Buena Vista Landfill Redevelopment Project
Draft Environmental Impact Report
State Clearinghouse #2024020617

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Acronyms and Abbreviations

µg/m^3	micrograms per cubic meter
3CE	Central Coast Community Energy
AAQS	ambient air quality standards
AB	Assembly Bill
AMBAG	Association of Monterey Bay Area Governments
APN	Assessor's Parcel Number
AQMP	Air Quality Management Plan
ASTM	American Society for Testing and Materials
ATP	Active Transportation Plan
BAAQMD	Bay Area Air Quality Management District
BMP	best management practice
BOS	County of Santa Cruz Board of Supervisors
BP	Before Present
Buena Vista Landfill or BVLF	Buena Vista Drive Sanitary Landfill
C&D	construction and demolition
CAA	Clean Air Act
CA-AIA	Commercial Agriculture-Airport Influence Area
CAAP	Climate Action and Adaptation Plan
CAG	Citizens Advisory Group
CAL FIRE	California Department of Forestry and Fire Protection
CalARP	California Accidental Release Prevention Program
CalEEMod	California Emissions Estimator Model
CalEPA	California Environmental Protection Agency
CalRecycle	California Department of Resources Recycling and Recovery
Caltrans	California Department of Transportation
CARB	California Air Resources Board
CBC	California Building Code
CCR	California Code of Regulations
CCRWQCB	Central Coast Regional Water Quality Control Board

CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CFC	California Fire Code
CFR	Code of Federal Regulations
CH_4	methane
CMP	Conceptual Mitigation Plan
CNEL	Community Noise Equivalent Level
CO	carbon monoxide
CO_2	carbon dioxide
CO_2e	carbon dioxide equivalent
County	County of Santa Cruz
CPI	Consumer Price Index
CRHR	California Register of Historical Resources
CSA	County Service Area
CUPA	Certified Unified Program Agency
CWA	Clean Water Act
CWPP	Community Wildfire Protection Plan
dB	decibel
dBA	A-weighted decibels
DTSC	California Department of Toxic Substances Control
DWR	California Department of Water Resources
EERF	Environmental Enhancement and Restoration Features
EIR	Environmental Impact Report
EO	Executive Order
FAR	floor area ratio
FEMA	Federal Emergency Management Agency
FHSZ	Fire Hazard Severity Zone
FHWA	Federal Highway Administration
FIFRA	Federal Insecticide, Fungicide, and Rodenticide Act
FMMP	Farmland Mapping and Monitoring Program
GHG	greenhouse gas

GIS	geographic information system
GSP	Groundwater Sustainability Plan
GWP	global warming potential
HDRBVA	HDR/Brown, Vence and Associates
HHW	Household Hazardous Waste
HVAC	heating, ventilation, and air conditioning
IPCC	Intergovernmental Panel on Climate Change
ITE	Institute of Transportation Engineers
IWMF	Integrated Waste Management Facilities
lbs	pounds
LCP	Local Coastal Program
Ldn	day-night average sound level
LEED	Leadership in Energy and Environmental Design
Leq	equivalent continuous sound level
LHMP	Local Hazard Mitigation Plan
LOS	level of service
LRA	Local Responsibility Area
MASP	mass-bed aerated static pile
MBARD	Monterey Bay Air Resources District
MBSST	Monterey Bay Sanctuary Scenic Trail
MLD	most likely descendant
MMT	million metric tons
MRZ	Mineral Resource Zone
MT CO_2e	metric tons of carbon dioxide equivalent
MT	metric ton
MTS	major transit stop
N_2O	nitrous oxide
NAHC	Native American Heritage Commission
NB	northbound
NCCAB	North Central Coast Air Basin
NH_3	ammonia
NO	nitric oxide
NO_2	nitrogen dioxide

NOP	Notice of Preparation
NO_x	oxides of nitrogen
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places
NWIC	Northwest Information Center
ODF	organics diversion facility
OPR	Governor's Office of Planning and Research
PF-AIA	Public Facilities-Airport Influence Area
PG&E	Pacific Gas & Electric Company
PM_{10}	particulate matter 10 microns or less in size
$PM_{2.5}$	particulate matter 2.5 microns or less in size
ppm	parts per million
PPV	peak particle velocity
PRC	California Public Resources Code
Project	Buena Vista Landfill Redevelopment Project
PV Water	Pajaro Valley Water Management Agency
RCNM	Roadway Construction Noise Model
RCRA	Resource Conservation and Recovery Act
RFP	Request for Proposals
RMP	Risk Management Plan
ROG	reactive organic gases
RPS	Renewables Portfolio Standard
RTC	Santa Cruz County Regional Transportation Commission
RTP	regional transportation plan
RWQCB	Regional Water Quality Control Board
SARA	Superfund Amendments and Reauthorization Act
SB	Senate Bill
SCBRL	Santa Cruz Branch Rail Line
SCCC	Santa Cruz County Code
SCS	Sustainable Communities Strategy
SF	square feet
SF_6	sulfur hexafluoride
SMARA	Surface Mining and Reclamation Act

SO_2	sulfur dioxide
SO_x	sulfur oxides
SR	State Route
SRA	State Responsibility Area
SVP	Society of Vertebrate Paleontology
SWFP	Solid Waste Facilities Permit
SWIS	Solid Waste Information System
SWPPP	Stormwater Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TCR	Tribal Cultural Resource
TMDL	Total Maximum Daily Load
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
VdB	vibration decibels
VMT	vehicle miles traveled
VOC	volatile organic compound
WDR	waste discharge requirement

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Executive Summary

The County of Santa Cruz (County) is proposing the **Buena Vista Landfill Redevelopment Project** (Project or Proposed Project) in unincorporated Santa Cruz County to provide a waste disposal/handling facility after the landfill closes. The County is serving as the California Environmental Quality Act (CEQA) lead agency.

This document is an Environmental Impact Report (EIR) analyzing the environmental effects of the Proposed Project in compliance with the CEQA Guidelines. This section summarizes the Project purpose, Project components, alternatives to the Project, and the environmental impacts and mitigation measures associated with the Project and alternatives.

Project Location

The Buena Vista Landfill is located between Buena Vista Drive and Harkins Slough Road in southern Santa Cruz County, west of Highway 1 and the City of Watsonville, within the California Coastal Zone (**Figure 1-1**, Regional Location, in Chapter 1). The Project area includes the Buena Vista Landfill site and County-owned property, as shown with the red boundary on **Figure 2-1**, Project Overview, in Chapter 2.

The Buena Vista Landfill address and primary entrance are 1231 Buena Vista Drive. The address, primary entrance, and permitted boundary would remain the same with Project implementation.

Project Purpose and Objectives

The Buena Vista Drive Sanitary Landfill (hereinafter called Buena Vista Landfill) is nearing capacity (or site life) and is estimated to close between 2028 and 2038 depending on the rate of the annual tonnage of waste disposed at the landfill, the amount of waste transferred for disposal at regional landfills while the Buena Vista Landfill remains open, and the organic diversion facility option selected for this Project.[1]

The Project **purpose** is to ensure an orderly landfill closure program that meets state and federal requirements and provides ongoing solid waste handling capabilities to allow the County to meet state-required waste management goals for waste reduction, source separation, materials recycling, household hazardous waste management, and organics diversion.

The Project **objectives** are to:

1. Provide continuous waste management operation at the Buena Vista Landfill site (waste reduction, resource recovery and recycling, organics diversion, and waste disposal/transfer services) to serve County residents, businesses, and commercial haulers.
2. Reduce illegal dumping within the County by continuing to provide local waste disposal and recycling options for County residents and businesses.

[1] The Proposed Project includes two options for the organics diversion facility (ODF). ODF Option 1 would be located on the existing landfill, likely reducing the remaining capacity of the existing landfill to fewer than 10 years. ODF Option 2 would be located on the old landfill, which is already closed. The ODF options are described briefly below and in more detail in Chapter 2, Section 2.4.

3. Maximize use of existing County property and waste disposal and recycling facilities and/or adjacent property to serve the public without expanding landfill operations onto other property within the County.
4. Minimize interference with existing landfill operations and infrastructure (e.g., scale house, recycle center, household hazardous waste facility).
5. Minimize air quality and greenhouse gas emissions associated with additional trips by consolidating refuse into larger trucks for transfer to a regional landfill.
6. Minimize impacts to the adjacent ecological reserve and other natural resources in the Coastal Zone and minimize any impacts to the occupants of the adjacent Buena Vista Migrant Center and Tierra Alta affordable housing complex.
7. Meet state mandates for stormwater compliance, landfill gas emissions compliance, waste reduction, mandatory recycling, and organics diversion.
8. Comply with state and federal landfill closure and post-closure requirements.
9. Start Project construction so transfer stations are operating prior to the landfill reaching full capacity.

Refer to Section 1.2, Project Background, in Chapter 1, Introduction, for information on the historical use, planning history, and current conditions and operations of the Buena Vista Landfill that led to the development of the Project.

Project Description

Project Components

The Proposed Project includes transitioning the Buena Vista Landfill to the Buena Vista Transfer Station, allowing County residents, businesses, and commercial waste haulers to continue bringing solid waste, household hazardous waste, recyclables, and organic materials to the landfill site.

Once the transfer station and organics area operations begin: 1) Solid waste would be loaded into transfer trucks and transported to a regional landfill. 2) Organic materials would continue to be preprocessed on site and either further processed on site or transferred to other compost or energy processing plants for conversion to recoverable organic products as required by state law. 3) The landfill closure and revegetation plan would be implemented. 4) Recyclables would continue to be sorted at either the existing or a relocated recycling facility on site.

To achieve this, the Project includes the following three key components, described in greater detail in Section 2.4, Project Components, in Chapter 2, Project Description, and shown on **Figure 2-1**, with the design plans included in **Appendix A**, Project Design Plans:

1. **Transfer Stations.** Two new waste transfer stations would be developed at the landfill site to implement transfer station operations for waste handling and transport. Transfer Station A, located in the undeveloped northeast corner of the County's landfill property, would serve self-haulers (residents and businesses). Transfer Station B, located at the current site of the maintenance building in the south portion of the site, would serve franchise haulers and larger commercial vehicles. Harkins Slough Road would be realigned around Transfer Station A to accommodate existing traffic and to contain all solid waste operational traffic on internal roadways.
2. **Organics Diversion Facility**. A new organics diversion facility (ODF) would be developed to continue the existing organics preprocessing activities and support additional processing and diversion in compliance with state organics diversion requirements. The ODF would be located either within the

existing active landfill footprint in the northern portion of the site (ODF Option 1) or on the "top deck" of the Old Landfill in the southwest portion of the site (ODF Option 2). ODF Option 1 (On-site Preprocessing on Current Landfill and Off-site Composting) would reduce maximum landfill capacity, at least during the time that ODF Option 1 is operational, but could allow fill to be added in the future, if another method to divert organics were approved for development at a later date[2] (e.g., biochar, waste to energy). Alternatively, Option 2 (On-site Preprocessing and Composting on Old Landfill Site) would allow the landfill to reach maximum capacity.

3. **Landfill Closure and Revegetation**. Once capacity of the Current Active Landfill area in the center of the site is reached, the landfill closure and revegetation plan would be implemented as described in detail in Section 2.4. The process includes a final cover system (cap), grading, and grassland revegetation. The closure plan also includes management and environmental monitoring systems for landfill gas, surface water, and groundwater.

   Additionally, the County is planning the following environmental enhancement and habitat restoration features as part of the Project to improve the functions and values (i.e., ecosystem services) of biological and aquatic resources within the Buena Vista Landfill facility limits (**Figure 2-4**, Environmental Enhancement and Habitat Restoration Features):

   - Restoration of Harkins Slough Road Drainage
   - Culvert Modification with Small Wildlife Crossing at Main Entrance
   - Culvert Replacement under Internal Roadway to Old Landfill
   - Restoration of Old Landfill Wetland and Drainage (ODF Option 2 only)
   - Wildlife Movement Corridor between Gallighan Slough and Harkins Slough
   - Wildlife Directional Features at Key Locations

The Project also includes the following optional improvements and the required General Plan/Local Coastal Program (LCP) Land Use Designation and Zoning Map Amendments:

4. **Optional Improvements**. The Project could include the following improvements on site to support the Project purpose and components described above, also shown on **Figure 2-1** and described in greater detail in Section 2.4:

   a. **Internal Access Road Improvements**. Internal roadway improvements could include asphalt paving of existing unpaved roads and repaving of existing worn and deteriorated roads.

   b. **Scale House Upgrades**. Upgrades could include additional scales with radio frequency identification to improve traffic flow and scale house operations.

   c. **Recycling Center Upgrades.** The existing recycling center could be upgraded on site and/or relocated to the northeast portion of the landfill (where ODF Option 1 could be located) to accommodate recovery of more mandated materials, increase transportation efficiency, and include a marketing and storage facility for sale and reuse.

   d. **Equipment Parking and Storage Area**. A new transfer truck/trailer and heavy equipment parking and storage area, including vehicle fueling and electric vehicle charging facilities, could be located on County property on the south side of Rountree Lane, between the

[2] Currently these potential future projects are too speculative to analyze, and supplemental environmental analysis would be undertaken if and when a project like this were proposed.

County's Rountree Medium (Jail) Facility and Buena Vista Migrant Center (farmworker housing and childcare facility)/Tierra Alta affordable housing complex.

5. **General Plan/Local Coastal Program Land Use Designation and Zoning Map Amendments.** To support the key Project components listed above, the Project requires and thus includes the following updates:
   a. Agricultural Resource Map Amendment
   b. General Plan/Local Coastal Program Map Amendment
   c. Zoning Map Amendment

Project Construction

The transfer stations would be constructed before the landfill reaches capacity and closes. The landfill is estimated to close between 2028 and 2038 depending on the rate of the annual tonnage of waste disposed at the landfill, the amount of waste transferred for disposal at regional landfills while the Buena Vista Landfill remains open, and the ODF option selected. The ODF, as well as the optional improvements (if constructed), would be constructed between 2028 and 2038.

Construction would occur between the hours of 8:00 a.m. and 5:00 p.m., Monday through Friday. Additionally, construction could also occur between the hours of 9:00 a.m. and 5:00 p.m. on Saturdays, Sundays, or national holidays with advance written approval from the County's Building Official.

Project Operation

There are currently 40–45 staff working at the Buena Vista site, and it is anticipated there would be similar staffing levels with Project implementation.

The hours of operation for the transfer stations would be Monday through Saturday, from 7:00 a.m. to 5:00 p.m., with the facility open to the public from 7:30 a.m. to 3:30 p.m. Monday through Saturday (except 7:30 a.m. to 2:30 p.m. on Wednesdays), which are the same as the current hours of operation.

Project Alternatives

Pursuant to Section 15126.6 of the CEQA Guidelines, the County considered several project alternatives, including design options, different sites, and suggestions received during the EIR scoping process. Refer to Section 5.1 and **Table 5-1** in Chapter 5, Project Alternatives, for a description of all the alternatives considered.

The following three project alternatives are evaluated in this EIR. Refer to Section 5.2 in Chapter 5.

- Alternative 1: Transfer Station A on South Side of Rountree Lane
- Alternative 2: No Project
- Alternative 3: Combined Facilities on Adjacent Property

Alternative 1

Transfer Station A would serve self-haulers (residents and businesses) and operate similarly to the Proposed Project, as described in Section 2.4 under "Transfer Station A (Self Haulers)." However,

instead of being located on undeveloped land in the northeast corner of the landfill property (where there is oak woodland sensitive habitat), Transfer Station A would be located on undeveloped land near the southeast corner of the landfill property on the south side of Rountree Lane. Instead of realigning Harkins Slough Road around the transfer station in the northeast corner, Rountree Lane would be realigned to the south, so the public roadway remains outside the facility fenceline. Alternative 1 would avoid significant impacts to the oak woodland sensitive habitat adjacent to Harkins Slough Road. Alternative 1 would include the same environmental enhancement and habitat restoration features listed above for the Proposed Project.

Alternative 2

CEQA requires analysis of a No Project alternative to allow decision makers to compare the impacts of approving a project with the impacts of not approving a project (CEQA Guidelines, Section 15126.6[e]). The No Project analysis must discuss the existing conditions at the time the NOP is published, as well as what would be reasonably expected to occur in the foreseeable future if the Proposed Project were not approved.

Under the No Project alternative, the Buena Vista Landfill would not be redeveloped as proposed, and the environmental enhancement and habitat restoration features would not be implemented.

When the landfill reaches full capacity and closes, the Buena Vista facility would no longer accept solid waste (refuse); however, it would continue to accept household hazardous waste, organics/green waste, self-haul recyclables, and bulk waste (e.g., appliances, e-waste, mattresses). Without a transfer station to accept refuse in south county, it is estimated that 107 commercial waste hauling trips (franchise hauler and commercial drop boxes) per week would be diverted from the Buena Vista site to ReGen Monterey, located 19 miles to the south in Marina. It is also estimated that 1,372 self-haul waste disposal trips per week would self-select to haul their loads to either the Ben Lomond Transfer Station in north county or to ReGen Monterey in Marina.

Alternative 3

Alternative 3 would include new combined facilities on the adjacent property located north of the Buena Vista Landfill and Harkins Slough Road (north of the oak woodland sensitive habitat). The combined facilities would include most of the operations that would continue once the landfill is closed and capped, including transferring solid waste, organics diversion, and recycling. Unlike current operations or the Proposed Project, operations at the combined facilities would be within enclosed structures. The County would continue household hazardous waste (HHW) collection operations on the Buena Vista landfill property.

Alternative 3 would avoid significant impacts to the oak woodland sensitive habitat adjacent to Harkins Slough Road. Alternative 3 would include the same environmental enhancement and habitat restoration features listed above for the Proposed Project (under 3. Landfill Closure and Revegetation), plus the following additional features at the Alternative 3 site (**Figure 5-13**, Alternative 3 Environmental Enhancement and Habitat Restoration Features):

- Re-establishment of Open Drainage along North-South Roadway
- Reorientation and Expansion of Existing Irrigation Ditch Wetland
- Wildlife Movement Corridor between USFWS Refuge and Undeveloped Open Space to the West
- Culvert and Fencing Designed for Wildlife Movement

The County decided to evaluate Alternative 3 at an equal level of detail as the Proposed Project (in Chapter 6 of this EIR) because in addition to reducing impacts to biological resources (oak woodland sensitive habitat), it provides an opportunity to consolidate the transfer stations, organics diversion, and recycling at one site in enclosed facilities. This would improve operational efficiency (by having the facilities at one location), reduce potential impacts on adjacent agricultural land (by enclosing the facilities), and would not disrupt current landfill activities during construction of the new facilities. This alternative was not considered earlier or at the time the EIR Notice of Preparation (NOP) was circulated because the adjacent property was not on the market at the time.

Areas of Known Controversy and Key Issues

Providing solid waste service for County residents is an essential service for health and safety, and there are no areas of known controversy based on scoping comments received in response to the NOP (**Appendix C**).

Key issues identified in the scoping comments and the environmental analysis include potential impacts to biological resources (e.g., sensitive habitat, oak woodland, water quality, wildlife movement) and surrounding properties (e.g., noise, odor, traffic, visual, agricultural production).

Issues to Be Resolved

Issues to be resolved include the County's choice between the Proposed Project and Project alternatives, as well as implementation of mitigation measures to reduce impacts.

Summary of Impacts and Mitigation Measures

This section includes a summary of the impacts of the Proposed Project and Project alternatives. The following tables are provided at the end of this Executive Summary.

- **Table ES-1**, Summary of Proposed Project Impacts
- **Table ES-2**, Summary of Mitigation Measures
- **Tables ES-3a and ES-3b**, Comparative Summary of Impacts for Proposed Project and Project Alternatives
- **Table ES-4,** Summary of Alternative 3 Impacts

Proposed Project

The potential impacts of the Proposed Project, as described in Section 2.4 and shown on **Figure 2-1** (and **Appendix D**), were analyzed in Chapter 3. The potential cumulative impacts are addressed in Chapter 4, Other CEQA Required Discussions.

Table ES-1 includes a summary of the Proposed Project impacts; identified mitigation measures, if required; and the residual impact after application of mitigation. Impacts are categorized as follows:

- **No Impact.** No adverse effect at all on environmental conditions and/or a beneficial effect by reducing the severity of existing environmental problems or hazards.
- **Less than Significant.** An impact that may be adverse but does not exceed the identified significance threshold and does not require mitigation measures.

- **Less than Significant with Mitigation.** An impact that may be adverse and exceed the identified significance threshold but can be reduced to below the significance threshold level with the adoption of identified mitigation measures.
- **Significant and Unavoidable.** An impact that may be adverse and exceed the identified significance threshold and cannot be reduced to below the threshold level even with the adoption of any identified mitigation measures.

Table ES-2 provides a list of the mitigation measures identified to reduce impacts of the Proposed Project, as well as the Project alternatives.

Project Alternatives

The three Project alternatives include:

- Alternative 1: Transfer Station A on South Side of Rountree Lane,
- Alternative 2: No Project, and
- Alternative 3: Combined Facilities on Adjacent Property.

The potential impacts of Alternatives 1 and 2 were analyzed at a lesser level of detail, as allowed by CEQA, in Chapter 5, Project Alternatives, Section 5.2, Alternatives Evaluated in Draft EIR. As stated above, the potential impacts of Alternative 3 were analyzed at an equal level of detail as the Proposed Project in Chapter 6, Alternative 3 Detailed Analysis, with a comparative summary provided in Section 5.2 following Alternatives 1 and 2.

Table ES-3 provides a qualitative comparison of impacts for the Proposed Project and Project alternatives. It is the same as **Table 5-4** in Chapter 5.

Table ES-4 includes a summary of the Alternative 3 impacts; identified mitigation measures, if required; and the residual impact after application of mitigation.

Significant and Unavoidable Impacts

The **Proposed Project** would result in the following significant and unavoidable impacts to biological resources:

- Impact BIO-8: Project construction and operation would result in impacts to coast live oak woodland
- Impact BIO-14: Project construction would conflict with local policies or ordinances protecting biological resources
- Impact BIO-C: Cumulative biological resources impacts from impacts to sensitive habitat (oak woodland tree removal)

Alternative 2 (No Project) would result in the following significant and unavoidable impact to utilities and service systems (solid waste):

- Impact UTIL-4: Alternative 2 would generate solid waste in excess of local infrastructure capacity; would not be in compliance with state waste diversion laws; and the lack of a local waste management site could lead to increased illegal dumping and potential health, safety, and environmental impacts (e.g., biological resources, water quality)

Alternative 1 (Transfer Station A on South Side of Rountree Lane) and Alternative 3 (Combined Facilities on Adjacent Property) would not result in any significant and unavoidable impacts.

Environmentally Superior Alternative

As described in Chapter 5, Project Alternatives, Section 5.3, Environmentally Superior Alternative, and summarized in **Table ES-3**, the impacts of the following were compared:

- Proposed Project
- Alternative 1: Transfer Station A on South Side of Rountree Lane
- Alternative 2: No Project
- Alternative 3: Combined Facilities on Adjacent Property

The County conducted a two-step process to identify an environmentally superior alternative: 1) reducing significant and unavoidable impacts, and then 2) minimizing impacts on adjacent residences (sensitive receptors).

The Proposed Project would result in a significant and unavoidable impact to biological resources. Alternative 2 (No Project) would result in a significant and unavoidable impact to utilities and service systems (solid waste).

Alternative 1 (Transfer Station A on South Side of Rountree Lane) and Alternative 3 (Combined Facilities on Adjacent Property) would not result in these or any other significant and unavoidable impacts. Therefore, the County identifies Alternatives 1 and 3 as environmentally superior to the Proposed Project, as well as Alternative 2, based on measure 1 (reducing significant and unavoidable project impacts). Therefore, the County used measure 2 (minimizing impacts on adjacent residences) to compare Alternatives 1 and 3 to identify an environmentally superior alternative.

Alternatives 1 and 3 would both result in potential localized air quality and noise impacts to adjacent residences (sensitive receptors) from construction and operation of the new facilities. For both Alternatives 1 and 3, the air quality impacts would be less than significant without mitigation, and the noise impacts would be less than significant with mitigation. With Alternative 1, these potential impacts would affect up to 36 residences in the Tierra Alta affordable housing complex. With Alternative 3, these potential impacts would affect one (1) single-family residence north of the site. Therefore, the County identifies Alternative 3 as the environmentally superior alternative.

In summary, **the County has determined Alternative 3 (Combined Facilities on Adjacent Property) to be the environmentally superior alternative** because 1) it would reduce the significant and unavoidable impact to biological resources for the Proposed Project and would avoid significant and unavoidable impacts for the combined facilities, and 2) it would minimize localized air quality and noise impacts on adjacent residences.

Table ES-1. Summary of Proposed Project Impacts

Impact	Significance Before Mitigation	Mitigation	Significance After Mitigation
Aesthetics			
AES-1. The Project would not have an adverse effect on scenic resources and vistas or degrade the existing visual character or quality of public views of the site or its surroundings.	Less than Significant	None Required	Less than Significant
AES-2. The Project would not damage scenic resources within a state scenic highway.	No Impact	None Required	No Impact
AES-3. The Project would not create a significant source of substantial light and glare that would adversely affect daytime or nighttime views.	Less than Significant	None Required	Less than Significant
AES-C. Cumulative development would not result in a significant cumulative impact. Therefore, the Project's contribution would not be cumulatively considerable.	Not Cumulatively Considerable	None Required	Not Cumulatively Considerable
Agricultural Resources			
AG-1. The Project would not convert Important Farmland to non-agricultural use.	Less than Significant	None Required	Less than Significant
AG-2. The Project would not conflict with existing zoning for agricultural use or a Williamson Act contract.	Less than Significant	None Required	Less than Significant
AG-3. The Project would not conflict with existing zoning for, or cause rezoning of, forest land or timberland, or result in the loss of forest land or conversion of forest land to non-forest use.	Less than Significant	None Required	Less than Significant
AG-4. The Project would not involve other changes in the existing environment which could result in conversion of farmland to non-agricultural use.	Less than Significant	None Required	Less than Significant
AG-C. Cumulative development would not result in a significant cumulative impact to agricultural resources. Therefore, the Project's contribution would not be cumulatively considerable.	Not Cumulatively Considerable	None Required	Not Cumulatively Considerable

Table ES-1. Summary of Proposed Project Impacts

Impact	Significance Before Mitigation	Mitigation	Significance After Mitigation
Air Quality			
AIR-1. The Project would not conflict with or obstruct implementation of the adopted MBARD AQMP.	Less than Significant	None Required	Less than Significant
AIR-2. The Project would not result in a cumulatively considerable net increase of any criteria pollutant for which the region is designated non-attainment.	Less than Significant	None Required	Less than Significant
AIR-3. The Project would not expose sensitive receptors to substantial pollutant concentrations.	Less than Significant	None Required	Less than Significant
AIR-4. The Project would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.	Less than Significant	None Required	Less than Significant
AIR-C. The North Central Coast Air Basin is experiencing an existing cumulative impact related to PM_{10} emissions. However, the Project's contribution would not be cumulatively considerable.	Not Cumulatively Considerable	None Required	Not Cumulatively Considerable
Biological Resources			
BIO-1. Project construction may result in impacts to Crotch's bumble bee, if present.	Potentially Significant	MM BIO-1a, BIO-1b, BIO-1c, BIO-1d, BIO-8d	Less than Significant
BIO-2. Project construction and operation would not result in impacts to roosting western monarch butterflies.	Less than Significant	None Required	Less than Significant
BIO-3. Project construction and operation may result in impacts to California red-legged frog.	Potentially Significant	MM BIO-1a, BIO-1b, BIO-3, BIO-8d	Less than Significant
BIO-4. Project construction and operation may result in impacts to northwestern pond turtle.	Potentially Significant	MM BIO-1a, BIO-1b, BIO-3, BIO-8d	Less than Significant
BIO-5. Project construction and operation may result in impacts to avian species, their habitats, and nesting activities.	Potentially Significant	MM BIO-1a, BIO-1b, BIO-5a, BIO-5b, BIO-8d	Less than Significant
BIO-6. Project construction and operation may result in impacts to bat species, their habitats, and roosting activities.	Potentially Significant	MM BIO-1a, BIO-1b, BIO-6, BIO-8d	Less than Significant
BIO-7. Project construction may result in impacts to San Francisco dusky-footed woodrat houses, individuals, or young.	Potentially Significant	MM BIO-1a, BIO-1b, BIO-6, BIO-8d	Less than Significant

Table ES-1. Summary of Proposed Project Impacts

Impact	Significance Before Mitigation	Mitigation	Significance After Mitigation
BIO-8. Project construction and operation would result in impacts to coast live oak woodland.	Potentially Significant	MM BIO-8a, BIO-8b, BIO-8c, BIO-8d	Significant and Unavoidable
BIO-9. Project construction would result in minimal impacts to riparian forest.	Potentially Significant	MM BIO-8a, BIO-8b, BIO-8c, BIO-8d, BIO-9a, BIO-9b	Less than Significant
BIO-10. Project construction would result in impacts to other Environmentally Sensitive Habitat Areas.	Potentially Significant	MM BIO-8a, BIO-8b, BIO-8c, BIO-8d	Less than Significant
BIO-11. Project construction would result in minimal impacts to wetlands.	Potentially Significant	MM BIO-8a, BIO-8b, BIO-8c, BIO-8d, BIO-9a, BIO-9b	Less than Significant
BIO-12. Project construction would result in minimal impacts to riverine habitats	Potentially Significant	MM BIO-8a, BIO-8b, BIO-8c, BIO-8d	Less than Significant
BIO-13. Project construction would result in impacts to wildlife movement.	Potentially Significant	MM BIO-1a, BIO-1b, BIO-3, BIO-8d, BIO-13	Less than Significant
BIO-14. Project construction would conflict with local policies or ordinances protecting biological resources	Potentially Significant	MM BIO-8a, BIO-8b, BIO-8c, BIO-8d, BIO-14	Significant and Unavoidable
BIO-C. Cumulative development would result in a significant cumulative impact to sensitive habitat. The Project's contribution would be cumulatively considerable.	Cumulatively Considerable	MM BIO-C.1, MM BIO-C.2	Cumulatively Considerable
Cultural Resources			
CR-1. The Project would not have an adverse effect on historical resources.	Less than Significant	None Required	Less than Significant
CR-2. Ground-disturbing activities during Project construction may unearth or adversely impact subsurface archaeological resources.	Potentially Significant	MM CR-2a, CR-2b	Less than Significant
CR-3. Ground-disturbing activities during Project construction may disturb human remains.	Potentially Significant	MM CR-2a, CR-2b	Less than Significant
CR-C. Cumulative development would not result in a significant cumulative impact. Therefore, the Project's contribution would not be cumulatively considerable.	Not Cumulatively Considerable	None Required	Not Cumulatively Considerable

Table ES-1. Summary of Proposed Project Impacts

Impact	Significance Before Mitigation	Mitigation	Significance After Mitigation
Energy			
EN-1. The Project would not result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during Project construction or operation.	Less than Significant	None Required	Less than Significant
EN-2. The Project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency.	Less than Significant	None Required	Less than Significant
EN-C. Cumulative development would not result in a significant cumulative impact. Therefore, the Project's contribution would not be cumulatively considerable.	Not Cumulatively Considerable	None Required	Not Cumulatively Considerable
Geology and Soils			
GEO-1. The Project would not cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault or strong seismic ground shaking.	Less than Significant	None Required	Less than Significant
GEO-2. ODF Option 2 could exacerbate exposure of the public to liquefaction or landslide hazards and may be located on a geological unit or soil that could become unstable as a result of lateral spreading, landslides, and liquefaction.	Potentially Significant	MM GEO-2	Less than Significant
GEO-3. The Project would not result in substantial soil erosion or loss of topsoil.	Less than Significant	None Required	Less than Significant
GEO-4. Transfer Station A and Transfer Station B could exacerbate the existing risk to life or property resulting from expansive soils.	Potentially Significant	MM GEO-4	Less than Significant
GEO-5. The Project would not have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems.	Less than Significant	None Required	Less than Significant
GEO-6. Ground-disturbing activities during Project construction would not directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.	Less than Significant	None Required	Less than Significant
GEO-C. Cumulative development would not result in a significant cumulative impact. Therefore, the Project's contribution would not be cumulatively considerable.	Not Cumulatively Considerable	None Required	Not Cumulatively Considerable

Table ES-1. Summary of Proposed Project Impacts

Impact	Significance Before Mitigation	Mitigation	Significance After Mitigation
Greenhouse Gas Emissions			
GHG-1. The Project would not result in GHG emissions that would have a significant impact on the environment.	Less than Significant	None Required	Less than Significant
GHG-2. The Project would result in tree removal that would be consistent with applicable GHG reduction plans.	Potentially Significant	MM BIO-14	Less than Significant
GHG-3. The Project would not expose people or structures to substantial risk of loss, injury, or death as a result of flooding from projected sea level rise and storms.	Less than Significant	None Required	Less than Significant
GHG-C. There is an existing statewide cumulative impact related to GHG emissions. However, the Project's contribution would not be cumulatively considerable.	Not Cumulatively Considerable	None Required	Not Cumulatively Considerable
Hazards and Hazardous Materials			
HAZ-1. The Project would not create a significant hazard to the public or the environment through the routine transport, use, disposal, or release of hazardous materials.	Less than Significant	None Required	Less than Significant
HAZ-2. The Project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.	No Impact	None Required	No Impact
HAZ-3. The Project would not be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, create a significant hazard to the public or the environment.	No Impact	None Required	No Impact
HAZ-4. The Project would not result in a safety hazard or excessive noise for people residing or working in the Project area due to proximity of an airport.	Less than Significant	None Required	Less than Significant
HAZ-5. The Project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.	Less than Significant	None Required	Less than Significant

Table ES-1. Summary of Proposed Project Impacts

Impact	Significance Before Mitigation	Mitigation	Significance After Mitigation
HAZ-6. The Project would not expose people or structures to a significant risk of loss, injury, or death involving wildfires.	Less than Significant	None Required	Less than Significant
HAZ-C. Cumulative development would not result in a significant cumulative impact. Therefore, the Project's contribution would not be cumulatively considerable.	Not Cumulatively Considerable	None Required	Not Cumulatively Considerable
Hydrology and Water Quality			
HYD-1. The Project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality or conflict with a Water Quality Control Plan.	Less than Significant	None Required	Less than Significant
HYD-2. The Project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge.	Less than Significant	None Required	Less than Significant
HYD-3. The Project would not substantially alter drainage patterns within the Project area or vicinity.	Less than Significant	None Required	Less than Significant
HYD-4. The Project would not risk release of pollutants due to Project inundation in flood hazard, tsunami, or seiche zones.	No Impact	None Required	No Impact
HYD-C. Cumulative development would not result in a significant cumulative impact. Therefore, the Project's contribution would not be cumulatively considerable.	Not Cumulatively Considerable	None Required	Not Cumulatively Considerable
Land Use and Planning			
LUP-1. The Project would not physically divide an established community.	Less than Significant	None Required	Less than Significant
LUP-2. The Project would not conflict with applicable land use plans, policies, or regulations adopted for the purpose of avoiding or mitigating an environmental effect.	Less than Significant	None Required	Less than Significant
LUP-C. Cumulative development would not result in a significant cumulative impact. Therefore, the Project's contribution would not be cumulatively considerable.	Not Cumulatively Considerable	None Required	Not Cumulatively Considerable

Table ES-1. Summary of Proposed Project Impacts

Impact	Significance Before Mitigation	Mitigation	Significance After Mitigation
Mineral Resources			
MIN-1. The Project would not result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state.	Less than Significant	None Required	Less than Significant
MIN-2. The Project would not result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan.	Less than Significant	None Required	Less than Significant
MIN-C. Cumulative development would not result in a significant cumulative impact. Therefore, the Project's contribution would not be cumulatively considerable.	Not Cumulatively Considerable	None Required	Not Cumulatively Considerable
Noise			
N-1. Project construction of optional equipment parking and storage area may result in a substantial temporary increase in noise levels at residential receptors.	Potentially Significant	MM N-1	Less than Significant
N-2. Project operation of Transfer Station B and Organics Diversion Facility Option 2 may expose persons to or generate excessive noise levels at Rountree Medium (Jail) Facility.	Potentially Significant	MM N-2a, N-2b, N-2c	Less than Significant
N-3. Construction would not expose persons to or generate excessive groundborne vibration or groundborne noise levels.	Less than Significant	None Required	Less than Significant
N-4. Construction and operation would not expose people residing or working in the Project area to excessive noise from aircraft.	No Impact	None Required	No Impact
N-C. Cumulative development would not result in significant cumulative impact. Therefore, the Project's contribution would not be cumulatively considerable.	Not Cumulatively Considerable	None Required	Not Cumulatively Considerable
Population and Housing			
PH-1. The Project would not induce substantial unplanned population growth in an area, either directly or indirectly.	No Impact	None Required	No Impact
PH-2. The Project would not displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere.	No Impact	None Required	No Impact

Table ES-1. Summary of Proposed Project Impacts

Impact	Significance Before Mitigation	Mitigation	Significance After Mitigation
PH-C. Cumulative development would not result in a significant cumulative impact. Therefore, the Project's contribution would not be cumulatively considerable.	Not Cumulatively Considerable	None Required	Not Cumulatively Considerable
Public Services			
PUB-1. The Project would not result in the need for new or physically altered fire protection facilities.	Less than Significant	None Required	Less than Significant
PUB-2. The Project would not result in the need for new or physically altered police protection or law enforcement facilities.	Less than Significant	None Required	Less than Significant
PUB-3. The Project would not result in the need for the construction of new or physically altered school or park facilities.	Less than Significant	None Required	Less than Significant
PUB-C. Cumulative development would not result in a significant cumulative impact. Therefore, the Project's contribution would not be cumulatively considerable.	Not Cumulatively Considerable	None Required	Not Cumulatively Considerable
Recreation			
REC-1. The Project would not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.	No Impact	None Required	No Impact
REC-2. The Project would not include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.	No Impact	None Required	No Impact
REC-C. Cumulative development would not result in a significant cumulative impact. Therefore, the Project's contribution would not be cumulatively considerable.	Not Cumulatively Considerable	None Required	Not Cumulatively Considerable
Transportation			
T-1. The Project would not conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities.	Less than Significant	None Required	Less than Significant
T-2. The Project would meet the screening criteria set by Santa Cruz County and thus would not conflict or be inconsistent with CEQA Guidelines, Section 15064.3(b).	Less than Significant	None Required	Less than Significant

Table ES-1. Summary of Proposed Project Impacts

Impact	Significance Before Mitigation	Mitigation	Significance After Mitigation
T-3. Neither construction nor operation of the Project would substantially increase hazards due to a geometric design feature or incompatible use.	Less than Significant	None Required	Less than Significant
T-4. The Project would not result in inadequate emergency access.	Less than Significant	None Required	Less than Significant
T-C. Cumulative development would result in a cumulative impact related to transportation (vehicle miles traveled). However, the Project's contribution would not be cumulatively considerable.	Not Cumulatively Considerable	None Required	Not Cumulatively Considerable
Tribal Cultural Resources			
TCR-1. The Project may cause a substantial adverse change in the significance of a Tribal Cultural Resource.	Potentially Significant	MM CR-2a, MM CR-2b	Less than Significant
TCR-C. Cumulative development would not result in a significant cumulative impact. Therefore, the Project's contribution would not be cumulatively considerable.	Not Cumulatively Considerable	None Required	Not Cumulatively Considerable
Utilities and Service Systems			
UTIL-1. The Project would require the relocation or replacement of water, wastewater, stormwater, and electricity conveyance infrastructure.	Less than Significant	None Required	Less than Significant
UTIL-2. Sufficient water supplies are available to serve construction and operation of the Project.	Less than Significant	None Required	Less than Significant
UTIL-3. The Project would not generate wastewater in excess of existing treatment capacity.	Less than Significant	None Required	Less than Significant
UTIL-4. The Project would not generate solid waste in excess of local landfill capacity and would comply with applicable regulations related to solid waste.	Less than Significant	None Required	Less than Significant
UTIL-C. Cumulative development could result in significant cumulative impact concerning water supply, but would not result in significant cumulative impacts to the other utilities and service systems. For potential cumulative impact to water supply, the Project's contribution would not be cumulatively considerable.	Not Cumulatively Considerable	None Required	Not Cumulatively Considerable

Table ES-1. Summary of Proposed Project Impacts

Impact	Significance Before Mitigation	Mitigation	Significance After Mitigation
Wildfire			
WILD-1. The Project would not substantially impair an adopted emergency response plan or emergency evacuation plan.	Less than Significant	None Required	Less than Significant
WILD-2. The Project would not, due to slope, prevailing winds, and other factors, exacerbate wildfire risks and thereby expose Project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire.	Less than Significant	None Required	Less than Significant
WILD-3. The Project would not require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment.	Less than Significant	None Required	Less than Significant
WILD-4. The Project would not expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes.	Less than Significant	None Required	Less than Significant
WILD-C. Cumulative development would not result in a significant cumulative impact. Therefore, the Project's contribution would not be cumulatively considerable.	Not Cumulatively Considerable	None Required	Not Cumulatively Considerable

Table ES-2. Summary of Mitigation Measures

Mitigation Measure	Proposed Project	Alternative 1 (Transfer Station A on South Side of Rountree Lane)	Alternative 2 (No Project)	Alternative 3 (Combined Facilities on Adjacent Property)
AG-2: Agricultural Buffer (Solid Board Fencing and Evergreen Vegetation) along Northern Property Line	No	No	No	Yes
BIO-1a: Conduct Environmental Training Prior to Construction	Yes	Yes	Yes	Yes
BIO-1b: Schedule Construction to Avoid Impacts to Sensitive Biological Resources	Yes	Yes	Yes	Yes
BIO-1c: Conduct Pre-construction Surveys and Implement Buffers for Crotch's Bumble Bee	Yes	Yes	Yes	Yes
BIO-1d: Restore and Promote Crotch's Bumble Bee Habitat	Yes	Yes	Yes	Yes
BIO-3: Implement Protective Measures and Biological Monitoring for California Red-Legged Frog and Northwestern Pond Turtle	Yes	Yes	Yes	Yes
BIO-5a: Avoid Vegetation Removal During Breeding Bird Season or Conduct Nesting Bird Surveys	Yes	Yes	Yes	Yes
BIO-5b: Conduct Surveys for Wintering Sensitive Bird Species	Yes	Yes	Yes	Yes
BIO-6: Schedule Tree Removal to Avoid Bat Maternity Roosts and Winter Hibernacula and/or Conduct Pre-Construction Surveys and Implement Protective Measures for Bat Roosts	Yes	Yes	Yes	Yes
BIO-7: Conduct Pre-Construction Surveys and Flag Woodrat Nests	Yes	Yes	No	Yes
BIO-8a: Implement Measures to Protect Sensitive and Native Habitats during Construction	Yes	Yes	No	Yes
BIO-8b: Implement Best Management Practices During Construction	Yes	Yes	No	Yes
BIO-8c: Stabilize and Restore Temporary Impact Areas	Yes	Yes	No	Yes
BIO-8d: Prepare and Implement a Habitat Mitigation Plan for Permanent Impacts to Sensitive Habitats, Including Aquatic Features, for Proposed Project	Yes	Yes	No	No
BIO-8e: Prepare and Implement a Habitat Mitigation Plan for Permanent Impacts to Sensitive Habitats, Including Aquatic Features, for Alternative 3	No	No	No	Yes
BIO-9a: Replace, Restore and/or Enhance with In-Kind Riparian Vegetation on Site	Yes	Yes	No	Yes

Table ES-2. Summary of Mitigation Measures

Mitigation Measure	Proposed Project	Alternative 1 (Transfer Station A on South Side of Rountree Lane)	Alternative 2 (No Project)	Alternative 3 (Combined Facilities on Adjacent Property)
BIO-9b: Transplant Willows to Restore Riparian Areas	Yes	No	No	Yes
BIO-13: Install Protective Fencing and Conduct Wildlife Relocation if Necessary	Yes	Yes	No	Yes
BIO-14: Implement Tree Replacement Planting and Habitat Enhancement	Yes	Yes	No	Yes
BIO-C.1: County-wide Comprehensive Tree Replacement Plan	Yes	No	No	No
BIO-C.2: Include Cumulative Conservation Goals and Objectives in the Project-Specific Biological Resources Conceptual Mitigation Plan (CMP)	Yes	No	No	No
CR-2a: Stop Work if Inadvertent Encounter of Undiscovered Archaeological Resources during Ground-Disturbing Activities	Yes	Yes	No	Yes
CR-2b: Archaeologist and Native American Monitoring during Initial Ground-Disturbing Activities in Specific Areas	Yes	Yes	No	Yes
GEO-2: Old Landfill Site Stability Evaluation for Organics Diversion Facility Option 2	Yes	Yes	No	Yes
GEO-4: Expansive Soils Design Measures for Specific Structures	Yes	Yes	No	No
N-1: Implement Noise-Reducing Measures for Construction Equipment Used within 200 Feet of Occupied Residences	Yes	Yes	No	Yes
N-2a: Implement Noise-Reducing Design Features at Transfer Station B	Yes	Yes	No	No
N-2b: Implement Noise-Reducing Design Features for Organics Diversion Facility Option 2 Equipment Operation	Yes	Yes	No	No
N-2c: Implement Noise-Reducing Design Features at Transfer Station A south of Rountree Lane	No	Yes	No	No
N-2d: Implement Noise-Reducing Design Features at Combined Facilities	No	No	No	Yes

Table ES-3a. Comparison of Impacts for Proposed Project and Project Alternatives

Resource Topics and Impacts	Proposed Project	Alternative 1 (Transfer Station A on South Side of Rountree Ln)	Alternative 2 (No Project)	Alternative 3 (Combined Facilities on Adjacent Property)
NI No Impact LTS Less than Significant LTSM Less than Significant with Mitigation SU Significant and Unavoidable The impact determinations are based on the most conservative (worse) impact identified for that topic in Table 5-4b.				
Aesthetics	LTS	LTS	LTS	LTS
Agricultural Resources	LTS	LTS	LTS	LTSM
Air Quality	LTS	LTS	LTS	LTS
Biological Resources	SU	LTSM	LTSM	LTSM
Cultural Resources	LTSM	LTSM	LTS	LTSM
Energy	LTS	LTS	LTS	LTS
Geology and Soils	LTSM	LTSM	LTS	LTSM
Greenhouse Gas Emissions	LTS	LTS	LTS	LTS
Hazards and Hazardous Materials	LTS	LTS	LTS	LTS
Hydrology and Water Quality	LTS	LTS	LTS	LTS
Land Use and Planning	LTS	LTS	LTS	LTS
Mineral Resources	LTS	LTS	NI	LTS
Noise	LTMS	LTMS	LTS	LTMS
Population and Housing	NI	NI	NI	NI
Public Safety and Services	LTS	LTS	NI	LTS
Recreation	NI	NI	NI	NI
Transportation	LTS	LTS	LTS	LTS
Tribal Cultural Resources	LTSM	LTSM	LTS	LTSM
Utilities and Service Systems	LTS	LTS	SU	LTS
Wildfire	LTS	LTS	LTS	LTS

Table ES-3b. Comparison of Impacts for Proposed Project and Project Alternatives

Resource Topics and Impacts[1]	Proposed Project	Alternative 1 (Transfer Station A on South Side of Rountree Ln)	Alternative 2 (No Project)	Alternative 3 (Combined Facilities on Adjacent Property)
Aesthetics				
AES-1. The Project would not have an adverse effect on scenic resources and vistas or degrade the existing visual character or quality of public views of the site or its surroundings.	LTS	LTS Similar	LTS Similar, less	LTS Similar
AES-2. The Project would not damage scenic resources within a state scenic highway.	NI	NI Similar	NI Similar	LTS Similar
AES-3. The Project would not create a significant source of substantial light and glare that would adversely affect daytime or nighttime views.	LTS	LTS Similar, more	LTS Similar, less	LTS Similar
Overall Impact Determination	***LTS***	***LTS***	***LTS***	***LTS***
Agricultural Resources				
AG-1. The Project would not convert Important Farmland to non-agricultural use.	NI	NI Similar	NI Similar	NI Similar
AG-2. The Project would not conflict with existing zoning for agricultural use or a Williamson Act contract.	LTS	LTS Similar	LTS Similar	LTSM More[2] (MM AG-2)
AG-3. The Project would not conflict with existing zoning for, or cause rezoning of, forest land or timberland, or result in the loss of forest land or conversion of forest land to non-forest use.	NI	NI Similar	NI Similar	NI Similar
AG-4. The Project would not involve other changes in the existing environment which could result in conversion of farmland to non-agricultural use.	LTS	LTS Similar	LTS Similar	LTS Similar
Overall Impact Determination	***LTS***	***LTS***	***LTS***	***LTSM***

Table ES-3b. Comparison of Impacts for Proposed Project and Project Alternatives

Resource Topics and Impacts[1]	Proposed Project	Alternative 1 (Transfer Station A on South Side of Rountree Ln)	Alternative 2 (No Project)	Alternative 3 (Combined Facilities on Adjacent Property)
Air Quality				
AIR-1. The Project would not conflict with or obstruct implementation of the adopted MBARD AQMP.	LTS	LTS Similar	LTS Similar	LTS Similar
AIR-2. The Project would not result in a cumulatively considerable net increase of any criteria pollutant for which the region is designated non-attainment.	LTS	LTS Similar	LTS Similar, more	LTS Similar
AIR-3. The Project would not expose sensitive receptors to substantial pollutant concentrations.	LTS	LTS Similar, more	LTS Similar, less	LTS Similar, more
AIR-4. The Project would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.	LTS	LTS Similar	LTS Similar	LTS Similar
Overall Impact Determination	***LTS***	***LTS***	***LTS***	***LTS***
Biological Resources				
BIO-1. Project construction may result in impacts to Crotch's bumble bee, if present.	LTSM (MM BIO-1a, BIO-1b, BIO-1c, BIO-1d, BIO-8d)	LTSM Similar, less (MM BIO-1a, BIO-1b, BIO-1c, BIO-1d, BIO-8d)	LTSM Similar, less (MM BIO-1a, BIO-1b, BIO-1c, BIO-1d)	LTSM Similar, less (MM BIO-1a, BIO-1b, BIO-1c, BIO-1d, BIO-8e)
BIO-2. Project construction and operation would not result in impacts to roosting western monarch butterflies.	LTS	LTS Similar	LTS Similar	LTS Similar

Table ES-3b. Comparison of Impacts for Proposed Project and Project Alternatives

Resource Topics and Impacts[1]	Proposed Project	Alternative 1 (Transfer Station A on South Side of Rountree Ln)	Alternative 2 (No Project)	Alternative 3 (Combined Facilities on Adjacent Property)
BIO-3. Project construction and operation may result in impacts to California red-legged frog.	LTSM (MM BIO-1a, BIO-1b, BIO-3, BIO-8d)	LTSM Similar (MM BIO-1a, BIO-1b, BIO-3, BIO-8d)	LTSM Less (MM BIO-1a, BIO-1b, BIO-3)	LTSM Similar, less (MM BIO-1a, BIO-1b, BIO-3, BIO-8e)
BIO-4. Project construction and operation may result in impacts to northwestern pond turtle.	LTSM (MM BIO-1a, BIO-1b, BIO-3, BIO-8d)	LTSM Similar (MM BIO-1a, BIO-1b, BIO-3, BIO-8d)	LTSM Less (MM BIO-1a, BIO-1b, BIO-3)	LTSM Similar, less (MM BIO-1a, BIO-1b, BIO-3, BIO-8e)
BIO-5. Project construction and operation may result in impacts to avian species, their habitats, and nesting activities.	LTSM (MM BIO-1a, BIO-1b, BIO-5a, BIO-5b, BIO-8d)	LTSM Less (MM BIO-1a, BIO-1b, BIO-5a, BIO-5b, BIO-8d)	LTSM Less (MM BIO-1a, BIO-1b, BIO-5a, BIO-5b)	LTSM Less (MM BIO-1a, BIO-1b, BIO-5a, BIO-5b, BIO-8e)
BIO-6. Project construction and operation may result in impacts to bat species, their habitats, and roosting activities.	LTSM (MM BIO-1a, BIO-1b, BIO-6, BIO-8d)	LTSM Less (MM BIO-1a, BIO-1b, BIO-6, BIO-8d)	LTSM Less (MM BIO-1a, BIO-1b, BIO-6)	LTSM Less (MM BIO-1a, BIO-1b, BIO-6, BIO-8e)
BIO-7. Project construction may result in impacts to San Francisco dusky-footed woodrat houses, individuals, or young.	LTSM (MM BIO-1a, BIO-1b, BIO-7, BIO-8d)	LTSM Less (MM BIO-1a, BIO-1b, BIO-7, BIO-8d)	LTS Less	LTSM Less (MM BIO-1a, BIO-1b, BIO-7, BIO-8e)
BIO-8. Project construction and operation would result in impacts to coast live oak woodland.	SU (MM BIO-8a, BIO-8b, BIO-8c, BIO-8d)	LTS Less (MM BIO-8a, BIO-8b, BIO-8c, BIO-8d)	NI Less	LTSM Less (MM BIO-8a, BIO-8b, BIO-8c, BIO-8e)

Table ES-3b. Comparison of Impacts for Proposed Project and Project Alternatives

Resource Topics and Impacts[1]	Proposed Project	Alternative 1 (Transfer Station A on South Side of Rountree Ln)	Alternative 2 (No Project)	Alternative 3 (Combined Facilities on Adjacent Property)
BIO-9. Project construction would result in minimal impacts to riparian forest.	LTSM (MM BIO-8a, BIO-8b, BIO-8c, BIO-8d, BIO-9a, BIO-9b)	LTSM Similar (MM BIO-8a, BIO-8b, BIO-8c, BIO-8d, BIO-9a)	NI Less	LTSM Similar, less (MM BIO-8a, BIO-8b, BIO-8c, BIO-8e, BIO-9a, BIO-9b)
BIO-10. Project construction would result in impacts to other Environmentally Sensitive Habitat Areas.	LTMS (MM BIO-8a, BIO-8b, BIO-8c, BIO-8d, BIO-9a, BIO-9b)	LTSM Less (MM BIO-8a, BIO-8b, BIO-8c, BIO-8d, BIO-9a, BIO-9b)	NI Less	LTSM Less[3] (MM BIO-8a, BIO-8b, BIO-8c, BIO-8e, BIO-9a, BIO-9b)
BIO-11. Project construction would result in minimal impacts to wetlands.	LTSM (MM BIO-8a, BIO-8b, BIO-8c, BIO-8d)	LTSM Less (MM BIO-8a, BIO-8b, BIO-8c, BIO-8d)	NI Less	LTSM Similar, more (MM BIO-8a, BIO-8b, BIO-8c, BIO-8e)
BIO-12. Project construction would result in minimal impacts to riverine habitats	LTSM (MM BIO-8a, BIO-8b, BIO-8c, BIO-8d)	LTSM Less (MM BIO-8a, BIO-8b, BIO-8c, BIO-8d)	NI Less	LTSM Similar, less (MM BIO-8a, BIO-8b, BIO-8c, BIO-8e)
BIO-13. Project construction would result in impacts to wildlife movement.	LTSM (MM BIO-1a, BIO-1b, BIO-3, BIO-8d, BIO-13)	LTSM Less (MM BIO-1a, BIO-1b, BIO-3 BIO-8d, BIO-13)	LTS Less	LTSM Less (MM BIO-1a, BIO-1b, BIO-3, BIO-8e, BIO-13)
BIO-14. Project construction would conflict with local policies or ordinances protecting biological resources.	SU (MM BIO-8a, BIO-8b, BIO-8c, BIO-8d, BIO-14)	LTSM Less (MM BIO-8a, BIO-8b, BIO-8c, BIO-8d, BIO-14)	LTS Less	LTSM Less[3] (MM BIO-8a, BIO-8b, BIO-8c, BIO-8e, BIO-14)
Overall Impact Determination	***SU***	***LTSM***	***LTSM***	***LTSM***

Table ES-3b. Comparison of Impacts for Proposed Project and Project Alternatives

Resource Topics and Impacts[1]	Proposed Project	Alternative 1 (Transfer Station A on South Side of Rountree Ln)	Alternative 2 (No Project)	Alternative 3 (Combined Facilities on Adjacent Property)
Cultural Resources				
CR-1. The Project would not have an adverse effect on historical resources.	LTS	LTS Similar	LTS Similar, less	LTS Similar
CR-2. Ground-disturbing activities during Project construction may unearth or adversely impact subsurface archaeological resources.	LTSM (MM CR-2a, CR-2b)	LTSM Similar (MM CR-2a, CR-2b)	LTS Less	LTSM Similar (MM CR-2a, CR-2b)
CR-3. Ground-disturbing activities during Project construction may disturb human remains.	LTSM (MM CR-2a, CR-2b)	LTSM Similar (MM CR-2a, CR-2b)	LTS Less	LTSM Similar (MM CR-2a, CR-2b)
Overall Impact Determination	***LTSM***	***LTSM***	***LTS***	***LSTM***
Energy				
EN-1. The Project would not result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during Project construction or operation.	LTS	LTS Similar	LTS Similar, more	LTS Similar
EN-2. The Project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency.	LTS	LTS Similar	LTS Similar, more	LTS Similar
Overall Impact Determination	***LTS***	***LTS***	***LTS***	***LTS***

Table ES-3b. Comparison of Impacts for Proposed Project and Project Alternatives

Resource Topics and Impacts[1]	Proposed Project	Alternative 1 (Transfer Station A on South Side of Rountree Ln)	Alternative 2 (No Project)	Alternative 3 (Combined Facilities on Adjacent Property)
Geology and Soils				
GEO-1. The Project would not cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault or strong seismic ground shaking.	LTS	LTS Similar	LTS Similar, less	LTS Similar
GEO-2. ODF Option 2 could exacerbate exposure of the public to liquefaction or landslide hazards and may be located on a geological unit or soil that could become unstable as a result of lateral spreading, landslides, and liquefaction.	LTSM (MM GEO-2)	LTSM Similar (MM GEO-2)	LTS Less	LTS Similar, less
GEO-3. The Project would not result in substantial soil erosion or loss of topsoil.	LTS	LTS Similar, less	LTS Similar, less	LTS Similar
GEO-4. Transfer Station A and Transfer Station B could exacerbate the existing risk to life or property resulting from expansive soils.	LTSM (MM GEO-4)	LTSM Similar (MM GEO-4)	LTS Less	LTSM Similar[4] (MM GEO-4)
GEO-5. The Project would not have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems.	LTS	LTS Similar	LTS Similar	LTS Similar
GEO-6. Ground-disturbing activities during Project construction would not directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.	LTS	LTS Similar	LTS Similar, less	LTS Similar
Overall Impact Determination	***LTSM***	***LTSM***	***LTS***	***LTSM***

Table ES-3b. Comparison of Impacts for Proposed Project and Project Alternatives

Resource Topics and Impacts[1]	Proposed Project	Alternative 1 (Transfer Station A on South Side of Rountree Ln)	Alternative 2 (No Project)	Alternative 3 (Combined Facilities on Adjacent Property)
Greenhouse Gas Emissions				
GHG-1. The Project would not result in GHG emissions that would have a significant impact on the environment.	LTS	LTS Similar	LTS Similar, less construction, more operation	LTS Similar
GHG-2. The Project would result in tree removal that would be consistent with applicable GHG reduction plans.	LTSM	LTSM Similar	LTS Similar, less construction, more operation	LTS Similar, less
GHG-3. The Project would not expose people or structures to substantial risk of loss, injury, or death as a result of flooding from projected sea level rise and storms.	LTS	LTS Similar	LTS Similar	LTS Similar
Overall Impact Determination	***LTS***	***LTS***	***LTS***	***LTS***
Hazards and Hazardous Materials				
HAZ-1. The Project would not create a significant hazard to the public or the environment through the routine transport, use, disposal, or release of hazardous materials.	LTS	LTS Similar	LTS Similar, less	LTS Similar
HAZ-2. The Project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.	NI	NI Similar	NI Similar	LTS Similar

Table ES-3b. Comparison of Impacts for Proposed Project and Project Alternatives

Resource Topics and Impacts[1]	Proposed Project	Alternative 1 (Transfer Station A on South Side of Rountree Ln)	Alternative 2 (No Project)	Alternative 3 (Combined Facilities on Adjacent Property)
HAZ-3. The Project would not be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, create a significant hazard to the public or the environment.	NI	LTS Similar	LTS Similar	LTS Similar
HAZ-4. The Project would not result in a safety hazard or excessive noise for people residing or working in the Project area due to proximity of an airport.	LTS	LTS Similar	LTS Similar	LTS Similar
HAZ-5. The Project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.	LTS	LTS Similar	LTS Similar, less	LTS Similar
HAZ-6. The Project would not expose people or structures to a significant risk of loss, injury, or death involving wildfires.	LTS	LTS Similar	LTS Similar	LTS Similar
Overall Impact Determination	***LTS***	***LTS***	***LTS***	***LTS***
Hydrology and Water Quality				
HYD-1. The Project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality or conflict with a Water Quality Control Plan.	LTS	LTS Similar, less	LTS, Similar, less	LTS Similar
HYD-2. The Project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge.	LTS	LTS Similar	NI Less	LTS Similar

Table ES-3b. Comparison of Impacts for Proposed Project and Project Alternatives

Resource Topics and Impacts[1]	Proposed Project	Alternative 1 (Transfer Station A on South Side of Rountree Ln)	Alternative 2 (No Project)	Alternative 3 (Combined Facilities on Adjacent Property)
HYD-3. The Project would not substantially alter drainage patterns within the Project area or vicinity.	LTS	LTS Similar	LTS Similar, less	LTS Similar
HYD-4. The Project would not risk release of pollutants due to Project inundation in flood hazard, tsunami, or seiche zones.	NI	NI Similar	NI Similar	LTS Similar
Overall Impact Determination	***LTS***	***LTS***	***LTS***	***LTS***
Land Use and Planning				
LUP-1. The Project would not physically divide an established community.	LTS	LTS Similar	LTS Similar, less	LTS Similar
LUP-2. The Project would not conflict with applicable land use plans, policies, or regulations adopted for the purpose of avoiding or mitigating an environmental effect.	LTS	LTS Similar	LTS Similar	LTS Similar
Overall Impact Determination	***LTS***	***LTS***	***LTS***	***LTS***
Mineral Resources				
MIN-1. The Project would not result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state.	LTS	LTS Similar, less	NI Less	LTS Similar
MIN-2. The Project would not result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan.	LTS	LTS Similar	NI Less	LTS Similar
Overall Impact Determination	***LTS***	***LTS***	***NI***	***LTS***
Noise				

Table ES-3b. Comparison of Impacts for Proposed Project and Project Alternatives

Resource Topics and Impacts[1]	Proposed Project	Alternative 1 (Transfer Station A on South Side of Rountree Ln)	Alternative 2 (No Project)	Alternative 3 (Combined Facilities on Adjacent Property)
N-1. Project construction of optional equipment parking and storage area may result in a substantial temporary increase in noise levels at residential receptors.	LTMS (MM N-1)	LTMS Similar, more[5] (MM N-1)	LTS Less	LTMS Similar, more[6] (MM N-1)
N-2. Project operation of Transfer Station B and Organics Diversion Facility Option 2 may expose persons to or generate excessive noise levels at Rountree Medium (Jail) Facility.	LTSM (MM N-2a, N-2b)	LTMS Similar, more[5] (MM N-2a, N-2b, N-2c)	LTS Less	LTMS Similar, more[6] (MM N-2d)
N-3. Construction would not expose persons to or generate excessive groundborne vibration or groundborne noise levels.	LTS	LTS Similar	LTS Similar, less	LTS Similar
N-4. Construction and operation would not expose people residing or working in the Project area to excessive noise from aircraft.	NI	NI Similar	NI Similar	NI Similar
Overall Impact Determination	***LTMS***	***LTMS***	***LTS***	***LTMS***
Population and Housing				
PH-1. The Project would not induce substantial unplanned population growth in an area, either directly or indirectly.	NI	NI Similar	NI Similar	NI Similar
PH-2. The Project would not displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere.	NI	NI Similar	NI Similar	NI Similar
Overall Impact Determination	*NI*	*NI*	*NI*	*NI*
Public Safety and Services				

Table ES-3b. Comparison of Impacts for Proposed Project and Project Alternatives

Resource Topics and Impacts[1]	Proposed Project	Alternative 1 (Transfer Station A on South Side of Rountree Ln)	Alternative 2 (No Project)	Alternative 3 (Combined Facilities on Adjacent Property)
PUB-1. The Project would not result in the need for new or physically altered fire protection facilities.	LTS	LTS Similar	NI Less	LTS Similar
PUB-2. The Project would not result in the need for new or physically altered police protection or law enforcement facilities.	LTS	LTS Similar	NI Less	LTS Similar
PUB-3. The Project would not result in the need for the construction of new or physically altered school or park facilities.	LTS	LTS Similar	NI Less	LTS Similar
Overall Impact Determination	***LTS***	***LTS***	***NI***	***LTS***
Recreation				
REC-1. The Project would not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.	NI	NI Similar	NI Similar	NI Similar
REC-2. The Project would not include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.	NI	NI Similar	NI Similar	NI Similar
Overall Impact Determination	*NI*	*NI*	*NI*	*NI*
Transportation				
T-1. The Project would not conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities.	LTS	LTS Similar	LTS Similar, more	LTS Similar

Table ES-3b. Comparison of Impacts for Proposed Project and Project Alternatives

Resource Topics and Impacts[1]	Proposed Project	Alternative 1 (Transfer Station A on South Side of Rountree Ln)	Alternative 2 (No Project)	Alternative 3 (Combined Facilities on Adjacent Property)
T-2. The Project would meet the screening criteria set by Santa Cruz County and thus would not conflict or be inconsistent with CEQA Guidelines, Section 15064.3(b).	LTS	LTS Similar	LTS Similar, more	LTS Similar
T-3. Neither construction nor operation of the Project would substantially increase hazards due to a geometric design feature or incompatible use.	LTS	LTS Similar	LTS Similar, less	LTS Similar
T-4. The Project would not result in inadequate emergency access.	LTS	LTS Similar	LTS Similar, less	LTS Similar
Overall Impact Determination	***LTS***	***LTS***	***LTS***	***LTS***
Tribal Cultural Resources				
TCR-1. The Project may cause a substantial adverse change in the significance of a Tribal Cultural Resource.	LTSM (MM CR-2a, CR-2b)	LTSM Similar (MM CR-2a, CR2-b)	LTS Less	LTSM Similar (MM CR-2a, CR2-b)
Overall Impact Determination	***LTSM***	***LTSM***	***LTS***	***LTSM***
Utilities and Service Systems				
UTIL-1. The Project would require the relocation or replacement of water, wastewater, stormwater, and electricity conveyance infrastructure.	LTS	LTS Similar	NI Less	LTS Similar
UTIL-2. Sufficient water supplies are available to serve construction and operation of the Project.	LTS	LTS Similar	NI Less	LTS Similar
UTIL-3. The Project would not generate wastewater in excess of existing treatment capacity.	LTS	LTS Similar	LTS Less	LTS Similar

Table ES-3b. Comparison of Impacts for Proposed Project and Project Alternatives

Resource Topics and Impacts[1]	Proposed Project	Alternative 1 (Transfer Station A on South Side of Rountree Ln)	Alternative 2 (No Project)	Alternative 3 (Combined Facilities on Adjacent Property)
UTIL-4. The Project would not generate solid waste in excess of local landfill capacity and would comply with applicable regulations related to solid waste.	LTS	LTS Similar	SU More[7]	LTS Similar
Overall Impact Determination	***LTS***	***LTS***	***SU***	***LTS***
Wildfire				
WILD-1. The Project would not substantially impair an adopted emergency response plan or emergency evacuation plan.	LTS	LTS Similar	LTS, Similar, less	LTS Similar
WILD-2. The Project would not, due to slope, prevailing winds, and other factors, exacerbate wildfire risks and thereby expose Project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire.	LTS	LTS Similar	LTS, Similar, less	LTS Similar
WILD-3. The Project would not require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment.	LTS	LTS Similar	LTS, Similar, less	LTS Similar
WILD-4. The Project would not expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes.	LTS	LTS Similar	LTS, Similar, less	LTS Similar
Overall Impact Determination	***LTS***	***LTS***	***LTS***	***LTS***

Table ES-3b. Comparison of Impacts for Proposed Project and Project Alternatives

Resource Topics and Impacts[1]	Proposed Project	Alternative 1 (Transfer Station A on South Side of Rountree Ln)	Alternative 2 (No Project)	Alternative 3 (Combined Facilities on Adjacent Property)

Notes:

NI= No Impact, **LTS**=Less than Significant, **LTSM**=Less than Significant with Mitigation, **SU**=Significant and Unavoidable, **MM**=Mitigation Measures

[1] The impact statements are for the Proposed Project as identified in Chapter 3, Environmental Impact Analysis. The "Overall Impact Determination" at the end of each topic is based on the most conservative (worse) impact.

[2] For Alternative 3, there would be no conflict with a Williamson Act contract, but there would be a conflict with existing zoning for agricultural use.

[3] For Alternative 3, the impacts to sensitive habitats/ESHA would be less overall than the Proposed Project, because impacts to coast live oak woodland would not occur. In addition, only 12 significant trees would be removed for Alternative 3, limited to arroyo willow scrub, which will reach a similar stature and structure within 2 years; compared to 114 significant trees, including many coast live oak trees, for the Proposed Project. Therefore, conflicts with local ordinances would be notably less; and impacts associated with Significant Tree Removal would be considered less than significant with mitigation, unlike the Proposed Project which would be significant and unavoidable.

[4] For Alternative 3, the geology and soils impact is from construction of the combined facilities on expansive soils (whereas the impact for the Proposed Project is from construction of Transfer Stations A and B on expansive soils).

[5] For Alternative 1, the noise impact is from construction and operation of Transfer Station A (south of Rountree Lane) on nearby residences, as well as operation of Transfer Station B on Rountree Medium (Jail) Facility.

[6] For Alternative 3, the noise impact is from construction and operation of the combined facilities on the nearby residence to the north, as well as from operation of the combined facilities on non-residential use (e.g., commercial nursery to the north).

[7] For Alternative 2, the solid waste impacts would be significant and unavoidable because the County would be generating solid waste in excess of local infrastructure capacity; would not be in compliance with state waste diversion laws; and the lack of a local waste management site could lead to increased illegal dumping and potential health, safety, and environmental impacts (e.g., biological resources, water quality).

Table ES-4. Summary of Alternative 3 Impacts

Impact	Significance Before Mitigation	Mitigation	Significance After Mitigation
Aesthetics			
AES-1. Alterative 3 would not have an adverse effect on scenic resources and vistas or degrade the existing visual character or quality of public views of the site or its surroundings.	Less than Significant	None Required	Less than Significant
AES-2. Alternative 3 would not damage scenic resources within a state scenic highway.	No Impact	None Required	No Impact
AES-3. Alternative 3 would not create a significant source of substantial light and glare that would adversely affect daytime or nighttime views.	Less than Significant	None Required	Less than Significant
AES-C. Cumulative development would not result in a significant cumulative impact. Therefore, the Alternative 3 contribution would not be cumulatively considerable, which is the same as the Proposed Project.	Not Cumulatively Considerable	None Required	Not Cumulatively Considerable
Agricultural Resources			
AG-1. Alternative 3 would not convert Important Farmland to non-agricultural use.	No Impact	None Required	No Impact
AG-2. Alternative 3 would not conflict with a Williamson Act contract, but would conflict with existing zoning for agricultural use.	Potentially Significant	MM AG-2	Less than Significant
AG-3. Alternative 3 would not conflict with existing zoning for, or cause rezoning of, forest land or timberland, or result in the loss of forest land or conversion of forest land to non-forest use.	No Impact	None Required	No Impact
AG-4. Alternative 3 would not involve other changes in the existing environment which could result in conversion of farmland to non-agricultural use.	Less than Significant	None Required	Less than Significant
AG-C. Cumulative development would not result in a significant cumulative impact to agricultural resources. Therefore, the Alternative 3 contribution would not be cumulatively considerable which is the same as the Proposed Project.	Not Cumulatively Considerable	None Required	Not Cumulatively Considerable

Table ES-4. Summary of Alternative 3 Impacts

Impact	Significance Before Mitigation	Mitigation	Significance After Mitigation
Air Quality			
AIR-1. Alternative 3 would not conflict with or obstruct implementation of the adopted MBARD AQMP.	Less than Significant	None Required	Less than Significant
AIR-2. Alternative 3 would not result in a cumulatively considerable net increase of any criteria pollutant for which the region is designated non-attainment.	Less than Significant	None Required	Less than Significant
AIR-3. Alternative 3 would not expose sensitive receptors to substantial pollutant concentrations.	Less than Significant	None Required	Less than Significant
AIR-4. Alternative 3 would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.	Less than Significant	None Required	Less than Significant
AIR-C. The North Central Coast Air Basin is experiencing an existing cumulative impact related to PM_{10} emissions. However, the Alternative 3 contribution would not be cumulatively considerable, which is the same as the Proposed Project.	Not Cumulatively Considerable	None Required	Not Cumulatively Considerable
Biological Resources			
BIO-1. Alternative construction may result in impacts to Crotch's bumble bee, if present.	Potentially Significant	MM BIO-1a, BIO-1b, BIO-1c, BIO-1d, BIO-8d	Less than Significant
BIO-2. Alternative construction and operation would not result in impacts to roosting western monarch butterflies.	Less than Significant	None Required	Less than Significant
BIO-3. Alternative construction and operation may result in impacts to California red-legged frog.	Potentially Significant	MM BIO-1a, BIO-1b, BIO-3, BIO-8e	Less than Significant
BIO-4. Alternative construction and operation may result in impacts to northwestern pond turtle.	Potentially Significant	MM BIO-1a, BIO-1b, BIO-3, BIO-8e	Less than Significant
BIO-5. Alternative construction and operation may result in impacts to avian species, their habitats, and nesting activities.	Potentially Significant	MM BIO-1a, BIO-1b, BIO-5a, BIO-5b, BIO-8e	Less than Significant
BIO-6. Alternative construction and operation may result in impacts to bat species, their habitats, and roosting activities.	Potentially Significant	MM BIO-1a, BIO-1b, BIO-6, BIO-8e	Less than Significant
BIO-7. Alternative construction may result in impacts to San Francisco dusky-footed woodrat houses, individuals, or young.	Potentially Significant	MM BIO-1a, BIO-1b, BIO-6, BIO-8e	Less than Significant

Table ES-4. Summary of Alternative 3 Impacts

Impact	Significance Before Mitigation	Mitigation	Significance After Mitigation
BIO-8. Alternative construction and operation would result in impacts to coast live oak woodland.	Potentially Significant	MM BIO-8a, BIO-8b, BIO-8c, BIO-8e	Less than Significant
BIO-9. Alternative construction would result in minimal impacts to riparian forest.	Potentially Significant	MM BIO-8a, BIO-8b, BIO-8c, BIO-8e, BIO-9a, BIO-9b	Less than Significant
BIO-10. Alternative 3 construction would result in impacts to other Environmentally Sensitive Habitat Areas.	Potentially Significant	MM BIO-8a, BIO-8b, BIO-8c, BIO-8e	Less than Significant
BIO-11. Alternative 3 construction would result in minimal impacts to wetlands.	Potentially Significant	MM BIO-8a, BIO-8b, BIO-8c, BIO-8e, BIO-9a, BIO-9b	Less than Significant
BIO-12. Alternative 3 construction would result in minimal impacts to riverine habitats	Potentially Significant	MM BIO-8a, BIO-8b, BIO-8c, BIO-8e	Less than Significant
BIO-13. Alternative 3 construction would result in impacts to wildlife movement.	Potentially Significant	MM BIO-1a, BIO-1b, BIO-3, BIO-8e, BIO-13	Less than Significant
BIO-14. Alternative 3 construction would conflict with local policies or ordinances protecting biological resources	Potentially Significant	MM BIO-8a, BIO-8b, BIO-8c, BIO-8e, BIO-14	Less than Significant
BIO-C. Cumulative development would result in a significant cumulative impact to sensitive habitat. However, the Alternative 3 contribution would not be cumulatively considerable, which is different than the Proposed Project which would result in a cumulatively considerable contribution.	Not Cumulatively Considerable	None Required	Not Cumulatively Considerable
Cultural Resources			
CR-1. Alternative 3 would not have an adverse effect on historical resources.	Less than Significant	None Required	Less than Significant
CR-2. Ground-disturbing activities during Alternative 3 construction may unearth or adversely impact subsurface archaeological resources.	Potentially Significant	MM CR-2a, CR-2b	Less than Significant
CR-3. Ground-disturbing activities during Alternative 3 construction may disturb human remains.	Potentially Significant	MM CR-2a, CR-2b	Less than Significant
CR-C. Cumulative development would not result in a significant cumulative impact. Therefore, the Alternative 3 contribution would not be cumulatively considerable, which is the same as the Proposed Project.	Not Cumulatively Considerable	None Required	Not Cumulatively Considerable

Table ES-4. Summary of Alternative 3 Impacts

Impact	Significance Before Mitigation	Mitigation	Significance After Mitigation
Energy			
EN-1. Alternative 3 would not result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during Project construction or operation.	Less than Significant	None Required	Less than Significant
EN-2. Alternative 3 would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency.	Less than Significant	None Required	Less than Significant
EN-C. Cumulative development would not result in a significant cumulative impact. Therefore, the Alternative 3 contribution would not be cumulatively considerable, which is the same as the Proposed Project.	Not Cumulatively Considerable	None Required	Not Cumulatively Considerable
Geology and Soils			
GEO-1. Alternative 3 would not cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault or strong seismic ground shaking.	Less than Significant	None Required	Less than Significant
GEO-2. Alternative 3 would not exacerbate exposure of the public to liquefaction or landslide hazards and would not be located on a geological unit or soil that could become unstable as a result of lateral spreading, landslides, and liquefaction.	Less than Significant	None Required	Less than Significant
GEO-3. Alternative 3 would not result in substantial soil erosion or loss of topsoil.	Less than Significant	None Required	Less than Significant
GEO-4. Alternative 3 could exacerbate the existing risk to life or property resulting from expansive soils.	Potentially Significant	MM GEO-4	Less than Significant
GEO-5. Alternative 3 would not have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems.	Less than Significant	None Required	Less than Significant
GEO-6. Ground-disturbing activities during Alternative 3 construction would not directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.	Less than Significant	None Required	Less than Significant
GEO-C. Cumulative development would not result in a significant cumulative impact. Therefore, the Alternative 3 contribution would not be cumulatively considerable, which is the same as the Proposed Project.	Not Cumulatively Considerable	None Required	Not Cumulatively Considerable

Table ES-4. Summary of Alternative 3 Impacts

Impact	Significance Before Mitigation	Mitigation	Significance After Mitigation
Greenhouse Gas Emissions			
GHG-1. Alternative 3 would not result in GHG emissions that would have a significant impact on the environment.	Less than Significant	None Required	Less than Significant
GHG-2. Alternative 3 would result in tree removal that would be consistent with applicable GHG reduction plans.	Potentially Significant	MM BIO-14	Less than Significant
GHG-3. Alternative 3 would not expose people or structures to substantial risk of loss, injury, or death as a result of flooding from projected sea level rise and storms.	Less than Significant	None Required	Less than Significant
GHG-C. There is an existing statewide cumulative impact related to GHG emissions. However, the Alternative 3 contribution would not be cumulatively considerable, which is the same determination as the Proposed Project.	Not Cumulatively Considerable	None Required	Not Cumulatively Considerable
Hazards and Hazardous Materials			
HAZ-1. Alternative 3 would not create a significant hazard to the public or the environment through the routine transport, use, disposal, or release of hazardous materials.	Less than Significant	None Required	Less than Significant
HAZ-2. Alternative 3 would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.	Less than Significant	None Required	Less than Significant
HAZ-3. Alternative 3 would not be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, create a significant hazard to the public or the environment.	Less than Significant	None Required	Less than Significant
HAZ-4. Alternative 3 would not result in a safety hazard or excessive noise for people residing or working in Alternative 3 area due to proximity of an airport.	Less than Significant	None Required	Less than Significant
HAZ-5. Alternative 3 would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.	Less than Significant	None Required	Less than Significant

Table ES-4. Summary of Alternative 3 Impacts

Impact	Significance Before Mitigation	Mitigation	Significance After Mitigation
HAZ-6. Alternative 3 would not expose people or structures to a significant risk of loss, injury, or death involving wildfires.	Less than Significant	None Required	Less than Significant
HAZ-C. Cumulative development would not result in a significant cumulative impact. Therefore, the Alternatives 3 contribution would not be cumulatively considerable, which is the same determination as the Proposed Project.	Not Cumulatively Considerable	None Required	Not Cumulatively Considerable
Hydrology and Water Quality			
HYD-1. Alternative 3 would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality or conflict with a Water Quality Control Plan.	Less than Significant	None Required	Less than Significant
HYD-2. Alternative 3 would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge.	Less than Significant	None Required	Less than Significant
HYD-3. Alternative 3 would not substantially alter drainage patterns within Alternative 3 area or vicinity.	Less than Significant	None Required	Less than Significant
HYD-4. Alternative 3 would not risk release of pollutants due to Project inundation in flood hazard, tsunami, or seiche zones.	Less than Significant	None Required	Less than Significant
HYD-C. Cumulative development would not result in a significant cumulative impact. Therefore, the Alternative 3 contribution would not be cumulatively considerable, which is the same as the Proposed Project.	Not Cumulatively Considerable	None Required	Not Cumulatively Considerable
Land Use and Planning			
LUP-1. Alternative 3 would not physically divide an established community.	Less than Significant	None Required	Less than Significant
LUP-2. Alternative 3 would not conflict with applicable land use plans, policies, or regulations adopted for the purpose of avoiding or mitigating an environmental effect.	Less than Significant	None Required	Less than Significant
LUP-C. Cumulative development would not result in a significant cumulative impact. Therefore, the Alternative 3 contribution would not be cumulatively considerable, which is the same as the Proposed Project.	Not Cumulatively Considerable	None Required	Not Cumulatively Considerable

Table ES-4. Summary of Alternative 3 Impacts

Impact	Significance Before Mitigation	Mitigation	Significance After Mitigation
Mineral Resources			
MIN-1. Alternative 3 would not result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state.	Less than Significant	None Required	Less than Significant
MIN-2. Alternative 3 would not result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan.	Less than Significant	None Required	Less than Significant
MIN-C. Cumulative development would not result in a significant cumulative impact. Therefore, the Alternative 3 contribution would not be cumulatively considerable, which is the same as the Proposed Project.	Not Cumulatively Considerable	None Required	Not Cumulatively Considerable
Noise			
N-1. Alternative 3 construction may result in a substantial temporary increase in noise levels at residential receptor.	Potentially Significant	MM N-1	Less than Significant
N-2. Alternative 3 operation may expose persons to or generate excessive noise levels at residential and non-residential receptors.	Potentially Significant	MM N-2d	Less than Significant
N-3. Alternative 3 construction would not expose persons to or generate excessive groundborne vibration or groundborne noise levels.	Less than Significant	None Required	Less than Significant
N-4. Alternative 3 construction and operation would not expose people residing or working on the Alternative 3 site to excessive noise from aircraft.	Less than Significant	None Required	Less than Significant
N-C. Cumulative development would not result in significant cumulative impact. Therefore, the Alternative 3 contribution would not be cumulatively considerable, which is the same determination as the Proposed Project.	Not Cumulatively Considerable	None Required	Not Cumulatively Considerable
Population and Housing			
PH-1. Alternative 3 would not induce substantial unplanned population growth in an area, either directly or indirectly.	No Impact	None Required	No Impact
PH-2. Alternative 3 would not displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere.	No Impact	None Required	No Impact
PH-C. Cumulative development would not result in a significant cumulative impact. Therefore, the Alternative 3 contribution would not be cumulatively considerable, which is the same as the Proposed Project.	Not Cumulatively Considerable	None Required	Not Cumulatively Considerable

Table ES-4. Summary of Alternative 3 Impacts

Impact	Significance Before Mitigation	Mitigation	Significance After Mitigation
Public Services			
PUB-1. Alternative 3 would not result in the need for new or physically altered fire protection facilities.	Less than Significant	None Required	Less than Significant
PUB-2. Alternative 3 would not result in the need for new or physically altered police protection or law enforcement facilities.	Less than Significant	None Required	Less than Significant
PUB-3. Alternative 3 would not result in the need for the construction of new or physically altered school or park facilities.	Less than Significant	None Required	Less than Significant
PUB-C. Cumulative development would not result in a significant cumulative impact. Therefore, the Alternative 3 contribution would not be cumulatively considerable, which is the same as the Proposed Project.	Not Cumulatively Considerable	None Required	Not Cumulatively Considerable
Recreation			
REC-1. Alternative 3 would not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.	No Impact	None Required	No Impact
REC-2. Alternative 3 would not include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.	No Impact	None Required	No Impact
REC-C. Cumulative development would not result in a significant cumulative impact. Therefore, the Alternative 3 contribution would not be cumulatively considerable, which is the same as the Proposed Project.	Not Cumulatively Considerable	None Required	Not Cumulatively Considerable
Transportation			
T-1. Alternative 3 would not conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities.	Less than Significant	None Required	Less than Significant
T-2. Alternative 3 would meet the screening criteria set by Santa Cruz County and thus would not conflict or be inconsistent with CEQA Guidelines, Section 15064.3(b).	Less than Significant	None Required	Less than Significant
T-3. Neither construction nor operation of Alternative 3 would substantially increase hazards due to a geometric design feature or incompatible use.	Less than Significant	None Required	Less than Significant
T-4. Alternative 3 would not result in inadequate emergency access.	Less than Significant	None Required	Less than Significant

Table ES-4. Summary of Alternative 3 Impacts

Impact	Significance Before Mitigation	Mitigation	Significance After Mitigation
T-C. Cumulative development would result in a cumulative impact related to transportation (VMT). However, the Alternative 3 contribution to the existing cumulative impact would not be cumulatively considerable, which is the same as the Proposed Project.			
Tribal Cultural Resources			
TCR-1. Alternative 3 may cause a substantial adverse change in the significance of a Tribal Cultural Resource.	Potentially Significant	MM CR-2a, MM CR-2b	Less than Significant
TCR-C. Cumulative development would not result in a significant cumulative impact. Therefore, the Alternative 3 contribution would not be cumulatively considerable, which is the same as the Proposed Project.	Not Cumulatively Considerable	None Required	Not Cumulatively Considerable
Utilities and Service Systems			
UTIL-1. Alternative 3 would require the relocation or replacement of water, wastewater, stormwater, and electricity conveyance infrastructure.	Less than Significant	None Required	Less than Significant
UTIL-2. Sufficient water supplies are available to serve construction and operation of Alternative 3.	Less than Significant	None Required	Less than Significant
UTIL-3. Alternative 3 would not generate wastewater in excess of existing treatment capacity.	Less than Significant	None Required	Less than Significant
UTIL-4. Alternative 3 would not generate solid waste in excess of local landfill capacity and would comply with applicable regulations related to solid waste.	Less than Significant	None Required	Less than Significant
UTIL-C. Cumulative development could result in significant cumulative impact concerning water supply, but would not result in significant cumulative impacts to the other utilities and service systems. For potential cumulative impact to water supply, the Alternative 3 contribution would not be cumulatively considerable, which is the same as the Proposed Project.	Not Cumulatively Considerable	None Required	Not Cumulatively Considerable

Table ES-4. Summary of Alternative 3 Impacts

Impact	Significance Before Mitigation	Mitigation	Significance After Mitigation
Wildfire			
WILD-1. Alternative 3 would not substantially impair an adopted emergency response plan or emergency evacuation plan.	Less than Significant	None Required	Less than Significant
WILD-2. Alternative 3 would not, due to slope, prevailing winds, and other factors, exacerbate wildfire risks and thereby expose Project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire.	Less than Significant	None Required	Less than Significant
WILD-3. Alternative 3 would not require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment.	Less than Significant	None Required	Less than Significant
WILD-4. Alternative 3 would not expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes.	Less than Significant	None Required	Less than Significant
WILD-C. Cumulative development would not result in a significant cumulative impact. Therefore, the Alternative 3 contribution would not be cumulatively considerable, which is the same as the Proposed Project.	Not Cumulatively Considerable	None Required	Not Cumulatively Considerable

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1 Introduction

This document is a project-specific Environmental Impact Report (EIR) for the **Buena Vista Landfill Redevelopment Project** (Project), located at the Buena Vista Drive Sanitary Landfill (hereinafter called Buena Vista Landfill) in unincorporated Santa Cruz County (County) (**Figure 1-1**, Regional Location). All figures are located at the end of Chapter 1. The Project is proposed by the County of Santa Cruz (County), which is serving as the California Environmental Quality Act (CEQA) lead agency.

The Buena Vista Landfill is currently permitted[1] to reach a maximum elevation of 200 feet. As of November 2022,[2] based on the estimated remaining capacity (or site life), the Buena Vista Landfill is estimated to close between 2028 and 2038 depending on the rate of the annual tonnage of waste disposed at the landfill, the amount of waste transferred for disposal at regional landfills while the Buena Vista Landfill remains open, and the organic diversion facility option selected for this Project.[3] To further extend the site life beyond 2028, the County obtained a medium transfer permit from the California Department of Resources Recycling and Recovery (CalRecycle) in 2024. This allows the County to export approximately one-third of the waste that would otherwise be buried at the landfill. The medium transfer permit does not resolve the waste management challenges, but it has helped delay site closure and provided an opportunity to test transfer operation efficiencies.

The County of Santa Cruz diverts approximately 55 percent of the waste generated in the unincorporated County through recycling and composting programs. However, despite increased investment in waste reduction and diversion efforts at the state and local level, per person waste disposal rates in the unincorporated County have doubled over the past 15 years. Over the past 30 years, County citizens have opposed all alternative landfill sites identified within the unincorporated County. With increased demand for waste disposal capacity and no new landfill sites available to it, the County must develop a waste management facility to serve the County's ongoing waste disposal needs.

The purpose of the County's redevelopment Project is to ensure an orderly landfill closure program that meets federal and state requirements and provides County residents with ongoing solid waste handling capabilities that meet state-required waste management goals for waste reduction, source separation, materials recycling, and organics diversion.

The Project includes three key components: 1) Developing two new waste transfer stations at the existing landfill site to implement transfer station operations for waste handling and transport; 2) Developing an improved organics diversion facility (ODF) to address stormwater quality issues and support organic waste processing and diversion; and 3) Implementing the landfill closure and revegetation plan once site capacity is reached. The design plans are presented in **Appendix A**, Project Design Plans.

[1] The current Solid Waste Facilities Permit (SWFP-SWIS No. 44-AA-0004) for the Buena Vista Drive Sanitary Landfill, hereinafter called Buena Vista Landfill in the EIR, was issued by CalRecycle.

[2] The topography was checked again in 2025, and the site life range is similar (2028–2038).

[3] If Organics Diversion Facility (ODF) Option 1 is selected, the organics facility will be developed on the existing landfill, likely reducing the remaining capacity of the existing landfill to fewer than 10 years. ODF Option 1 is described further below in Section 2.4.

This EIR chapter includes discussion of the following topics:

1. EIR Purpose and County Legal Authority
2. Project Background
3. CEQA Environmental Review Process
4. EIR Scope and Content
5. EIR Organization
6. Public Outreach

1.1 EIR Purpose and County Legal Authority

To implement the Project, discretionary approval by the County is required. This renders the Project subject to the requirements of CEQA. The County is the CEQA lead agency.

In accordance with Section 15121 of the CEQA Guidelines (Title 14, California Code of Regulations, Section 15000 et seq.), the purpose of an EIR is to serve as an informational document that "will inform public agency decision-makers and the public generally of the significant environmental effects of a project, identify possible ways to minimize the significant effects, and describe reasonable alternatives to the project."

This EIR serves as an informational document for the public, responsible agencies, and County decision-makers. The decision-makers will review and consider the information in the EIR, along with any other relevant information, in making final decisions regarding the Project.

1.2 Project Background

Santa Cruz County owns two recycling and solid waste facilities in the unincorporated county—the Ben Lomond Transfer Station in north County and the Buena Vista Landfill in south County. Both facilities include household hazardous waste collection sites, organics processing and transfer sites, recycling centers, and safe disposal sites for County residents, businesses, and commercial waste haulers. Recycling efforts include mattresses, e-waste, tires, carpet, construction and demolition (C&D) materials, appliances, batteries, etc. Regulations continue to evolve and expand the items that are required to be diverted from the waste stream.

1.2.1 Ben Lomond Transfer Station

The Ben Lomond Transfer Station was built in 1990 adjacent to the former Ben Lomond landfill as a resource for north County residents to continue to recycle and dispose of their solid waste after the Ben Lomond landfill was closed. The Ben Lomond Transfer Station also includes a household hazardous waste facility. Recyclables, organics, and solid waste are sorted and transported from the Ben Lomond Transfer Station to either a recycling facility, an organics composting facility, or a landfill. Refuse is taken to the ReGen Monterey Landfill in Marina, California, under an agreement with the Monterey Regional Waste Management District.

No changes to facilities or operations at the Ben Lomond Transfer Station are proposed as part of the Project.

1.2.2 Buena Vista Landfill

The Buena Vista Landfill is a Class III municipal solid waste landfill that receives nonhazardous solid waste and is a center for waste handling, recycling collection, organics diversion, and other waste reduction activities necessary to comply with state and federal laws. Additionally, there is a household hazardous waste collection facility that accepts materials to be transferred for appropriate off-site recycling or disposal, and a landfill gas co-generation facility that collects landfill gas and converts it to electricity. To provide background and context for the Project being analyzed in this EIR, this section provides information on the historical use, planning history, and current operations of the Buena Vista Landfill. The Buena Vista Landfill planning history and timeline are summarized at the end of this section and in **Table 1-1**.

Historical Use and Planning History

The County acquired the privately owned Buena Vista Landfill in the 1960s, when there was little regulation of solid waste disposal in the United States. Buena Vista Landfill then occupied the 35-acre parcel that is now called the Old Landfill, located southwest of the Current Active Landfill. The Old Landfill parcel is adjacent to the Santa Cruz Branch Rail Line and the City of Watsonville landfill (**Figure 1-2**, Landfill History).

When the County acquired the Old Landfill, its main use was for the burial of solid waste. After federal passage of the Solid Waste Disposal Act in 1965, landfill operations began to change in response to state and federal regulations governing landfills. The purpose of the Solid Waste Disposal Act was to reduce the volume of materials disposed in landfills and to develop materials diversion and reuse technologies. Since 1965 many laws have passed to increase landfill safety and to divert materials from landfill disposal.

In 1985, the County evaluated and approved a Coastal Development Permit and General Plan/Local Coastal Program (LCP) Amendment to expand the Buena Vista Landfill to its current footprint (**Figure 1-3**, Buena Vista Landfill Boundaries). At the time, the anticipated closure date of the expanded landfill was 2005.

The Buena Vista Landfill expansion approvals required a General Plan/LCP Amendment because the 1985 project uses were inconsistent with the General Plan/LCP and zoning. The existing uses of the parcel prior to the landfill expansion included a quarry, grazing, and row crop agriculture in the southeast portion of the south landfill parcel[4]. At the time the General Plan/LCP Amendment was approved, it was believed that the landfill would be an "interim use" and the land would be returned to the agricultural use of grazing once the landfill was closed. Therefore, the General Plan/LCP Amendment included language allowing a publicly owned and operated sanitary landfill as an interim use on land zoned Commercial Agriculture, as long as the land could be made available for subsequent agricultural uses upon cessation of landfill activities. Landfill closure and agricultural viability are discussed in greater detail in the next section below.

In 1990, the County convened an Integrated Waste Management Local Task Force (Task Force), a commission composed of elected officials from the County and each of the incorporated cities (Capitola, Santa Cruz, Scotts Valley, and Watsonville), and a citizen representative. One of the primary tasks of the Task Force was to explore landfill post-closure options, including potential sites

[4] As described in Chapter 2, the "south landfill" parcel is APN 052-531-03. It is currently composed of 94 acres zoned PF-AIA that houses the closed Module 1 of the landfill and support facilities, as well as the County's Rountree Medium (Jail) Facility and Buena Vista Migrant Center (farmworker housing and childcare facility).

for new landfills, transfer stations, waste processing plants, and large-scale composting. This planning history is summarized in **Table 1-1**.

Between 1991 and 1996, the Integrated Waste Management Facilities (IWMF) project was conducted by the Integrated Waste Management Local Task Force as a first step in the Facilities Siting Study required under the Integrated Waste Management Act (Assembly Bill [AB] 939). The Task Force collaborated to hire consultants to plan and site facilities needed to maximize waste diversion through material recovery and composting operations. The proposed functionality of the future facilities was intended to reduce waste disposed in landfills through diversion programs to maximize existing landfill lifespans.

The IWMF project identified existing waste sites in north and south County for redevelopment and six potential new waste sites in unincorporated south County to add needed south County recycling capacity. The IWMF project also recommended a countywide composting facility in south County capable of accepting both organic waste and sewage sludge. If approved, the IWMF project would have developed or redeveloped waste sites for use as transfer stations, materials recovery facilities, and landfill sites in both north and south County to serve self-haulers and franchise collection vehicles. The IWMF project also proposed to develop a consolidated compost facility adjacent to the Watsonville Wastewater Treatment Plant in the unincorporated county to serve all local jurisdictions. The County prepared an EIR for the preferred new waste sites based on the conceptual facility designs recommended by the Task Force. The IWMF project EIR was never certified because of a change in County direction for the project based on lack of policy support for the project.

In 2000, the Task Force formed a subcommittee called the Citizens Advisory Group (CAG) who completed the initial report known as the “Siting Study” in summer 2003. A series of public meetings were held to discuss the initial study identifying possible locations for a new landfill within the County. The final siting study presented 23 potential sites for a new County landfill at a public meeting held on September 9, 2004, to determine which of the 23 locations would be moved forward in the process for further study.

A large public turn out in opposition of any new landfills in Santa Cruz County resulted in the Task Force’s recommendation to the County Board of Supervisors to drop all potential landfill sites under review and to not consider development of a new County landfill until other waste management alternatives had been fully studied. The two alternatives recommended by the Task Force and approved by the County Board of Supervisors on February 9, 2005: 1) transferring refuse to landfills outside Santa Cruz County and/or 2) conversion of waste to a reusable energy product.

Between 2005 and 2009, various waste-to-energy proposals were evaluated and presented to the County Board of Supervisors for consideration. In September 2009, the County refrained from considering this alternative until a proposal had proven to be commercially and environmentally viable in California on a scale suitable to the County of Santa Cruz’s waste stream.

Between 2005 and 2019, Public Works staff, as directed by the County Board of Supervisors, hired consultants to evaluate various proposals to continue to provide public disposal and recycling services post-landfill closure. Public Works staff determined that a smaller transfer station and ODF project on the County-owned Buena Vista Landfill property, without expansion northward or elsewhere in the County, is the most feasible post-closure solution to meet future waste disposal needs at Buena Vista Landfill, with the least impact on surrounding property and other County lands.

In 2019, the County retained SCS Engineers to analyze the Buena Vista Landfill site, identify potential building sites, and design the planned facilities based on current and future County waste disposal needs. Potential locations for the transfer station within the landfill parcels were evaluated

by SCS Engineers and County staff and documented in the Buena Vista Landfill Proposed Transfer Station Opportunities and Constraints Analysis (SCS Engineers 2020). The transfer station building site analysis focused on areas of the parcels where buried waste is not present because of the geotechnical challenges and regulatory requirements described below.

Geotechnical Challenges

- Long-term differential waste settlement affects stability of structures built over the waste body.
    - Foundation/tipping floor integrity
    - Roadway integrity
- Differential settlement from waste decomposition coupled with building weight can damage the integrity of the landfill cap.
    - Landfill gas leaks, greenhouse gas emissions, and associated explosion risks
        - Infiltration of landfill gas into new structures
        - Escape of landfill gas into the environment
- Differential settlement from waste decomposition coupled with building weight can damage landfill infrastructure needed to control environmental impacts associated with buried municipal waste.
    - Landfill gas collection system
    - Leachate collection system
    - Condensate collection system
- Construction is incompatible with the maintenance of both base and cap landfill liners.
    - Pile driving and other structural building techniques needed to add stability to new construction pierce liners and defeat the purpose of landfill environmental containment.

Regulatory Requirements[5]:

- Maintain cap integrity to ensure effective landfill gas containment.
    - Control air quality emissions
    - Limit subsurface gas migration
    - Prevent landfill gas explosions
- Maintain cap integrity to limit water infiltration into waste body to control leachate production.
- Maintain cap integrity to protect leachate and condensate collection systems.
- Maintain liner integrity to protect groundwater resources.

The constraints analysis only evaluated building sites that were outside the landfill waste boundaries for transfer station development. The Old Landfill in the southern portion of the landfill property was included as a potentially viable location for an ODF, because of the limited

[5] Regulatory requirements to maintain environmental and public safety: California Code of Regulations, Title 27, Section 21190 – California Integrated Waste Management Board-Postclosure Land Use (Section 21190) and Proposed General Waste Discharge Requirements Order R3-2024-0036 For Closed Landfill Facilities in the Central Coast Region (General Order for Closed MSW Landfills).

construction impacts associated with the proposed ODF facility. Other factors considered in relation to the Old Landfill as a potential new construction site are the length of time the landfill has been closed; the current low levels of landfill gas production, which indicates decomposition of putrescible waste has slowed so differential settlement is likely to be manageable; and the thick layer of inert cap material that would provide a more stable subsurface for construction. For additional information on the locations considered, refer to Chapter 5, Project Alternatives; Section 5.1; and **Figure 5-2**, Transfer Station Alternatives.

The currently undeveloped area in the far northeast corner of the property was identified as the preferred location because: it provides the greatest number of opportunities for the County to maximize use of the landfill in serving the public for both the short and long term, with minimal interference with current recycling and landfill operations, continued use of existing infrastructure (e.g., scale house, recycle center, household hazardous waste facility), closure operations, and long-term monitoring when the landfill reaches capacity.

In 2021, during conceptual design of the transfer station in the far northeast corner of the property, the Project team determined the site could not accommodate a transfer station large enough to accommodate the amount of waste anticipated, nor accommodate an ODF. Therefore, the Project includes two transfer stations and the ODF in different locations on the property. As described in Section 2.4, Transfer Station A would be in the northeast corner of the property. Transfer Station B would be on the site of the existing maintenance facilities. The ODF would either remain in its current location on the Current Active Landfill or be relocated to the Old Landfill.

Landfill Closure and Agricultural Viability

As described above, in 1985, when the County approved the landfill expansion and required General Plan/LCP Amendment, it was believed that the landfill would be an “interim use,” and the land would be returned to the agricultural use of grazing once the landfill closed. However, the southeast portion of the site was the only area that historically accommodated agriculture. The northwest portion was the O’Connell Quarry, operated by Granite Construction to mine sand and gravel, and the remaining area was a “slough-like drainage surrounded by rolling hills” (1985 EIR).

Since 1985, landfill regulations and closure requirements have changed substantially. The passage of the Federal Resource Conservation and Recovery Act in 1989 altered landfill closure methods, long-term monitoring requirements, and best management practices for closed landfills, so that it is no longer feasible to consider returning the closed landfill to an agricultural use (grazing) as was planned in 1985.

In 2021, the County retained the services of Rush and Associates, an agricultural consultant, to evaluate agricultural viability of the landfill property as outlined in General Plan Section 5.13.20, Conversion of Agricultural Lands, and Section 5.13.21, Determining Agricultural Viability. The report concludes that much of the land was never suitable for commercial agriculture prior to use as a landfill due to the poor and highly variable soil quality, native vegetation, and topography. The report is included in **Appendix B**, Agriculture Viability Study.

Post-landfill use for commercial agriculture is not considered feasible because federal landfill closure laws specified in the Resource Conservation and Recovery Act require the installation and maintenance of a cap designed to form a barrier between the waste and the ground surface. This cap is designed to minimize the exposure of humans and environmental receptors from the capped media and to restrict surface water and rainwater infiltration into the subsurface waste to reduce leachate generation and prevent potential leaching of site contaminants. The proposed cap at the

Buena Vista Landfill includes a combination of vegetative soil material and geosynthetic liners and drainage media.

Maintenance of the landfill cap as an intact structure limits many activities essential to commercial agriculture including, but not limited to: deep and shallow tilling, groundwater pumping, and crop irrigation. These normal agricultural activities would adversely impact the integrity of the cap and lead to erosion, leaching, and the potential for vertical/lateral movement of contaminants in the subsurface waste. Although dry land grazing on native vegetation might be feasible, it is not recommended because of the potential for grazing animals to impact the cap, leading to the potential for erosion damage, water infiltration, and off-site contaminant transport.

Further, the study notes that the adjacent wildlife refuge and riparian estuary to the east is a protected haven for various animals (e.g., rats, squirrels, gophers, skunks, racoons, deer, coyotes) which could damage, destroy or contaminate growing crops, and is habitat for insects and fungal disease organisms that could damage crops. Additionally, the proximity of the ecologically sensitive riparian habitat downslope would restrict the use of pesticides and fertilizers.

Because of these engineering and environmental concerns, the County determined that Commercial Agriculture zoning is not an appropriate designation and will rezone this portion of the landfill to Public Facility zoning to match the rest of the landfill and adjacent developed lands to the south.

Table 1-1. Buena Vista Landfill Planning History Timeline

Year	Action
1960s	County acquires private landfill (i.e., Old Landfill).
1985	BVLF permitted to expand to current limits, with anticipated closure year of 2005.
1990	Countywide Integrated Waste Management Local Task Force (Task Force) established under state law as an advisory commission to the County of Santa Cruz Board of Supervisors. Task Force charged to develop the Countywide Integrated Waste Management Plan and to ensure ongoing regional waste management capacity.
1991–1996	Task Force evaluated IWMF project to upgrade existing waste facilities in north and south County to increase waste diversion infrastructure. Project identified six potential new waste management sites and analyzed two sites to develop complimentary recycling and composting facilities.
2000	Task Force[1] evaluated post-closure options, and identified new anticipated BVLF closure year of 2020.
2003–2004	Task Force Subcommittee, CAG, completes siting study to identify potential sites for new County landfill. Task Force holds well attended siting study public meeting at Mello Center. Most speakers oppose developing a new landfill site within the County. September 2, 2004, the Task Force passed a motion to recommend BOS drop consideration of new landfill sites within the County.[2] On February 15, 2005, BOS accepts Task Force recommendation and directs staff to issue an RFP for consulting services to assist the County in long-range resource recovery and waste management facilities planning.

Table 1-1. Buena Vista Landfill Planning History Timeline

Year	Action
2005–2007	County hires consultant HDRBVA to evaluate potential sites for resource and non-landfill facilities, formulate an action plan, and facilitate public outreach. November 29, 2007, BOS accepts and files state report on Zero Waste EcoPark long-range resource recovery and waste management planning and authorizes the Director of Public Works to sign a letter of intent to participate in the development of a regional organics processing facility with Monterey Regional Waste Management District. HDRBVA's report, Long-Range Resource Recovery and Waste Management Facilities (EcoPark) Planning Facility Functionality and Overview of Site Considerations, presented to the County BOS. The EcoPark[3] would be located on a portion of the landfill and the adjacent 26-acre parcel to the north.
2008–2010	BOS directs County staff to start environmental review of the EcoPark in March, and then to re-evaluate the project description based on current data in December 2008. BOS directs County staff to further revise the EcoPark project description, which downsized due to economic downturn, reduced interest from participating cities, and permitting challenges associated with developing the adjacent 26-acre parcel to the north. BOS identifies landfill closure date to be between 2023–2025 based on aerial photographs and the 2007 HDRBVA report.
2011–2018	County determines that a smaller transfer station and organics waste facility project on County-owned property is the most feasible post-closure solution to meet future waste disposal needs when Buena Vista Landfill closes. This decision allowed for continued operations and utilization of landfill Module 5 to prolong the life of the landfill. Options for a post-landfill disposal facility continued to be evaluated and presented to the BOS at regular intervals.
2019–2021	In 2019, County hires consultant SCS Engineers to analyze operational data and prepare multiple conceptual designs for a transfer station and organics waste facility within the landfill parcels. In 2020, Public Works staff and SCS Engineers prepared the Buena Vista Landfill Proposed Transfer Station Opportunities and Constraints Analysis, as a tool to evaluate the conceptual options prepared by SCS Engineers as well as off-site alternatives. This report and subsequent planning and design efforts in 2021 resulted in the current Project being evaluated in this EIR.
2021	County hires consultant Rush and Associates to determine if the landfill parcel currently zoned Commercial Agriculture is viable for agricultural use. The report concluded that it is not.

Notes:

[1] The Task Force consists of elected officials from the County and the incorporated Cities of Capitola, Santa Cruz, Scotts Valley, and Watsonville, as well as citizen representatives appointed by the BOS.

[2] At the regularly scheduled CAG meeting, 650–700 community members voiced opposition to a new landfill.

[3] The EcoPark included: a reuse and resale center, regional composting operation, materials recovery facilities for curbside recycling and construction/demolition materials, a transfer station to move residual waste to an out-of-county landfill or other waste conversion facility, and other bulky materials processing operations.

BOS = County of Santa Cruz Board of Supervisors; BVLF = Buena Vista Landfill; CAG = Citizens Advisory Group; HDRBVA = HDR/Brown, Vence and Associates; RFP = Request for Proposals

Current Conditions and Operations

The Buena Vista Landfill is open 6 days per week and provides a wide range of waste disposal and waste recovery services to the public, businesses, and commercial waste haulers approximately 310 days per year. The landfill currently accepts approximately 448 tons of waste per day from 18 daily curbside trash collection trucks and approximately 340 residents and businesses daily that "self-

haul" their solid waste. Of this solid waste, approximately 232 tons per day is buried at the landfill. The rest is recycled, diverted for reuse, or transferred to the ReGen Monterey Landfill in Marina. As stated in the beginning of this chapter, the landfill is estimated to close between 2028 and 2038, if filled to the permitted elevations. However, the landfill could reach capacity and close by 2028 if the Project reduces the use of the landfill's permitted capacity. For example, permitted landfill capacity would be reduced if some areas of the active landfill are not filled to capacity and are instead reserved for organics or recycling processing areas. To further extend the site life beyond 2028, the County obtained a medium transfer permit from CalRecycle in 2024. This allows the County to export approximately one-third of the waste that would otherwise be buried at the landfill. The medium transfer permit does not resolve the waste management challenges, but it has helped delay site closure and provided an opportunity to test transfer operation efficiencies.

The County plans to continue to provide residents, businesses, and commercial waste haulers with a local option for disposal. Failure to provide a local waste disposal site will result in increased trips to the ReGen Monterey Landfill in Marina, the Ben Lomond Transfer Station, and the Santa Cruz City Resource Recovery Facility. In addition, it would likely also result in a greater amount of illegal dumping within the County. This would effectively represent the No Project scenario for purposes of this EIR, as follows:

- 12 additional daily trips by refuse collection trucks (increasing from the current 18 trips to 30 trips), traveling an additional 19 miles to the ReGen Monterey Landfill in Marina.
- Potential 340 additional daily trips by residents and businesses or "self-haulers," traveling an additional 19 miles to the ReGen Monterey Landfill, City of Santa Cruz Resource Recover, Ben Lomond Transfer Station, or illegal dumping sites throughout the County.
- Increase in illegal dumping within the County due to the inconvenience and expense of driving to ReGen Monterey Landfill.

Buena Vista Landfill is the last landfill operated by the County, and every effort has been made to extend its functional life. These efforts include an aggressive Zero Waste Goal, public awareness campaigns, a long-standing yard waste diversion program, a commercial food waste diversion and recovery program, and an agreement with the Monterey Regional Waste Management District allowing the County to divert solid waste to the ReGen Monterey Landfill, located 19 miles south in Marina. Transfers to ReGen Monterey Landfill include treated wood waste [9 trips/month hauling approximately 4.5 tons/trip] and refuse [10 trips/month hauling approximately 18 tons/trip].

Landfill volumetric analyses to estimate remaining capacity are performed annually to aid in operations and planning. Actual conditions can vary from projections due to outside factors such as a natural disaster precipitating more waste being disposed of in the landfill or, as seen at Buena Vista, waste diversion efforts greatly extending the original expected lifespan. However, as the amount of available space in the landfill diminishes, the capacity estimates become more accurate. As stated, the landfill is estimated to close between 2028 and 2038; thus, an estimated implementation date of 2028 is used for planning and analysis purposes.

Active Landfill Closure

Landfill areas are divided into modules that are constructed, filled, and closed in phases. Rather than filling the entire landfill at once, constructing landfill modules in phases provides better operational efficiency, cost management, and environmental control.

California and federal landfill closure regulations require a landfill cover system (commonly called a cap) to: separate waste from the environment, control erosion by conveying stormwater runoff at non-scouring flow rates, minimize rain infiltration into the waste to prevent the production of leachate, and control landfill gas. Interim cover (soil/asphalt/other paving) may be used in areas where ongoing waste management activities reserve landfill capacity for possible future use.

The Current Active Landfill at the Buena Vista site consists of seven modules (Modules 1, 2, 3, 4A, 4B, 5, 6) and is delineated in pink on **Figure 1-3**. Modules 1 and 2 were constructed prior to the promulgation of the federal Subtitle D regulations (i.e., before Subpart 257 and 258, Title 40, Federal Code of Regulations were in effect) and are lined with a clay liner and include a leachate collection and removal system. Modules 3 to 6 have composite liners that are compliant with Subtitle D requirements.

An unlined Old Expansion Area exists directly south of the Current Active Landfill. This Old Expansion Area and a portion of Modules 1 and 2 were closed in 1995 under federal landfill regulations in effect at that time[6](delineated in green on Figure 1-3). This area was capped with a final cover that consists of a minimum 2-foot-thick clay liner and a minimum 1.5-foot-thick vegetative layer.

The portions of Modules 1 and 2 that have not been closed, and Modules 3–6 are part of the Project and will be closed in accordance with Title 27 of the California Code of Regulations and Subtitle D. Refer to Chapter 2, Project Description (Section 2.4, Project Components; 3. Landfill Closure and Revegetation) and **Figure 2-1** (green shading).

The federal Subtitle D regulations are part of the Resource Conservation and Recovery Act, which provides the federal requirements for public and private landfills receiving municipal solid waste. It sets minimum standards for design, operation, location, closure, and post-closure landfill maintenance. California Code of Regulations, Title 27, implements Subtitle D and meets or exceeds the federal landfill design, construction, operation, closure, and post-closure standards.

A final closure and post-closure maintenance plan for the portions of the Buena Vista Current Active Landfill will be submitted 2 years before the facility's anticipated date of closure or partial closure.

1.3 CEQA Environmental Review Process

CEQA requires all state and local government agencies to consider the environmental consequences of nonexempt projects over which they have discretionary authority before taking action on those projects. To identify and disclose the environmental impacts, the lead agency must prepare the appropriate environmental documentation (EIR or negative declaration). As the CEQA lead agency, the County has decided to prepare an EIR.

CEQA requires agencies to comply with the following objectives and procedures and with the process summarized on **Figure 1-4**, CEQA EIR Process, when preparing an EIR:

- Identify and prevent environmental damage (i.e., significant environmental effects) by identifying mitigation measures, alternatives, and mitigation monitoring
- Enhance public participation and foster intergovernmental coordination through:
  - Publication of the Notice of Preparation (NOP)

[6] Title 27 of the California Code of Regulations, Section 21090, sets the detailed closure and post-closure maintenance requirements for landfills.

  - Project scoping
  - State Clearinghouse and public review of environmental documents
  - Preparation of a Final EIR responding to public input
- Disclose the rationale for agency decision-making through the adoption of findings addressing the disposition of all significant environmental effects identified in the EIR and the issuance of Statements of Overriding Consideration where projects with significant unavoidable environmental effects are approved

1.3.1 Lead, Responsible, and Trustee Agencies

The CEQA Guidelines define "lead," "responsible," and "trustee" agencies. "Lead agency" means the public agency that has the principal responsibility for implementing or approving a project. The lead agency will determine the appropriate environmental documentation and be responsible for its preparation. The County is the CEQA lead agency for the Project.

A "responsible agency" refers to a public agency subject to California law other than the "lead agency" with discretionary approval over a project. A "trustee agency" refers to a state agency having jurisdiction by law over natural resources affected by a project. As listed in Section 2.7, Required Permits and Approvals, responsible and trustee agencies for the Project include the following:

- California Coastal Commission
- California Department of Fish and Wildlife
- California Department of Resources Recycling and Recovery (CalRecycle)
- California Department of Transportation (Caltrans) Division of Aeronautics and Federal Aviation Administration
- California Regional Water Quality Control Board
- U.S. Army Corps of Engineers
- U.S. Fish and Wildlife Service

1.3.2 Notice of Preparation

The purpose of the NOP is to solicit participation from responsible and coordinating federal, state, and local agencies and from the public in determining the scope of an EIR. CEQA requires a 30-day NOP review period.

The scoping process for this EIR was formally initiated on February 15, 2024, with submission of the NOP to the State Clearinghouse in compliance with CEQA (State Clearinghouse No. 2024020617) for distribution to state agencies. The NOP was also posted on the County's website and published in the Santa Cruz Sentinel, a newspaper of general circulation in Santa Cruz County. Additionally, a copy of the NOP was sent to 45 federal, state, and local agency representatives; 28 members of various businesses and organizations; and 5 individual members of the public who expressed interest in County projects in the past. Further, 15 NOP bilingual letters were mailed to residents and businesses within 1,000 feet of the Buena Vista Landfill, and 61 copies of the NOP were emailed to people who had previously requested to be notified of County EIRs. The NOP review period was

from February 15, 2024, to March 18, 2024 (33 days total). A copy of the NOP is included in **Appendix C**, NOP and Scoping Comments.

1.3.3 Scoping Process

Scoping refers to the process used to assist the lead agency in determining the focus and content of an EIR. Scoping solicits input on the potential topics to be addressed in an EIR, range of project alternatives, and possible mitigation measures. Scoping is also helpful in establishing methods of assessment and in selecting the environmental effects to be considered in detail. Scoping this EIR included distribution of the NOP (described above) and a public scoping meeting.

A public scoping meeting was held on February 28, 2024. The scoping meeting provided another opportunity for attendees to comment on environmental issues of concern and the alternatives that should be discussed in the EIR.

In response to the NOP and public scoping meeting, the County received written comments from four agencies and six organizations, businesses, or individuals. **Table 1-2** provides a summary of the written comments received concerning the scope of the environmental analyses and alternatives to be considered. **Appendix C** includes the NOP and a copy of all the comments received.

Table 1-2. Summary of Notice of Preparation Comments Received

Commenters	Summary of Key Issues and Concerns	Location of Topic in EIR
Agencies (alphabetical order by agency)		
California Department of Fish and Wildlife, Erin Chappell	Draft EIR should include full Project description and environmental setting, impact analysis and mitigation as it relates to biological resources (habitat, hydrology, water quality, special status species, natural communities, wildlife movement).	Chapter 2, Project Description Chapter 3, Environmental Impact Analysis (3.4, Biological Resources, and 3.10, Hydrology and Water Quality)
California Department of Transportation, Aeronautics Program, Ingrid McRoberts	Draft EIR should consider Project and airport land use compatibility and relevant regulations.	Chapter 3, Environmental Impact Analysis (3.11, Land Use and Planning)
California Environmental Protection Agency, Department of Resources Recycling and Recovery, Joy Bowers	Draft EIR should analyze each solid waste activity including and considering hours of operation, maximum allowed daily tonnage and traffic flow, permitted acreage of each activity, and types and quantities of waste types allowed.	Chapter 2, Project Description Chapter 3, Environmental Impact Analysis (all sections)
California Native American Heritage Commission, Cody Campagne	Draft EIR should identify potential impacts to Tribal Cultural Resources and avoidance/mitigation measures, and conduct required consultation with Native American Tribes should be conducted.	Chapter 3, Environmental Impact Analysis (3.5 Cultural Resources, and 3.18, Tribal Cultural Resources)
Organizations/Businesses/Individuals (alphabetical order by commenter first name)		
Angie Richman, Santa Cruz Resource Conservation District	A biomass processing facility would be beneficial.	Chapter 5, Project Alternatives
Anne Howard	Draft EIR should determine if Project would generate noise, odor, and traffic impacts that are greater than current facility operations.	Chapter 3, Environmental Impact Analysis (3.3, Air Quality, 3.13, Noise, and 3.17, Transportation)
Carol Latta	The commenter supports composting with simple traffic routing.	Not applicable

Table 1-2. Summary of Notice of Preparation Comments Received

Commenters	Summary of Key Issues and Concerns	Location of Topic in EIR
David Miyashita, Miyashita Nursery	The commenter is concerned about noise, traffic, visual impacts, as well as windblown debris and bird droppings, from Transfer Station A.	Chapter 3, Environmental Impact Analysis (3.1, Aesthetics, 3.11, Land Use and Planning, 3.13, Noise, and 3.17, Transportation)
Susan Petrie, Open Space Trust	The Project should include facilities to process woody biomass generated from forestry/fuel reduction, storm debris cleanup, and construction debris.	Chapter 5, Project Alternatives
Wendy Weil	Draft EIR should identify environmental impacts to the neighbors.	Chapter 3, Environmental Impact Analysis

1.4 EIR Scope and Content

The scope and content of the EIR is guided by the requirements set forth in the CEQA Guidelines and input gathered during the NOP and scoping process identified above. This EIR evaluates the potential impacts of the Project in relation to the following environmental topics:

1. Aesthetics
2. Agricultural Resources
3. Air Quality
4. Biological Resources
5. Cultural Resources
6. Energy
7. Geology and Soils
8. Greenhouse Gas Emissions
9. Hazards and Hazardous Materials
10. Hydrology and Water Quality
11. Land Use and Planning
12. Mineral Resources
13. Noise
14. Population and Housing
15. Public Safety and Services
16. Recreation
17. Transportation
18. Tribal Cultural Resources
19. Utilities and Services Systems
20. Wildfire

This EIR identifies (1) potential environmental impacts, including Project-specific and cumulative effects, of the Project for these topics in accordance with the provisions set forth in the CEQA Guidelines, Appendix G, and (2) feasible mitigation measures, where possible, that would reduce or eliminate significant adverse environmental effects.

Additionally, this EIR identifies significant unavoidable impacts, significant irreversible changes in the environment, and growth inducement.

1.5 EIR Organization

In addition to this section, the EIR contains the following sections:

- Chapter 2, Project Description, includes a detailed description of the Proposed Project.
- Chapter 3, Environmental Impact Analysis, includes an evaluation of various resources potentially affected by the Proposed Project, as outlined in Section 1.4, EIR Scope and Content. There is a separate section for each of the 20 environmental topics identified in Appendix G of the CEQA Guidelines. Each section presents the existing conditions, relevant regulatory setting, methodology and significance thresholds, potential impacts, and any mitigation measures required to reduce potentially significant impacts to a less than significant level.
- Chapter 4, Other CEQA-Required Discussions, includes discussions of the Project's cumulative impacts, growth-inducing impacts, significant irreversible environmental changes, significant environmental impacts that cannot be avoided, and energy effects.
- Chapter 5, Project Alternatives, includes a description of the various alternatives considered and either dismissed from further analysis or analyzed in this EIR.
- Chapter 6, Alternative 3 Environmental Impact Analysis, includes an evaluation of Alternative 3, Combined Facilities on Adjacent Property, at a level of detail similar to that for the Proposed Project in Chapter 3.
- Chapter 7, List of Preparers and References, provides a list of preparers of and contributors to the EIR and a bibliography.

1.6 Public Outreach

Table 1-3 describes the public meetings and outreach efforts conducted to identify new landfill sites, alternatives to landfill disposal, and waste management strategies to preserve landfill space that have occurred to date and are planned for the Project.

Project information, NOP, presentations, recordings of public meetings, and design plans are posted on the County's website: https://dpw.co.santa-cruz.ca.us/Home/RecyclingTrash/BuenaVistaProject.aspx.

Table 1-3. Buena Vista Landfill Public Outreach

Date/Action	Description
1991–1996 Waste Management Facility Project	After passage of the Integrated Waste Management Act of 1989 (AB 939), the County together with the Integrated Waste Management Local Task Force (Task Force) conducted various studies and public meetings to plan and site waste diversion facilities needed to maximize materials recovery and composting operations as part of an IWMF plan. Conceptual designs were developed for facilities that would receive self-haul yard and wood waste and franchise hauler loads of recyclables and green waste. The goal of these planning efforts was to identify alternatives to process materials for recovery and transfer residual waste for landfill disposal at Buena Vista Landfill or elsewhere once the landfill was closed. An EIR was prepared for the preferred sites based on the conceptual facility designs presented to the County for consideration.
June 1991 Waste Management Facility Project	Task Force received R.W. Beck and Associates' IWMF conceptual design, site evaluations, and recommendations on the technical feasibility of siting the facility on the Buena Vista site identified in the County's site selection process located across from the Buena Vista Landfill on Buena Vista Drive. The report addressed: 1) adequacy of the site for current needs and future expansion, 2) accessibility, 3) geotechnical concerns, 4) site development requirements, 5) environmental concerns.
March 1992 Waste Management Facility Project	Task Force submitted Countywide Siting Element to BOS, which approved the integrated waste management planning document before County staff submitted it to the California Integrated Waste Management Board as required by AB 939.
August 25, 1992 Waste Diversion Project	The BOS received a report on strategic planning activities on future solid waste management contracts and opportunities to provide cost-effective waste management services with a restructured franchise agreement, the proposed IWMF, and associated recycling services.
October 1992 Waste Management Facility Project	Task Force received R.W. Beck and Associates' report that developed a final conceptual design for the IWMF. This report included a conceptual composting and recycling plan, a conceptual operating plan, a material recovery facility conceptual site development plan, architectural plan, and preliminary economic analysis.
June 1993 Waste Management Facility Project	R.W. Beck and Associates presented the final IWMF Options Study to the Task Force which discussed 1) an evaluation of possible sites for the planned facilities, including a composting site located separately from the materials recovery facility site, 2) technical information and analysis of alternative integrated residential and commercial recycling collection system, 3) technical information and analysis of operational complexity, reliability, flexibility, effectiveness of the integrated waste management system, materials processing, and composting system, and 4) an overall assessment of Integrated Waste Management System economics. The report evaluated six sites for their appropriateness for siting the materials recovery facility and composting facility based on the following criteria: 1) site characteristics, 2) land use, 3) environmental issues, and 4) transportation factors/access routes. Site A adjacent to Watsonville's Wastewater Treatment Plant was most preferable for the composting facility and Site F bordered on the northwest by Riverside Drive and on the southwest by the Pajaro River was most preferred for the materials recovery facility.
October 19, 1993 Waste Diversion Project	BOS directed Task Force staff to carry out a strategic planning process to procure solid waste collection and related services needed to divert 25% of materials from landfill disposal by 1995 and 50% by 2000 as required by AB 939.
March 22, 1994 Waste Management Facility Project	BOS accepted a status report on various solid waste planning efforts and directed staff to return with further reports on this work.
April 19,1994 Waste Management Facility Project	BOS received reports on recycling and composting programs necessary to comply with AB 939 waste reduction requirements (25% reduction by 1995 and 50% reduction by 2000), Curbside refuse and recycling collection programs, and Facilities planning work to develop countywide facilities needed to support state mandated waste diverted from landfill disposal. BOS approved two-year extension to the curbside recycling agreement, authorized the start of environmental review for the IWMF project.

Table 1-3. Buena Vista Landfill Public Outreach

Date/Action	Description
December 13, 1994 Waste Management Facility Project	BOS authorized contractor CH2M Hill to prepare an EIR to assess the environmental impacts of the proposed IWMF.
March 1995 Waste Management Facility Project	Task Force received and reviewed IWMF Conceptual Master Plan report with findings and recommendations on the six new waste management sites and identified preferred sites for a recycling materials recovery facility to serve south County and a compost facility to serve the entire county.
June 13, 1995 Waste Diversion Project	BOS approved competitive bid approach for obtaining refuse, recycling, and yard waste collection services; amendment to BVA consulting contract to add tasks to prepare RFP for collection services; direct Task Force staff to hold public meetings in each supervisorial district to obtain public comment on the proposed collection system; and direct County staff to begin detailed negotiations with Cities of Santa Cruz and Watsonville to provide recycling services to the unincorporated county.
January 1996 Waste Management Facility Project	CH2M Hill prepared a Draft EIR on Site A (composting facility) and Site F (material recovery facility). The intent of the EIR was to provide the appropriate level of environmental review to facilitate permitting the proposed facilities and activities at five existing facilities: 1) City of Santa Cruz Landfill Materials Recovery Facility, 2) Watsonville Landfill, 3) Watsonville Municipal Services Center, 4) Buena Vista Landfill, 5) Existing Ben Lomond Transfer Station, and the two new facilities: 6) Site A Proposed Composting Facility and 7) Site F Proposed Materials Recovery Facility.
June 1996 Waste Management Facility Project	BOS considered and failed to certify the CH2M Hill IWMF EIR. The project was dropped from further consideration because of local opposition to siting a new composting facility in unincorporated Santa Cruz County adjacent to the Watsonville Wastewater Treatment Facility and a new materials recovery facility in unincorporated Santa Cruz County near a Watsonville industrial neighborhood.
June 10, 1999 Waste Management Facility Project	Task Force introduced plans for an upcoming landfill siting process to begin in 2000 at a public Task Force meeting.
February 10, 2000 Waste Management Facility Project	Task Force directed staff to complete Memorandum of Understanding between cities and county to define scope, process, and cost sharing to prepare State mandated Landfill Siting Study.
April 13, 2000 Waste Management Facility Project	Memorandum of Understanding for Landfill Siting Study approved by all local jurisdictions. Task Force begins recruiting for CAG Siting Study subcommittee. CAG charged with refining siting criteria thresholds to rank potential landfill sites.
June 8, 2000 Waste Management Facility Project	Task Force reviewed basemaps for use by CAG once appointed. Task Force added social equity as site selection criteria and discussed the economic influences of facility siting.
June 13, 2000 Waste Diversion Project	BOS approved Public Works's plans to issue an RFP to begin diverting C&D waste from landfill disposal by developing a C&D waste recovery operation at the Buena Vista Landfill. BOS also approved the allocation of resources for public outreach and technical assistance on waste reduction, recycling and composting for both the residential and business communities.
September 14, 2000 Waste Management Facility Project	Task Force unanimously appointed seven Task Force selected CAG members and discussed scheduling joint Task Force/CAG meeting to set siting study scope and objectives of CAG work.
September 15, 2000 Waste Diversion Project	BOS received a status report on C&D material recovery program and directed the Director of Public Works to work with the Planning Department to develop a C&D waste recovery ordinance to reduce disposal of C&D materials in the Buena Vista Landfill.

Table 1-3. Buena Vista Landfill Public Outreach

Date/Action	Description
December 14, 2000 Waste Management Facility Project	Task Force confirmed the appointment of four CAG members nominated by Supervisor Symons, Supervisor Beautz, the Farm Bureau, and the Sierra Club. Appointed Task Force member Stephanie Harlan to serve as liaison to CAG.
February 27, 2001 Waste Diversion Project	BOS directed Public Works to report back on the landfill-based C&D recovery system with recommendations on the appropriate program design and new staffing requirements necessary to operate the C&D recycling program.
April 12, 2001 Waste Management Facility Project	Task Force confirmed CAG should not consider waste-to-energy facilities when evaluating possible sites for future disposal facilities.
February 14, 2002 Waste Management Facility Project	Task Force authorized preparation of Siting Study Public Outreach materials to include state requirements to identify sites and prepare siting study and further publicize CAG and Task Force public meetings to encourage public participation and provide regular siting study updates to elected officials so they can respond to public information requests.
April 11, 2002 Waste Management Facility Project	Task Force received Siting Study progress report from CAG on the weighting of site evaluation criteria. Task Force developed public outreach recommendations to establish a Public Outreach CAG subcommittee and outreach plan to ensure public is aware of opportunities to participate in CAG and Task Force meetings and Siting Study.
May 9, 2002 Waste Management Facility Project	Task Force received CAG status update, CAG work schedule, and Siting Study public outreach plan update.
June 13, 2002 Waste Management Facility Project	Task Force received appointments of two additional City and County CAG members and additional recommendations on Public Outreach Plan from CAG Public Outreach Subcommittee.
September 12, 2002 Waste Management Facility Project	September 12, 2002, Task Force confirmed additional CAG appointments, received CAG updates on Siting Study criteria, Siting Study public outreach plan, and landfill study area 11.
December 12, 2002 Waste Management Facility Project	Task Force received CAG update on Transfer Station study area evaluation, Siting Study public outreach plan, and provided feedback to CAG on their Transfer Station citing criteria.
February 13, 2003 Waste Management Facility Project	Task Force received updated CAG Siting Study schedule. CAG expected to wrap up Siting Study by CAG's June public meeting and bring to Task Force during its September 2003 public meeting. Task Force also discussed Siting Study public outreach and reviewed its own decision-making process once it receives CAG disposal site recommendations. Task Force passed a motion to receive CAG's top 10 sites with no rankings and focus public meeting with prior outreach to identified site property owners.
April 10, 2003 Waste Management Facility Project	Task Force decided to focus on possible landfill sites only and examine transfer station sites at a later date if needed.
June 10, 2003 Waste Management Facility Project	BOS directed Department of Public Works to expedite the evaluation of replacement solid waste facilities.
June 11, 2003 Waste Management Facility Project	CAG provided update on its completion of Siting Study and asked Task Force to receive information on top 12 sites, including site rankings. Task Force passed motion to accept CAG recommendations as proposed.
September 11, 2003 Waste Management Facility Project	Task Force received and discussed CAG Siting Study recommendations. Decided to set an additional Task Force meeting to begin in-depth CAG Siting Study and rankings review.

Table 1-3. Buena Vista Landfill Public Outreach

Date/Action	Description
December 11, 2003 Waste Management Facility Project	Task Force formally accepted CAG Siting Study Final Report as submitted. Task Force developed and approved a study area review procedure and tentative process schedule with the understanding that the schedule could be revised at a later date if needed.
February 12, 2004 Waste Management Facility Project	Task Force meeting to discuss Disposal Facility Siting Study, included comments from County Counsel. Task Force makes recommendations to BOS, BOS makes final decision. Members of the public sent letters and commented on the Siting Study process, most requested removal of one or more study areas from consideration. After receiving comments, Task Force further refined site evaluation process.
April 8, 2004 Waste Management Facility Project	Task Force discussed Siting Study and recommendations to eliminate 11 sites for poor access or proximity to public water supply wells. Task Force received numerous public comments and letters raising concerns about various study areas. Task Force voted to eliminate Study Area 5 because of existing conservation easement. Also voted to evaluate CAG's top 10 study areas and give greater weight to environmental justice, access, and water supply well locations as raised during public comments.
December 2, 2004 Waste Diversion Project	Task Force considered development of options for managing solid waste in the absence of a regional landfill, including goals that can be taken by individual jurisdictions: 1) adopting a zero waste goal, 2) undertake waste composition analysis to determine the most effective diversion actions, 3) develop design parameters for a compost facility.
February 1, 2005 Waste Diversion Project	BOS considered amendments to the state-required Non-Disposal Facility Element to approve changes that support the increase in materials diversion to comply with State law and extend the life of the Buena Vista Landfill. Scheduled hearing for February 15, 2005.
February 3, 2005 Waste Management Facility Project	Task Force considered landfill disposal alternatives. Reviewed State's waste conversion draft report. Created a subcommittee to develop a model zero waste plan. Discussed siting for a composting facility and markets for compost products.
February 15, 2005 Waste Management Facility Project	BOS approved two Task Force recommended alternatives to developing a new landfill inside the county: (1) transferring refuse to landfills outside of Santa Cruz County, and/or (2) conversion of waste to a reusable energy product.
February 15, 2005 Waste Diversion Project	BOS approved amendments to the County's Non-Disposal Facility Element that support the increase in materials diversion to comply with State law and extend the life of the Buena Vista Landfill. The non-disposal facilities included in the approval are the wood and yard waste chipping and grinding facilities, the new C&D waste sorting facility, and the new food waste composting facility being developed at the Buena Vista Landfill.
March 15, 2005 Waste Diversion Project	BOS accepted Task Force 2004 annual report. Task Force informed BOS that it had evaluated all possible future landfill locations recommended by CAG, received public comments on possible locations, and eliminated all possible CAG recommended locations until all non-landfill disposal alternatives have been examined. Task Force future goals are to examine alternatives to local landfill disposal including increased waste diversion, local waste conversion, and export waste out-of-county for landfill disposal or waste conversion.
April 7, 2005 Waste Diversion Project	Task Force discussed landfill disposal alternatives as a balance between export to Marina and to continue to operate Buena Vista and preserve capacity. All jurisdictions expressed an interest in increased diversion, all but Capitola expressed an interest in waste conversion and only Scotts Valley expressed an interest in short-term waste export. Subcommittee reported on Zero Waste model plan. County shared its Long-Range Resource Recovery and Waste Management Planning Scope of Work.
June 21, 2005 Waste Diversion Project	BOS approved Mandatory Recycling Ordinance to banned 22 materials from landfill disposal in order to extend the life of the County's Buena Vista Landfill.

Table 1-3. Buena Vista Landfill Public Outreach

Date/Action	Description
August 9, 2005 Waste Diversion Project	BOS approved solid waste consulting services contract to divert food waste from landfill disposal. The contract provides home, school, and business diversion support to recover edible food, and collect food for animal feed and composting. Food waste constitutes about 20% of the unincorporated area's waste stream and increased diversion conserves landfill space.
September 1, 2005 Waste Diversion Project	Task Force considered Non-Landfill Alternatives, considered the formation of a countywide joint-powers authority, and the adoption of a 75% zero waste goal by 4 of the 5 local jurisdictions and the City of Santa Cruz would take up the zero waste goal in fall of 2006.
November 15, 2005 Waste Diversion Project	BOS approved agreement with Hope Services, Incorporated for C&D recycling support services to divert C&D material from landfill disposal and extend the life of the Buena Vista Landfill.
January 10, 2006 Waste Diversion Project	BOS accepted Task Force 2005 annual report. Task Force reported each jurisdiction's interest in various non-landfill waste disposal alternatives including increased diversion, local waste conversion, and export waste out of county for disposal or conversion. Each city indicated an interest in participating in a study on long-range waste management options. Task force also reported on creating a subcommittee to develop zero waste resolutions to increase diversion by 75%. Reported to the BOS on potential waste conversion technologies from information provided by the California Integrated Waste Management Board and a consensus that all jurisdictions have an interest in a countywide composting facility.
December 7, 2006 Waste Diversion Project	Task Force unanimously approved model language for a packaging extended producer responsibility resolution to reduce landfill disposal. Watsonville offered a portion of its undeveloped landfill as a temporary compost facility location.
January 23, 2007 Waste Diversion Project	BOS accepted Task Force's 2006 annual report which focused the status of the County study on long-range waste management options, the landfill alternatives review including increased diversion, local waste conversion, export out of county for disposal or waste conversion, and received status report for short-term export to Marina. Task Force also focused on adopting model language to endorse extended producer responsibility and the California Product Stewardship Council.
February 1, 2007 Waste Management Facility Project	Task Force met to consider developing model packaging ordinance to reduce food packaging waste, continued to develop landfill alternatives by considering a multi-jurisdictional long-range planning study to examine resource recovery park, large-scale yard/wood waste processing and compost facility, recycling corporation yard, residual waste transfer facility, and a conversion facility using new technologies to produce fuels.
April 16, 23,24, & 25, 2007 Waste Management Facility Project	Public meetings held in Watsonville, Felton, Live Oak, and Aptos to preview and discuss developing a Zero Waste EcoPark as an alternative to developing a new landfill.
May 8, 2007 Waste Management Facility Project	Task Force met to receive update on long-range planning study and on the 30-year agreement with Monterey Regional Waste Management District to accept County refuse transferred from Ben Lomond.
May 15, 2007 Waste Management Facility Project	BOS Considered report on the Long-Range Resource Recovery and Waste Management Plan (Zero Waste EcoPark), and direct Public Works to return on or before June 12, 2007, with a report on the facility development plans and siting options for future resource recovery and waste management service facilities.
May 15 & 17, 2007 Waste Management Facility Project	Landfill alternatives public meetings held in Santa Cruz and Watsonville to present and discuss Zero Waste EcoPark and other landfill alternatives. Also discussed economic viability of local composting facilities and using existing Santa Cruz and Watsonville materials recovery facilities to locally process recyclables for County, Capitola and Scotts Valley instead of using franchise hauler facilities.

Table 1-3. Buena Vista Landfill Public Outreach

Date/Action	Description
May 30, 2007 Waste Management Facility Project	Task Force received County consultant, HDRBVA's published status report on the Long-Range Resource Recovery and Waste Management Facilities (Zero Waste EcoPark) Planning Facility Functionality and Overview of Site Considerations. The report recommends a 25-acre site for proposed EcoPark to accommodate a transfer station, C&D processing facility, green/wood waste processing facility, material recovery facility, possible waste conversion facility (technology to be determined), possible household hazardous waste facility to serve residents and small businesses. The report also recommends a 50-acre site to accommodate a regional compost facility and related bulky materials processing area.
June 12, 2007 Waste Management Facility Project	BOS considered report on the Long-Range Resources Recovery and Waste Management Plan (Zero Waste EcoPark). The presentation focused on two options for the facility: (1) all facilities (transfer, materials processing, composting) at one location or (2) facilities separated into two sites (transfer and materials process at one site and composting at a second site). BOS directed Public Works to conduct public presentations in each supervisorial district on the proposed development plans and siting options for the Zero Waste EcoPark facilities and to return with a list of final recommended facility sites for environmental review.
June 18, 2007 Waste Management Facility Project	Task Force discussed possible sites for locating landfill alternative Zero Waste EcoPark based on report from County contractor HDRBVA. The Task force members and public raised questions about problems with various sites. Staff indicated that many of these questions would be answered in the economic analysis due later in the summer.
July 31-August 15, 2007 Waste Management Facility Project	Task Force held a series of public informational meetings, one in each supervisorial district, on the proposed development plans and siting options for the Zero Waste EcoPark facilities. With the exception of the Watsonville meeting, turnout was light, and comments were information seeking in nature, supporting diversion efforts, and did not show significant concerns about siting locations. The Watsonville meeting had a larger turnout of approximately two dozen people. Comments at the Watsonville meeting included concerns about solid waste facilities located in south County, environmental issues at the Buena Vista Landfill, agricultural land conversion, and conflicts with the Watsonville Airport. Suggestions raised in the Watsonville meeting included the development of small transfer stations and waste-to-energy plants in north County closer to where trash is generated.
September 6, 2007 Waste Management Facility Project	Task Force discussed aspects of landfill disposal alternatives and which jurisdictions would participate in the various aspects of the Zero Waste EcoPark.
September 18, 2007 Waste Management Facility Project	Public Works presented Zero Waste EcoPark economic analysis to BOS outlining the technical and cost considerations needed to finalize the list of sites and site combinations necessary to move forward with CEQA review of the project. The site analysis focused on prior facility planning and siting studies of the early to mid-1990s and the more recent work of the Citizen Advisory Group. The cost analysis outlines a range of costs based on the highest and lowest levels of participation by the city. The analysis is not site specific but provides a range of costs for each site and final sizing and capital costs for each material processing stream once city commitments are made. Many capital and operating cost questions were raised by the cities at the BOS meeting. BOS decided that Task Force should review and approve the final draft analysis before the item is brought back to the BOS.

Table 1-3. Buena Vista Landfill Public Outreach

Date/Action	Description
December 6, 2007 Waste Management Facility Project	Task Force heard a status report on the Zero Waste EcoPark Planning Concepts and Siting Options Analysis. Discussion focused on correcting waste volumes re. the economic analysis, so costs are more in line with actual waste quantities. Report was given to all the cities so they could determine participation based on waste quantities and the report's economic analysis. Jurisdiction staff reviewed the report and thought the costs were on the high side. Cities indicated an ongoing interest to participate and are scheduled to present this information to their governing bodies to determine cities' commitment to participate. Participation will determine the size and cost of facility development. The Task force also discussed the regional approach to working with the Monterey Regional Waste Management District (ReGen Monterey) in Marina to develop a regional compost facility on their site. This could happen more quickly because the site already belongs to ReGen Monterey and they have an existing permit for compost operations. Currently, ReGen Monterey compost facility is on a parallel path with a local composting facility, but it could replace the EcoPark compost facility.
January 8, 2008 Waste Management Facility Project	BOS accepted 2007 Task Force Annual Report which included a report on developing a Zero Waste EcoPark Planning Concepts and Siting Options Analysis. Five public outreach meetings had been held to develop planning concepts and siting options for inclusion in the report. The BOS also received a report on developing a regional composting alternative with the ReGen Monterey. The report to the BOS also summarized the future goals of the Task Force to continue investigation of countywide and regional alternatives to local landfill disposal including increased diversion, local waste conversion, and export out of county for landfill disposal or waste conversion. The Task Force made a commitment to continue investigating countywide regional alternatives to local landfill disposal including increased diversion, local waste conversion, and export out-of-county for landfill disposal or waste conversion and submit their findings to the BOS and City Councils.
January 8, 2008 Waste Diversion Project	BOS considered ordinance to ban expanded polystyrene foam food packaging to achieve County waste reduction goals.
January 29, 2008 Waste Diversion Project	BOS approved Environmentally Acceptable Packaging Materials ordinance in concept to ban expanded polystyrene foam food packaging and achieve County waste reduction goals.
February 7, 2008 Waste Management Facility Project	Task Force considered Zero Waste EcoPark and Landfill Alternatives Planning Study prepared by County engineering consultants HDRBVA. Received participation commitments from City of Scotts Valley to participate in the entire EcoPark project EIR. The City of Santa Cruz committed to participate in portions of the proposed project (a countywide green waste/wood waste processing and compost facility and a C&D processing facility). The City of Capitola chose not to participate in the project. The City of Watsonville did not secure City Council support for the project prior to the Task Force meeting and may consider joining the project at a later date under a supplemental EIR. However, ReGen Monterey is also working on developing a regional compost facility at their Marina Landfill site with support from Salinas Valley Recycles, Santa Cruz County, and the City of Santa Cruz. Task Force also reviewed the Draft Zero Waste EcoPark project description.
February 12, 2008 Waste Management Facility Project	BOS accepted Task Force recommendation and deferred further consideration of the Zero Waste EcoPark until Task Force finalizes the project description after approval by participating cities.
March 18, 2008 Waste Management Facility Project	BOS received Task Force final report on the Zero Waste EcoPark and Landfill Alternatives Planning Study. BOS approved the proposed project description and directed Public Works and Planning to take all necessary steps to initiate environmental review under CEQA.
April 3, 2008 Waste Management Facility Project	Task Force received the final report on the Zero Waste EcoPark and Landfill Alternatives Planning Study. The Task Force also reviewed the Zero Waste EcoPark draft project description in preparation for an EIR on the proposed project.

Table 1-3. Buena Vista Landfill Public Outreach

Date/Action	Description
April 15, 2008 Waste Diversion Project	BOS received a presentation from Adaptive ARC on a potential waste-to-energy plasma arc conversion technology to convert organic waste to a fuel product. This would be an alternative to landfill development. BOS directed the Public Works Department to sign a letter of intent with Adaptive ARC conditional on the County's ability to secure appropriate approvals and permits to pursue the pilot project within a reasonable time.
June 5, 2008 Waste Diversion Project	Task Force received an informational update on a waste-to-energy project presented to the BOS at its April 15, 2008, meeting as a possible alternative to landfill development.
August 12, 2008 Waste Diversion Project	BOS extended the deadline on the Adaptive ARC gasification project as a landfill alternative and extended the hosting feasibility deadline to October 7, 2008.
August 26, 2008 Waste Management Facility Project	BOS received an update on the Zero Waste EcoPark explaining the proposal to use the last remaining landfill module, seven acre Module 5 and a 26 acre site across Buena Vista Drive to construct the new facilities that include a new transfer station, a reuse and resale center, materials recovery facilities for curbside recyclables and C&D materials, a corporation yard for the County's franchise hauler, a regional composting facility and an outreach and education center. The BOS accepted and filed the report and directed Public Works to return with a progress report on or before November 25, 2008.
September 4, 2008 Waste Management Facility Project	Task Force received an update that the Zero Waste EcoPark project had been submitted to the Planning Department. A planner would be assigned to the project and provide a detailed list of the information needed to review the proposed project. The Task Force also received updates on the Adaptive ARC gasification pilot project as a waste-to-energy alternative and ReGen Monterey compost facility, both as alternatives to future landfill development in Santa Cruz County.
November 18, 2008 Waste Diversion Project	BOS indicated that they did not want to proceed with the Adaptive ARC organic waste-to-energy project because they were interested in proven technology that included reliable environmental data before they would consider the use of waste conversion technology in Santa Cruz County.
November 24, 2008 Waste Management Facility Project	At the recommendation of the Public Works Director, BOS deferred consideration of the Zero Waste EcoPark until December 16, 2008.
December 8, 2008 Waste Management Facility Project	Task Force received an update on the Zero Waste EcoPark application to the Planning Department. A planner has been assigned and they are preparing a List of Required Information which will need to be submitted so a critical path and processing strategy can be developed. Task Force was also informed that County Public Works is planning to hire a consultant to assist with application, EIR processing, and Coastal Commission compliance.
December 16, 2008 Waste Management Facility Project	BOS received a status update on the Zero Waste EcoPark that a planner has been assigned and the preliminary project list is being assembled as a first step toward formal project review. BOS was also informed that since the plan was presented in March 2008 the waste stream and revenues have decreased due to the economic downturn and increased recycling efforts. BOS directed Public Works to review the March 18, 2008, EcoPark plan and its components in terms of waste stream disposal tonnage, diversion potential, and economic analysis and return on or before February 3, 2009, with an amended project description for further consideration.
January 27, 2009 Waste Management Facility Project	BOS deferred consideration of the amended project description of the proposed Zero Waste EcoPark to allow the Public Works Department additional time to confer with its long-range planning and engineering consultants.

Table 1-3. Buena Vista Landfill Public Outreach

Date/Action	Description
February 5, 2009 Waste Management Facility Project	Task Force received an update on the decision to reconfigure aspects of the EcoPark EIR Project Description to eliminate the waste conversion technology discussion after the BOS decided to drop the Adaptive ARC proposal for lack of solid environmental data. The project description was also altered to eliminate the corporation yard, and include a redesign of the transfer station and C&D processing facility to include space for processing curbside recyclables.
February 24, 2009 Waste Management Facility Project	BOS approved and filed the Task Force's 2008 annual report documenting a range of landfill alternatives considered during the year. Task Force reported developing various aspects of the EcoPark concept prior to beginning the CEQA process. The Task Force approved the EcoPark project description and economic analysis report. The Cities of Capitola and Watsonville chose not to participate in the EcoPark project. Task Force members agreed to develop a working group to consider a regional composting facility RFP.
February 24, 2009 Waste Diversion Project	BOS approved and filed the Task Force's 2008 annual report that also reported on waste diversion projects, including development of a food packaging ordinance banning the use of Styrofoam, educational workshops with restaurants to reduce the use of disposable food packaging, endorsed a joint jurisdictional multi-family recycling grant application, developed a fluorescent lighting take-back program, consider the development of a construction debris waste recycling ordinance, and developing a voluntary plastic bag ordinance, investigated waste conversion technologies, and supported a multi-jurisdictional waste characterization study, all targeted at reducing countywide waste disposal. BOS also approved a contract with Karin Grobe operating as Organic Recyclers Anonymous to continue work to divert food waste from landfill disposal. Currently 75 businesses are participating and diverting 125 tons of food from landfill disposal each month.
March 3, 2009 Waste Management Facility Project	BOS deferred consideration of the amended Zero Waste EcoPark project description to allow the Public Works Department additional time to confer with long-range planning and engineering consultants on stability assessments and design modifications.
April 2, 2009 Waste Management Facility Project	Task Force received a Zero Waste EcoPark update that after a series of County Public Works, Planning and County Administrative Officer meetings it was determined that a new proposal be put forward to include all EcoPark facilities on the Buena Vista Landfill parcel. The EcoPark would be pared back to eliminate the corporation yard, the curbside recyclables materials recovery facility, and the placeholder site for a future waste-to-energy facility.
April 14, 2009 Waste Management Facility Project	BOS considered, accepted, and filed a report on the status of the proposed Zero Waste EcoPark. Directed Public Works to submit a revised EcoPark project description that reduces the size and scope of the project to the Planning Department as the basis for a permit application and CEQA review for the EcoPark development. The new project description would eliminate the set aside area for a future waste-to-energy facility, the curbside recycling materials recovery facility, the franchise hauler corporation yard, and the riparian restoration area and viewing boardwalk. BOS directed Public Works to reconfirm with each City its interest in participating in the revised EcoPark project and return in September 2009 with a further report.
April 14, 2009 Waste Diversion Project	BOS approved request for proposals for concrete crushing and grinding services at the Buena Vista Landfill to divert used concrete from landfill disposal for reuse as construction aggregate to achieve County waste diversion goals.
June 4, 2009 Waste Management Facility Project	Task Force received a detailed report on the progress of the Zero Waste EcoPark and the streamlined permitting that will result from the pared down project located on the existing landfill site. The project is still expected to be complete by 2014. Task Force members asked if the compost facility could be completed sooner to increase the diversion of food waste.
June 9, 2009 Waste Diversion Project	BOS approved waste characterization contract to analyze the composition of waste sent to the Buena Vista Landfill for landfill disposal to assess waste diversion efforts aimed at meeting state recycling requirements that preserve landfill space.

Table 1-3. Buena Vista Landfill Public Outreach

Date/Action	Description
September 3, 2009 Waste Management Facility Project	Task Force received an update on the Zero Waste EcoPark. Public Works is gathering the documents needed by Planning to prepare the project application and CEQA evaluation.
September 29, 2009 Waste Management Facility Project	BOS received an update on the Zero Waste EcoPark that discussed CEQA review of the project elements (transfer station, reuse/resale center, C&D materials recovery facility, regional composting facility, and community meeting/education facility). Sustainability features will be built into the EcoPark facilities under the U.S. Green Building LEED program standards. All local jurisdictions continue to express a high level of interest in using the composting operation, the Cities of Watsonville and Santa Cruz expressed an interest in using the C&D processing facility, and the City of Watsonville expressed some interest in using the transfer station. The City of Scotts Valley is in transition but expressed an interest in all aspects of the project. The BOS accepted and filed the report on the proposed Zero Waste EcoPark project and directed Public Works to return with further updates in early 2010.
November 24, 2009 Waste Diversion Project	BOS approved an extension of C&D diversion program to recycle C&D waste into landscape and compost materials to decrease the volume of reusable materials buried in the Buena Vista Landfill to preserve landfill space.
January 26, 2010 Waste Diversion Project	BOS approved revenue independent contractor agreement with Sims Metal Management to haul and recycle metals and mixed recyclables diverted from the Buena Vista Landfill waste stream. This extends the life of the landfill and generates recycling revenue for the County.
March 2, 2010 Waste Management Facility Project	BOS received an update on the Zero Waste EcoPark that discussed the need to scale the project back to avoid impacts on the scenic corridor in the Coastal Zone. The project was also impacted by the downturn in the economy. For environmental and economic reasons, the Public Works Department is developing an alternative plan for the Zero Waste EcoPark that would be smaller and less costly, at least in the initial stages. The new plan will address the County's most urgent solid waste needs first, with possible phasing in of other components as resources become available.
September 14, 2010 Waste Diversion Project	BOS authorized payment to Hope Services, Incorporated for C&D recycling support services to divert C&D material from landfill disposal and extend the life of the Buena Vista Landfill.
September 14, 2010 Waste Management Facility Project	BOS accepted and filed a report from Public Works on its continued work with the Planning Department and consultants to refine plans for the proposed Zero Waste EcoPark. An aerial survey was completed of the Buena Vista Landfill to better assess landfill capacity and more clearly define solutions to concerns regarding soil transport, stormwater runoff, and related drainage issues. Public Works continues to review the economic feasibility and environmental sensitivity in designing a facility that will be most effective in furthering the County's zero waste goals. BOS also approved ongoing funding to continue to pay Hope Services for the labor necessary to continue diverting C&D debris from the waste stream at Buena Vista Landfill.
September 28, 2010 Waste Diversion Project	BOS approved an independent contractor agreement with ReGen Monterey to divert and compost commercial food waste to reduce landfill disposal of this material. This replaces the County's food waste composting pilot project at the Buena Vista Landfill. That Buena Vista program ended on April 30, 2010, because of projected site improvement costs needed to meet State permitting requirements for a food composting facility. The new agreement ensures continued commercial food waste diversion from landfill disposal to extend the life of the Buena Vista Landfill.
October 26, 2010 Waste Management Facility Project	BOS approved a $50,000 amendment to HDR Engineering, Inc.'s 2005 agreement for long-term planning services for the proposed Zero Waste EcoPark project for a total not to exceed amount of $385,652 to complete alternative plans for the Eco Park that would be smaller and less costly.
January 11, 2011 Waste Diversion Project	BOS amended Hope Services, Incorporated scope of services for C&D recycling support services contract to divert C&D material from landfill disposal and extend the life of the Buena Vista Landfill and extended the terms to June 30, 2011.

Table 1-3. Buena Vista Landfill Public Outreach

Date/Action	Description
February 15, 2011 Waste Management Facility Project	BOS accepted and filed report on the proposed Zero Waste EcoPark project on work done to scale back the project to have fewer size, cost, visual impacts, and other issues.
April 12, 2011 Waste Diversion Project	BOS directed Public Works to implement concrete crushing and grinding at the Buena Vista Landfill and market the final product to reduce the amount of materials stockpiled at the landfill and divert concrete/porcelain waste from landfill disposal for reuse as construction aggregate.
May 17, 2011 Waste Management Facility Project	BOS accepted and filed a report on the Zero Waste EcoPark providing an update on the redesigned facility and use of the existing County property for the EcoPark while retaining existing landfill capacity. Public Works is assessing use of County property located near the Sheriff's Rountree Medium (Jail) Facility as a potential future site for the EcoPark.
June 28, 2011 Waste Diversion Project	BOS approved ongoing C&D program funding to continue to divert construction waste from landfill disposal to extend the life of the Buena Vista Landfill.
September 13, 2011 Waste Diversion Project	BOS adopted ordinance to reduce single-use plastic and paper carry out bags to reduce their use and disposal in the unincorporated County.
October 4, 2011 Waste Diversion Project	BOS directed the Department of Public Works to further reduce waste disposal by developing an ordinance to divert e-waste from landfill disposal through the proper disposal of e-waste and to provide a status report to the BOS on or before January 10, 2012.
October 25, 2011 Waste Management Facility Project	BOS accepted and filed a report on the proposed new location for the Buena Vista Landfill transfer station. BOS directed Public Works to return on or before December 2011 with a presentation on plans for the Zero Waste EcoPark.
December 13, 2011 Waste Management Facility Project	BOS accepted status update on Zero Waste EcoPark project in coordination with the Sherrif's office need to expand the Rountree Medium (Jail) Facility to ensure no conflicts between projects. BOS directed Public Works to return with plans for the EcoPark in February 2012.
February 14, 2012 Waste Management Facility Project	BOS accepted and filed a report on the Zero Waste EcoPark and coordination efforts with the Sheriff's proposed expansion plans at the Rountree Medium (Jail) Facility. The Sheriff's plans are still in concept form, so project coordination is ongoing.
March 20, 2012 Waste Management Facility Project	BOS considered a report on the proposed Zero Waste EcoPark project. The report recommended the construction of a single transfer station at a site on Rountree Lane adjacent to the Sheriff's Detention Facility and the Buena Vista Migrant Center (farmworker housing and childcare facility) with reduced functionality from the original EcoPark proposal. The recommendation also proposed to delay building the scaled back facility to a time when the "…need for the facility is more pressing and planning and construction funds are more readily available." The BOS directed Public Works to provide annual updates on plans for the EcoPark and other Recycling and Solid Waste operations.
April 17, 2012 Waste Diversion Project	BOS approved RFP process to hire strategic planning consultants to evaluate County's existing waste management strategies and identify alternative methods to manage recycling and solid waste to meet the County's long-range goals to increase waste diversion and ensure financially sustainable waste services.
August 21, 2012 Waste Diversion Project	BOS approved Independent Contractor Agreement with HF&H to provide strategic planning services to evaluate County's existing waste management strategies and identify alternative methods to increase waste diversion and ensure financially sustainable waste management services.
September 11, 2012 Waste Diversion Project	BOS approved amendment to Hope Services, Inc. contract to expand scope of C&D diversion contract to also include mattress and clothing diversion to increase recycling and reduce landfill disposal of these items.

Table 1-3. Buena Vista Landfill Public Outreach

Date/Action	Description
February 26, 2013 Waste Diversion Project	BOS considered presentation from County consultant HF&H on improving County's existing waste management strategies to increase waste diversion and improve financial sustainability of County waste management services.
June 25, 2013 Waste Diversion Project	BOS accepted and filed report and presentation on strategic planning for recycling and solid waste; and among other things, directed Public Works to return with a progress report and additional options for consideration by the BOS no later than May 2014.
May 20, 2014 Waste Diversion Project	BOS approved amended agreement for a two-year contract extension with consultant HF&H to continue to provide strategic recycling and solid waste planning services.
June 10, 2014 Waste Management Facility Project	BOS approved plans and specifications and engineer's estimate and authorized a call for bids to construct Buena Vista Sanitary Landfill, Module 5 [final landfill expansion]. Opening of bids set for July 10, 2014
June 17, 2014 Waste Management Facility Project	BOS authorized Director of Public Works to enter an on-call inspection services contract for the Buena Vista Landfill, Module 5 project.
June 24, 2014 Waste Diversion Project	BOS approved Hope Services labor services contract to continue operation of C&D recycling and mattress diversion projects to divert recyclable waste from landfill disposal.
October 28, 2014 Waste Diversion Project	BOS considered presentation on long-range planning for recycling and solid waste services, including the possible development of a regional organics diversion program to divert organic waste from landfill disposal.
February 24, 2015 Waste Management Facility Project	BOS approved amendment to agreement with Quincy Engineering, Inc., for construction management and quality assurance services for Buena Vista Landfill, Module 5 construction project.
March 10, 2015 Waste Diversion Project	BOS considered report on long-range planning for recycling and solid waste services that among other things will modernize the County's reuse, recycling, and compost collection programs to further the County's zero waste goals, expands the availability of food waste collection programs, and aligns the County's revenue model with its goals to increase material recovery and reduce landfilling to minimize the impacts of greenhouse gas emissions from collection vehicles and the processing, composting, and disposal operations.
March 24, 2015 Waste Diversion Project	BOS approved an amendment to agreement with HF&H Consultants, LLC, to revise their scope of work to include additional recycling and solid waste services analysis.
May 12, 2015 Waste Diversion Project	BOS Accepted and filed report on long-range planning for recycling and solid waste services, directed Public Works to return with a draft request for proposal for organics processing no later than November 2015, directed Public Works to return with a proposed universal service ordinance for consideration no later than September 2015, directed Public Works to continue discussions with GreenWaste Recovery on fee restructuring with a goal of implementation by January 2016, and directed Public Works to return with a proposed Zero Waste Plan in December 2015.
June 9, 2015 Waste Diversion Project	BOS considered a presentation on long-range planning for recycling and solid waste services, including modernizing the County's reuse, recycling, and compost collection programs to further the County's Zero Waste goals, aligning the County's revenue model with its goals to increase material recovery and reduce landfilling, and to expand food waste collection programs.
September 1, 2015 Waste Diversion Project	BOS directed Public Works to draft an ordinance requiring producers of prescription and nonprescription drugs and sharps to develop product stewardship take-back program to collect and dispose of unused/unwanted pharmaceutical and sharps waste from county residents and return to the Board on or before November 3, 2015, with the draft ordinance.

Table 1-3. Buena Vista Landfill Public Outreach

Date/Action	Description
October 20, 2015 Waste Diversion Project	BOS considered the proposed universal waste service ordinance to cover the urbanized areas of the County. BOS opened a public hearing to receive comments from local residents and adopted the proposed ordinance in concept after the close of the public hearing.
November 3, 2015 Waste Diversion Project	BOS adopted universal recycling and solid waste service ordinance to divert more recyclable materials from landfill disposal.
November 10, 2015 Waste Diversion Project	BOS considered the proposed safe drug and sharps disposal ordinance, opened a public hearing to receive comments from local residents on the proposed ordinance and adopted the ordinance in concept at the close of the public hearing. BOS also accepted and filed Styrofoam report to work with franchise hauler and Valley Women's Club to implement Styrofoam diversion and recycling program to reduce landfill disposal of these items.
December 8, 2015 Waste Diversion Project	BOS adopted safe drug and sharps disposal ordinance to create a producer responsibility program to place the cost of proper disposal of unwanted medications and sharps on the manufacturers and to reduce landfill disposal of these items.
December 15, 2015 Waste Diversion Project	BOS approved the California Used Mattress Recycling Program Collection Facility and Used Mattress Management Services Agreement between the County and the Mattress Recycling Council to divert used mattress, box springs, and futons from landfill disposal.
December 15, 2015 Waste Diversion Project	BOS accepted Task Force's 2014–2015 report on waste reduction programs that include new diversion programs to limit the amount of waste buried at the Buena Vista Landfill. These diversion programs include carpet and mattress recycling programs provided at County waste sites and retail take-back programs for batteries, propane canisters, fluorescent light bulbs, paint, motor oil, sharps and pharmaceuticals provided at retail locations. The Task Force report also included information on the extended producer responsibility ordinance for collection and disposal of medical waste produced at home.
January 26, 2016 Waste Diversion Project	BOS approved Santa Cruz County's Zero Waste Plan to manage resources and eliminate waste in the unincorporated County. BOS also directed Public Works to return with an annual report on progress toward these Zero Waste goals during budget hearings.
June 28, 2016 Waste Diversion Project	BOS approved and filed Public Works annual report on the County's Zero Waste Plan that includes increased diversion programs.
August 2, 2016 Waste Diversion Project	BOS approved independent contractor agreement with Salinas Valley Solid Waste Authority to provide mattress recycling services to continue landfill diversion.
September 13, 2016 Waste Diversion Project	BOS adopted resolution to support the statewide ban of single-use plastic bags.
January 24, 2017 Waste Diversion Project	BOS approved Request For Proposals for yard and wood waste processing services to continue diverting organic materials from landfill disposal.
June 6, 2017 Waste Diversion Project	BOS accepted and filed County's Zero Waste report that included updates on diversion programs to save landfill space and investigations into developing a parcel adjacent to the Buena Vista Landfill for a future compost facility.
August 22, 2017 Waste Diversion Project	BOS approved Department of Public Works issuance of the yard and wood waste processing RFP to identify compost service provider to continue diverting organic materials from landfill disposal.
December 5, 2017 Waste Diversion Project	BOS considered and approved an independent contractor agreement with Keith Day Company to provide yard and wood waste processing and select C&D debris services to continue diverting organic waste from landfill disposal.

Table 1-3. Buena Vista Landfill Public Outreach

Date/Action	Description
April 10, 2018 Waste Diversion Project	BOS approved a resolution to authorize Director of Community Development to apply for CalRecycle grants to divert additional materials, including edible food, from landfill disposal.
June 12, 2018 Waste Diversion Project	BOS accepted and filed Zero Waste and organics processing reports, including updates on new County outreach and education positions to implement new organics diversion laws, large public event food waste collection, and additional businesses provided organic waste collection services. All targeted to reduce landfill disposal. The report also included a discussion of the reduced market for recyclables that has yet to impact the continued diversion of the County's collected recyclables.
June 26, 2018 Waste Diversion Project	Approve amendment to agreement with HF&H Consultants, LLC, for recycling and solid waste strategic planning consulting services to analyze long-term needs for county recycling and solid waste facilities and operations, including an analysis of remaining landfill life, need for a new transfer station, costs of new facilities and potential sources of revenue, future staffing needs, and alternative approaches and opportunities for regional waste management cooperation.
October 30, 2018 Waste Diversion Project	Approve amendment to agreement with Keith Day Company, Inc., for wood waste processing services by extending the term of the agreement to June 30, 2020, to align with County fiscal year and to continue the diversion of organic waste from landfill disposal.
December 11, 2018 Waste Diversion Project	BOS considered report on proposed recommendations for Recycling and Solid Waste Strategic Plan that included discussion of the need for extensive capital investment in the near future to meet changing waste management needs, including significant increased costs to meet state organic waste diversion mandates, either through construction of a local facility or by transporting organic waste out of the County for processing.
February 12, 2019 Waste Diversion Project	BOS adopted a resolution endorsing the creation of a statewide commission on recycling to expand markets for recyclable materials to improve diversion of recyclables from landfill disposal.
June 11, 2019 Waste Diversion Project	BOS approved Recycling and Solid Waste Services strategic planning contract with HF&H consultants to include, among other things, source reduction/extended producer responsibility policy frameworks, enhanced countywide mandatory recycling/organics policies, a solid waste infrastructure master plan, along with capital improvements/operations funding and financing plans.
August 6, 2019 Waste Diversion Project	BOS considered a presentation of options to reduce plastic pollution and directed Public Works to develop ordinances to prevent the sale of single-use plastic water bottles of less than a gallon at County facilities, reduce the use of disposable cups, and develop other plastic/litter reduction measures to reduce waste and increase landfill diversion.
August 27, 2019 Waste Diversion Project	BOS considered a report on proposed recommendations for the Recycling and Solid Waste Strategic Plan that included progress in meeting the County's Zero Waste goals, recommendations to meet new State organic waste diversion requirements to extend the life of the landfill, and planning for a new waste transfer facility at the Buena Vista Waste Site as the landfill reaches capacity.
November 5, 2019 Waste Diversion Project	BOS considered ordinance amending the Santa Cruz County Code to add a charge on single-use disposable cups at businesses in the unincorporated County to reduce waste and landfill disposal of single-use cups.
November 19, 2019 Waste Diversion Project	BOS approved provisional ordinance amending the Santa Cruz County Code to add a charge on single-use disposable cups at businesses in the unincorporated County to reduce waste and landfill disposal of single-use cups.
December 10, 2019 Waste Diversion Project	BOS adopted Chapter 5.47 to the Santa Cruz County Code, relating to a charge for single-use disposable cups in the unincorporated County to reduce waste and landfill disposal of single-use cups.

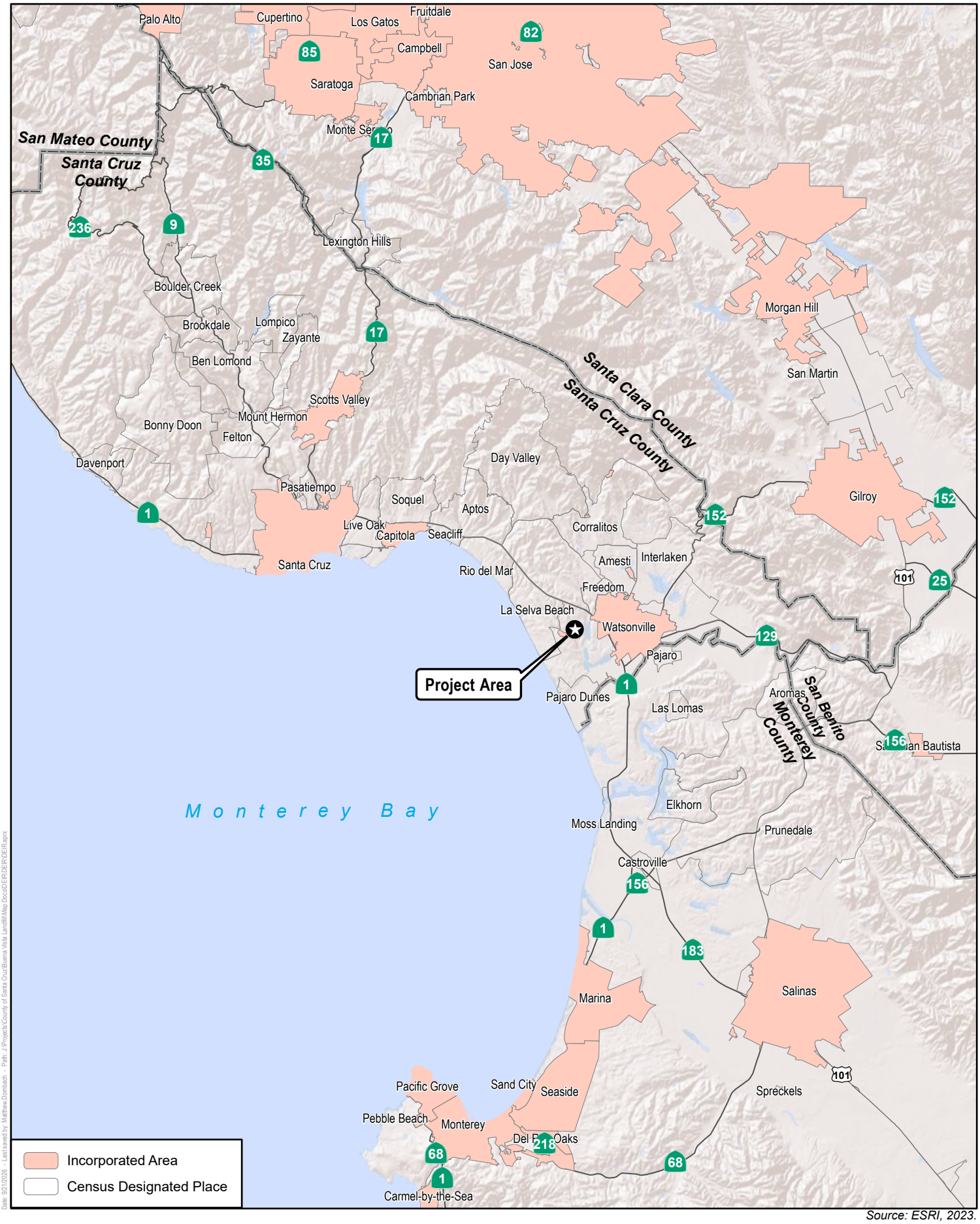
Table 1-3. Buena Vista Landfill Public Outreach

Date/Action	Description
March 24, 2020 Waste Management Facility Project	BOS approved contract with SCS Engineers to provide design, permitting, grant application, bidding assistance, construction support, and compost training services for an in-County compost facility at the Buena Vista Landfill site to reduce costs of compliance and transportation impacts necessary to implement Senate Bill 1383 mandated organic waste diversion programs.
June 2, 2020 Waste Diversion Project	BOS approved Keith Day Co. organics compost processing contract with an expanded scope to include sheetrock (wall board) processing to increase diversion of waste materials from landfill disposal.
November 17, 2020 Waste Management Facility Project	BOS approved Recycling and Solid Waste Services Strategic Plan to provide funding to maintain current operations, to comply with State mandates, and for capital improvements in preparation for the closure of the Buena Vista Landfill. BOS also directed Planning to work with Public Works to align the General Plan designation and zoning of the Buena Vista Landfill with the existing use as a public facility.
February 23, 2021 Waste Management Facility Project	BOS accepted and filed the Buena Vista Landfill Agricultural Viability Study and the Buena Vista Landfill Proposed Transfer Station Opportunities and Constraints Analysis needed to meet the public need for a solid waste and recycling facility at the Buena Vista site.
February 23, 2021 Waste Diversion Project	BOS also approved a mattress recycling revenue agreement to continue mattress recycling at County waste sites to ensure maximum diversion of these material from landfill disposal.
June 8, 2021 Waste Diversion Project	BOS approved amendment to Keith Day Co. agreement to continue processing yard, wood and sheetrock waste into recycled organic waste products to ensure diversion of these materials from landfill disposal continues uninterrupted.
August 10, 2021 Waste Diversion Project	BOS approved Skip the Stuff ordinance adding Chapter 5.53 to the County Code to reduce litter and reduce the amount of single-use food service ware (straws, napkins, condiment packets, utensils, etc.) provided with take-out meals to also divert these materials from landfill disposal.
September 14, 2021 Waste Management Facility Project	BOS approved contract with SCS Engineers for design, environmental analysis, permitting, bid, and construction administration services for the Buena Vista Landfill Redevelopment Project.
September 28, 2021 Waste Management Facility Project	BOS approved Recycling and Solid Waste Services progress report on Zero Waste Planning and directed Public Works to return with recommendations to proceed with a protest vote needed to establish an infrastructure charge to increase funding to permit and construct necessary solid waste facilities at the Buena Vista Landfill site. BOS also approved a solid waste engineering contract with Geosyntec to support disposal facility engineering related to ongoing landfill operations. site redevelopment, and closure of the Buena Vista Landfill.
October 19, 2021 Waste Diversion Project	BOS approved amendment to Santa Cruz County Code, Section 7.20, to expand organic waste collection service in the unincorporated county to increase diversion of organics from landfill disposal.
November 16, 2021 Waste Diversion Project	BOS approved amendment to Keith Day Company contract to add food waste composting to increase diversion of this material from landfill disposal.
February 15, 2022 Waste Management Facility Project	BOS approved report on proposed infrastructure charge and directed Public Works to return and present the Recycling and Solid Waste Infrastructure charges and initiate Proposition 218 proceedings necessary to increase funding to permit and construct necessary solid waste facilities at the Buena Vista Landfill site.
June 7, 2022 Waste Management Facility Project	BOS public hearing to hear protests to the proposed Recycling and Solid Waste Infrastructure charge. After hearing public comments the BOS approved the infrastructure charge.

Table 1-3. Buena Vista Landfill Public Outreach

Date/Action	Description
June 28, 2022 Waste Diversion Project	BOS approved agreement with Keith Day Co. to provide organics and select C&D debris processing services to continue diverting these materials from landfill disposal.
October 25, 2022 Waste Management Facility Project	BOS approved Recycling and Solid Waste long-term planning progress report that discussed developing the Buena Vista Landfill site as a transfer station once the landfill closes as well as challenges to the County's progress to reach its Zero Waste goals.
December 13, 2022 Waste Diversion Project	BOS approved independent contractor agreement with Granite Rock Company to provide concrete hauling, crushing, and recycling to ensure diversion from landfill disposal, access to former stockpile area for use as landfill space, and reuse of waste concrete as recycled aggregate. BOS also approved amendments to GreenWaste Recovery franchise agreement for collection of solid waste, organics and collection and recyclables processing to continue diversion of organics and recyclables from landfill disposal.
October 17, 2023 Waste Management Facility Project	BOS considered report on Recycling and Solid Waste Services long-term planning progress, including updates on Buena Vista Landfill Redevelopment Project outlining the years remaining before landfill closure and the design of two transfer station to provide adequate waste services to the general public and to commercial waste haulers.
February 28, 2024 Waste Management Facility Project	NOP hybrid public scoping meeting held at Aptos Public Library and on Zoom to seek public input on the proposed Buena Vista Landfill Redevelopment Project and begin CEQA project review process.
June 25, 2024 Waste Diversion Project	BOS approved two-year agreement with Second Harvest Food Bank to provide food recovery support services to the Unincorporated County and local city partners to comply with state law requirements under Senate Bill 1383, and to improve the diversion of excess edible food fit for human consumption from landfill disposal.
November 19, 2024 Waste Diversion Project	BOS approved amendment to Keith Day Company contract to provide organics and select C&D debris processing services to continue to divert these materials from landfill disposal.
December 10, 2024 Waste Management Facility Project	BOS approved amendment to SCS Engineer's contract to provide continuing design services for the Buena Vista Landfill Redevelopment Project.
January 14, 2025 Waste Management Facility Project	BOS approved Recycling and Solid Waste Service's progress report, including updates on Buena Vista Landfill Redevelopment Project to either develop of a new compost facility or divert organics to an off-site recycling facility and planning for a new waste transfer station facility to ensure ongoing waste management capacity in the unincorporated south County as the Buena Vista Landfill approaches capacity.
To Be Determined	Draft EIR review meeting (BOS meeting).
To Be Determined	Final EIR certification meeting (BOS meeting).

Notes: AB = Assembly Bill; BOS = County of Santa Cruz Board of Supervisors; C&D = construction and demolition; CAG = Citizens Advisory Group; CEQA = California Environmental Quality Act; EIR = Environmental Impact Report; IWMF = Integrated Waste Management Facilities; LEED = Leadership in Energy and Environmental Design; NOP = Notice of Preparation; RFP = Request for Proposals



Source: ESRI, 2023.

Harris & Associates

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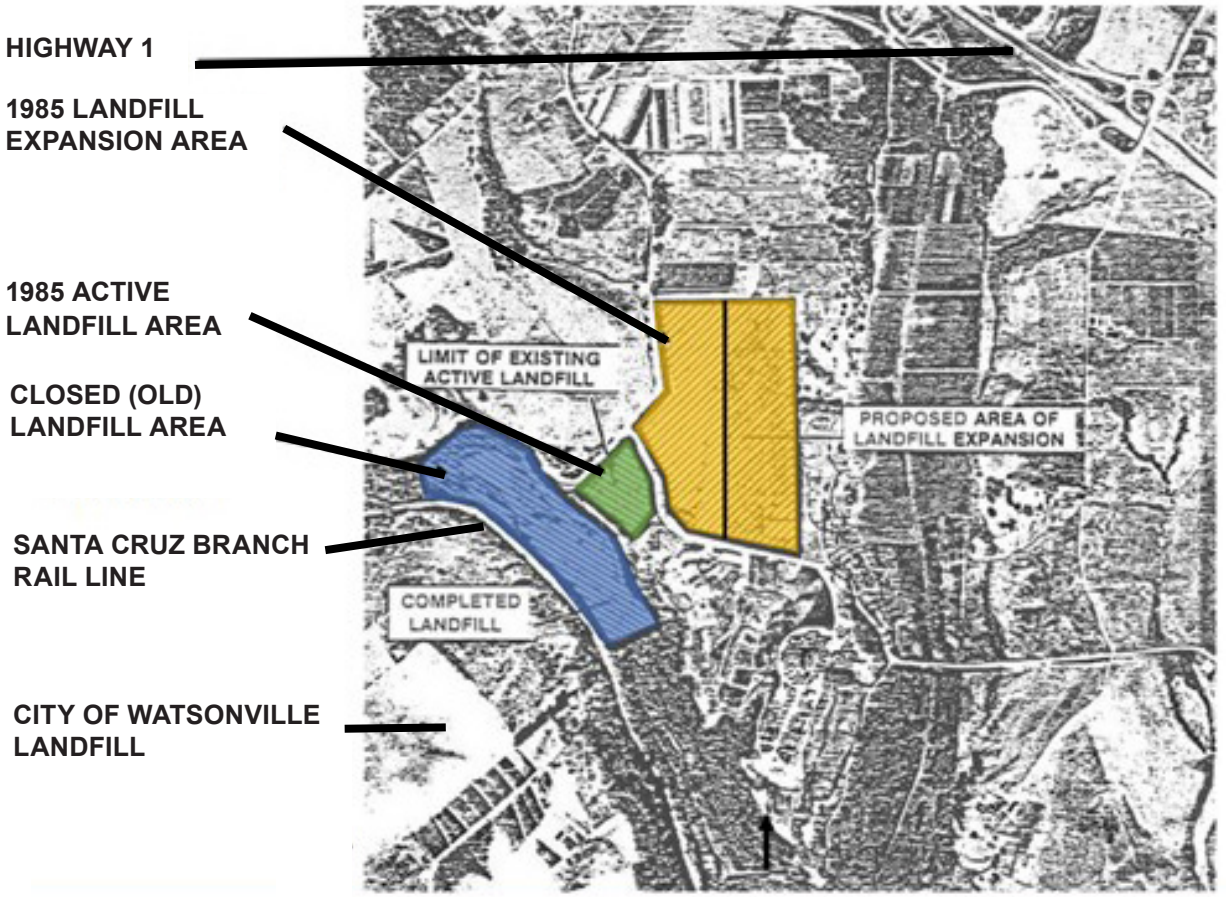
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Figure 1-1

Regional Location

Buena Vista Landfill Redevelopment Project

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**Disclaimer: This map is for informational purposes and may not have been prepared for or be suitable for legal, engineering, or surveying purposes. The map may not reflect current site conditions. If sourced from legacy and/or historical documents, the map may not be of the highest visual quality.*

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Source: County of Santa Cruz Department of Public Works 2022.

Harris & Associates

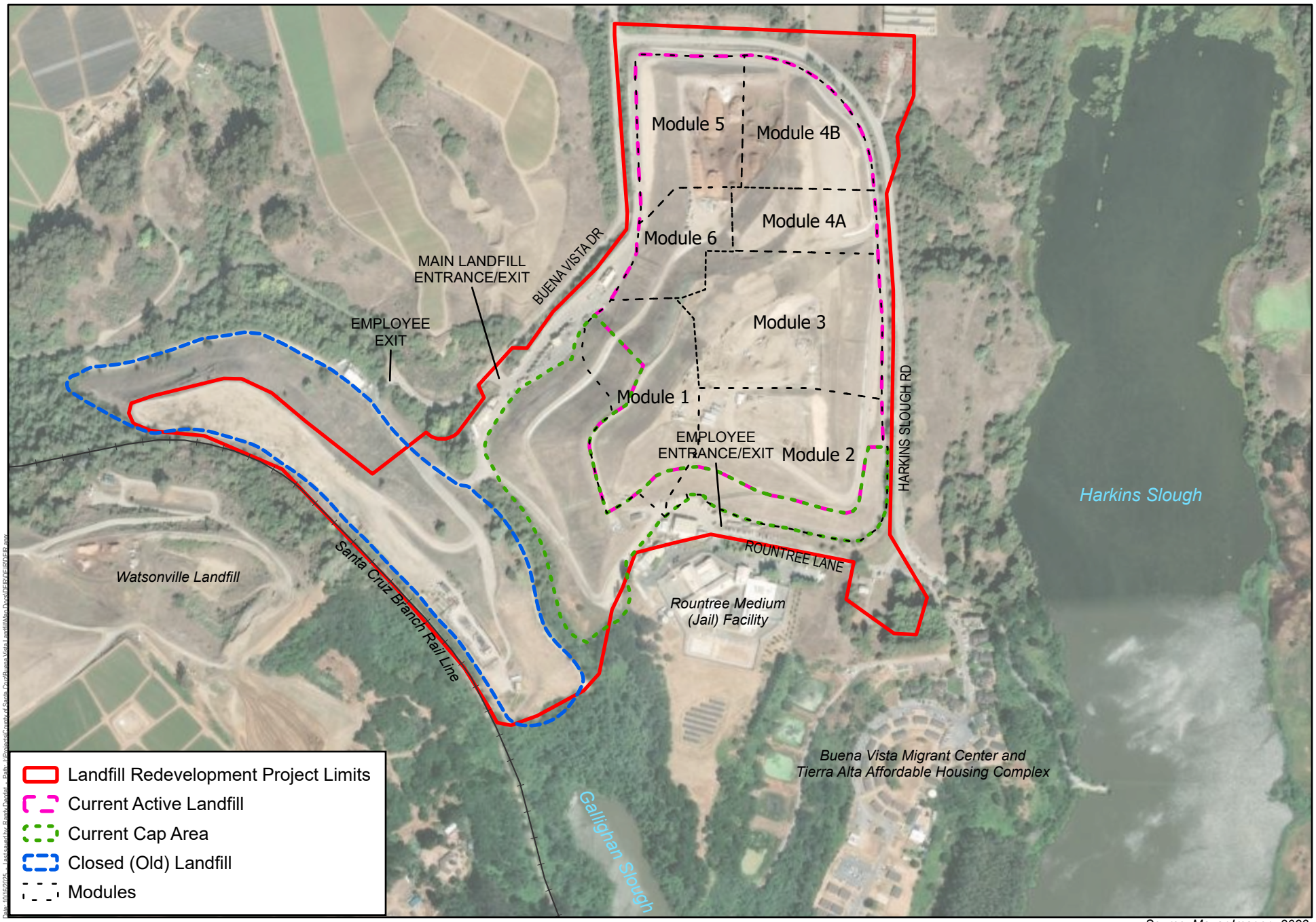
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Figure 1-2

Landfill History

Buena Vista Landfill Redevelopment Project



Source: Maxar Imagery 2023.

Harris & Associates

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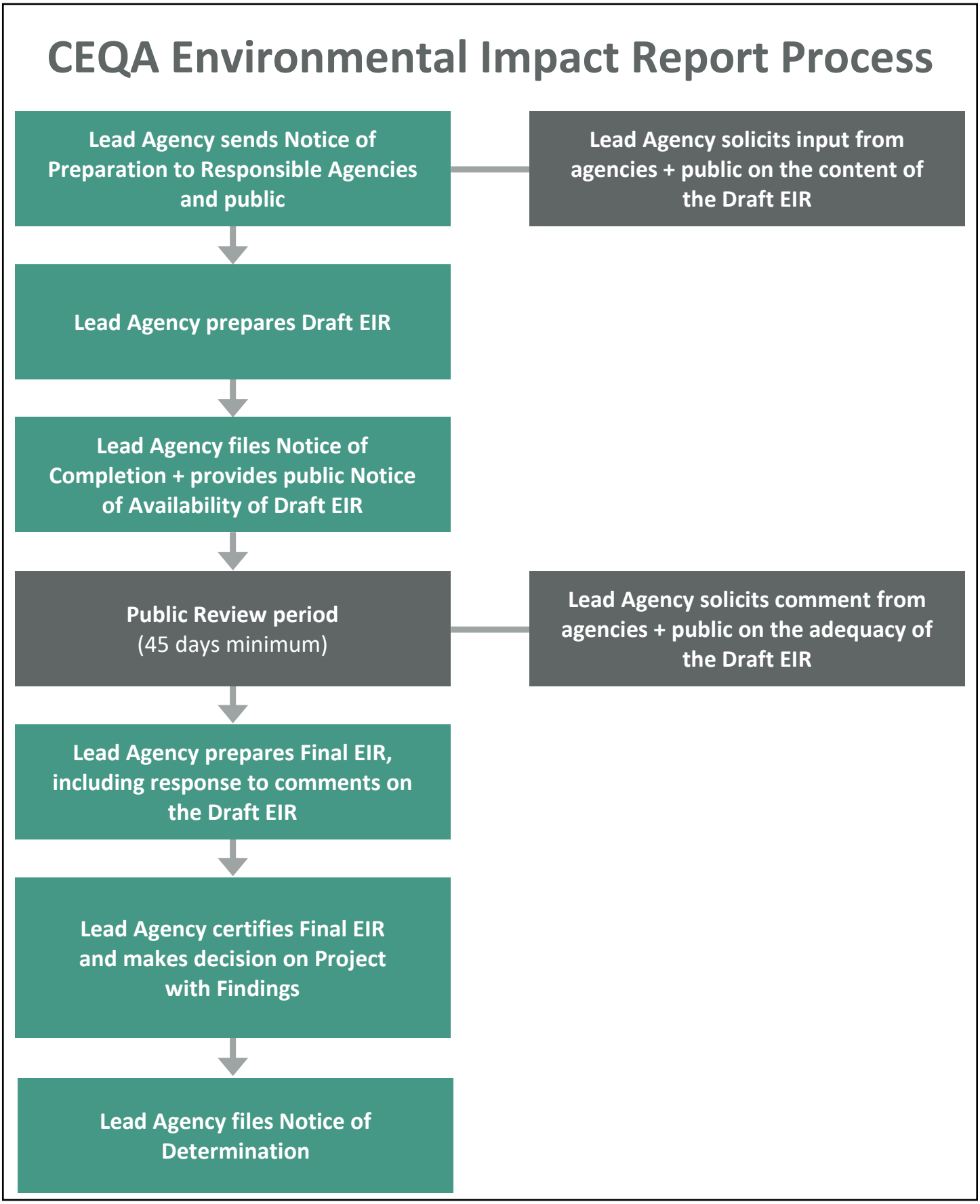
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Figure 1-3

Buena Vista Landfill Boundaries

Buena Vista Landfill Redevelopment Project



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Harris & Associates

Figure 1-4
CEQA EIR Process

2 Project Description

2.1 Overview

The County of Santa Cruz (County) is proposing the Buena Vista Landfill Redevelopment Project (Project) in unincorporated Santa Cruz County (**Figure 1-1**, Regional Location). All figures are located at the end of Chapter 2.

The Buena Vista Drive Sanitary Landfill (hereinafter called Buena Vista Landfill) is nearing capacity (or site life) and is estimated to close between 2028 and 2038 depending on the rate of the annual tonnage of waste disposed at the landfill, the amount of waste transferred for disposal at regional landfills while the Buena Vista Landfill remains open, and the organics diversion facility (ODF) option selected for this Project.[1] Refer to Chapter 1, Introduction, for additional detail.

The purpose of the Project is to ensure an orderly landfill closure program that meets federal and state requirements and provides County residents with ongoing solid waste handling capabilities that meet state-required waste management goals for waste reduction, source separation, materials recycling, and organics diversion.

The Project includes three key components: 1) Developing two new waste transfer stations for waste handling and transport; 2) Developing an improved ODF to address stormwater quality issues and support organic waste processing and diversion; and 3) Implementing the landfill closure and revegetation plan once site capacity is reached (**Figure 2-1**, Project Overview). The design plans are presented in **Appendix A**, Project Design Plans.

Additionally, the Project includes 4) Optional improvements (paving internal access roads, upgrading the scale house, upgrading the recycling center, and adding an equipment parking and storage area).

The Project also requires 5) General Plan/Local Coastal Program (LCP) Land Use Designation and Zoning Map Amendments (agricultural resources soils map revision, parcel rezone, and General Plan/LCP amendment).

This Environmental Impact Report (EIR) includes an evaluation and disclosure of the potential impacts associated with the Project, in accordance with state law and the California Environmental Quality Act (CEQA) Guidelines.

This EIR chapter describes the Project in detail and contains the following sections:

- Project Location and Setting
- Project Purpose and Objectives
- Project Components
- Project Construction
- Required Permits and Approvals

[1] If ODF Option 1 is selected, the organics facility will be developed on the existing landfill, likely reducing the remaining capacity of the existing landfill to fewer than 10 years. ODF Option 1 is described further below in Section 2.4.

2.2 Project Location and Setting

The Project area is the Buena Vista Landfill site, located between Buena Vista Drive and Harkins Slough Road in unincorporated southern Santa Cruz County, west of Highway 1 within the California Coastal Zone (**Figure 1-1**, Regional Location, and **Figure 2-1**). The Project area includes the Project limits, as shown on **Figure 2-1**.

The Buena Vista Landfill address and primary entrance is 1231 Buena Vista Drive. The address, primary entrance, and permitted boundary would remain the same with Project implementation.

The Buena Vista Landfill property is composed of the following County-owned parcels, as shown on **Figure 2-2**, Landfill Parcels and Current Zoning:

- **Assessor's Parcel Number (APN) 052-531-01.** 35 acres zoned Public Facilities-Airport Influence Area (PF-AIA), includes the County's closed landfill, referred to as the "Old Landfill."
- **APN 052-531-03.** 94 acres zoned PF-AIA, includes the closed Module 1 portion and support facilities of the County's current landfill, referred to as the "South Landfill," as well as the County's Rountree Medium (Jail) Facility, the Buena Vista Migrant Center (farmworker housing and childcare facility), and the Housing Authority's affordable housing complex known as Tierra Alta.
- **APN 052-021-33.** 69 acres, 34 acres zoned PF-AIA and 35 acres zoned Commercial Agriculture-Airport Influence Area (CA-AIA), includes the County's active landfill, referred to as the "north landfill."

The Project area is located amid low-lying hills and is adjacent to lands zoned for public facilities and agricultural uses.

Agricultural uses are located to the northwest, north, and northeast of the landfill site and include row crops, greenhouses, horse stables, and fallow lands. The undeveloped land to the east, between Harkins Slough Road and Harkins Slough, is federally owned land managed by the U.S. Fish and Wildlife Service as a National Wildlife Refuge for the benefit of native plants and wildlife species.

Public facilities are located to the southeast, south, and southwest of the landfill site. The County's Buena Vista Migrant Center, a publicly owned farmworker housing development and childcare center, and the Tierra Alta affordable housing complex are located southeast of the landfill on Tierra Alta Drive. The County's Rountree Medium (Jail) Facility is located south of the landfill site on Rountree Lane. The City of Watsonville's landfill is located southwest of the County's "Old Landfill" and is accessed from San Andreas Road. The City of Watsonville landfill is used only by Watsonville's city-operated refuse collection trucks. The Santa Cruz Branch Rail Line, owned by the Santa Cruz County Regional Transportation Commission, extends along the south side of the County's "Old Landfill."

2.3 Project Purpose and Objectives

Section 15124 of the CEQA Guidelines indicates that the EIR Project Description include a statement of the objectives sought by the proposed project. A clearly written statement of objectives will help the lead agency develop a reasonable range of alternatives to evaluate in the EIR and will aid the decision-makers in preparing findings or a statement of overriding considerations, if necessary. The statement of objectives should include the underlying purpose of the project and may discuss project benefits.

Current operations at the Project area include acceptance and proper handling of household hazardous waste; collection and sorting recyclable materials for transfer, sale, and reuse; organic materials acceptance, processing (chipping and grinding) and transfer for off-site composting; and burial of solid waste. All of the waste acceptance, handling, sorting, and transfer operations currently provided by skilled County staff or contracted vendors at the landfill site will need to continue after the landfill reaches capacity. Closure of the landfill without the Project would leave Santa Cruz County without a waste disposal/handling facility in south County needed to meet the State of California's waste management, reduction, and diversion goals.

The Project **purpose** is to ensure an orderly landfill closure program that meets state and federal requirements and provides ongoing solid waste handling capabilities to allow the County to meet state-required waste management goals for waste reduction, source separation, materials recycling, household hazardous waste management, and organics diversion.

The Project **objectives** are to:

1. Provide continuous waste management operation at the Buena Vista Landfill site (waste reduction, resource recovery and recycling, organics diversion, and waste disposal/transfer services) to serve County residents, businesses, and commercial haulers.
2. Reduce illegal dumping within the County by continuing to provide local waste disposal and recycling options for County residents and businesses.
3. Maximize use of existing County property and waste disposal and recycling facilities and/or adjacent property to serve the public without expanding landfill operations onto other property within the County.
4. Minimize interference with existing landfill operations and infrastructure (e.g., scale house, recycle center, household hazardous waste facility).
5. Minimize air quality and greenhouse gas emissions associated with additional trips by consolidating refuse into larger trucks for transfer to a regional landfill.
6. Minimize impacts to the adjacent ecological reserve and other natural resources in the Coastal Zone and minimize any impacts to the occupants of the adjacent Buena Vista Migrant Center and Tierra Alta affordable housing complex.
7. Meet state mandates for stormwater compliance, landfill gas emissions compliance, waste reduction, mandatory recycling, and organics diversion.
8. Comply with state and federal landfill closure and post-closure requirements.
9. Start Project construction so transfer stations are operating prior to the landfill reaching full capacity.

Refer to Section 1.2, Project Background, in Chapter 1, Introduction, for information on the historical use, planning history, and current conditions and operations of the Buena Vista Landfill that led to the development of the Project.

2.4 Project Components

The County's proposed Buena Vista Landfill Redevelopment Project (Project) includes transitioning the Buena Vista Landfill to the Buena Vista Transfer Station, allowing County residents, businesses, and commercial waste haulers to continue bringing solid waste, household hazardous waste, recyclables, and organic materials to the landfill site.

Once the transfer station and organics area operations begin: 1) Solid waste would be loaded into transfer trucks and transported to a regional landfill. 2) Organic materials would continue to be preprocessed on site and either further processed on site or transferred to other compost or energy processing plants for conversion to recoverable organic products as required by state law. 3) The landfill closure and revegetation plan would be implemented. 4) Recyclables would continue to be sorted at either the existing or a relocated recycling facility on site.

To achieve this, the Project includes the following three key components, described in greater detail below and shown on **Figure 2-1** with the design plans included in **Appendix A,** Project Design Plans:

1. **Transfer Stations.** Two new waste transfer stations would be developed at the landfill site to implement transfer station operations for waste handling and transport. Transfer Station A, located in the undeveloped northeast corner of the County's landfill property, would serve self-haulers (residents and businesses). Transfer Station B, located at the current site of the maintenance building in the south portion of the site, would serve franchise haulers and larger commercial vehicles. Harkins Slough Road would be realigned around Transfer Station A to accommodate existing traffic and to contain all solid waste operational traffic on internal roadways.
2. **Organics Diversion Facility**. A new ODF would be developed to continue the existing organics preprocessing activities and support additional processing and diversion in compliance with State organics diversion requirements. The ODF would be located either within the existing active landfill footprint in the northern portion of the site (ODF Option 1) or on the "top deck" of the Old Landfill in the southwest portion of the site (ODF Option 2). ODF Option 1 (On-site Preprocessing on Current Landfill and Off-site Composting) would reduce maximum landfill capacity, at least during the time that ODF Option 1 is operational but could allow fill to be added in the future, if another method to divert organics were approved for development at a later date[2] (e.g., biochar, waste to energy). Alternatively, Option 2 (On-site Preprocessing and Composting on Old Landfill Site) would allow the landfill to reach maximum capacity.
3. **Landfill Closure and Revegetation**. Once capacity of the Current Active Landfill area in the center of the site is reached, the landfill closure and revegetation plan would be implemented.

Additionally, the Project includes the following optional improvements and the required General Plan/LCP Land Use Designation and Zoning Map Amendments.

4. **Optional Improvements**. The Project could include the following improvements on site to support the Project purpose and components described above, also shown on **Figure 2-1** and described in greater detail below:
    a. **Internal Access Road Improvements**. Internal roadway improvements could include asphalt paving of existing unpaved roads and repaving of existing worn and deteriorated roads.
    b. **Scale House Upgrades**. Upgrades could include additional scales with radio frequency identification to improve traffic flow and scale house operations.

[2] Currently these potential future projects are too speculative to analyze, and supplemental environmental analysis would be undertaken if and when a project like this were proposed.

c. **Recycling Center Upgrades.** The existing recycling center could be upgraded on site and/or relocated to the northeast portion of the landfill (where ODF Option 1 could be located) to accommodate recovery of more mandated materials, increase transportation efficiency, and include a marketing and storage facility for sale and reuse.

d. **Equipment Parking and Storage Area**. A new transfer truck/trailer and heavy equipment parking and storage area, including vehicle fueling and electric vehicle charging facilities, could be located on County property on the south side of Rountree Lane, between the County's Rountree Medium (Jail) Facility and Buena Vista Migrant Center (farmworker housing and childcare facility)/Tierra Alta affordable housing complex.

5. **General Plan/Local Coastal Program Land Use Designation and Zoning Map Amendments.** To support the key Project components listed above, the Project requires and thus includes the following updates:

   a. Agricultural Resource Map Amendment

   b. General Plan/Local Coastal Program Map Amendment

   c. Zoning Map Amendment

1. Transfer Stations

Transfer Station A (Self-Haulers)

Transfer Station A would serve self-haulers (residents and businesses) and would be located in the undeveloped northeast corner of the Project area. This area is currently used to store large metal collection bins (roll-off boxes) and other equipment when not in use.

Self-haulers would unload their solid waste, and transfer trucks would collect and transport it to a regional waste disposal facility. All vehicles transporting solid waste are required to enclose or cover the solid waste in accordance with California Vehicle Code, Sections 23114 and 23115.[3]

Construction and operation of the transfer station require the realignment of Harkins Slough Road. Refer to **Figure 2-1**, Transfer Station A, in the northeast portion of the site, and **Appendix A**, Sheets C200 and C300.

Building Structure. The transfer station structure would be approximately 32,700 square feet and include office and visitor spaces (30 feet by 50 feet), restroom, and nine parking spaces for County employees. The transfer station would use a full-depth tunnel for transfer trailer loading, requiring excavation up to 25 feet deep, described further below. The exterior building height would be approximately 40 feet tall. The location where Transfer Station A would be constructed is approximately 110 feet above mean sea level, and Transfer Station A would be approximately 150 feet above mean sea level.

Transfer Station A is designed to promote counterclockwise traffic control, which is safer for all types of vehicles using the facility. The design includes a 15-foot-wide full-depth "transfer truck tunnel" that extends the length of the building and is recessed approximately 15 feet below tipping floor elevation. Thus, the tunnel is open at the top and not an underground tunnel.

[3] Under California Vehicle Code, Sections 23114 and 23115, it is against the law to operate a vehicle on the highway which is improperly covered, constructed or loaded. Contents must be covered so that no part spills, drops, leaks, blows, sifts or in any other way escapes from the vehicle. This law applies to residents in personal vehicles; and businesses, haulers and collectors.

Transfer Station A also includes a waiting area, offices, storage/utility room, conference/break room, and restrooms. The tipping floor has been designed to accommodate different types of waste. Municipal solid waste would be tipped on the north side of the building and bulk waste items and other divertible waste would be tipped in a designated area on the south side of the building where this waste will be loaded into rear load trailers at the provided loading docks. Transfer Station A's tipping floor is designed for self-haulers unloading pickup trucks, trailers, and other small sized vehicles.

Harkins Slough Road Realignment. Harkins Slough Road currently divides the Project area, located between the proposed Transfer Station A site and the active landfill area. To separate local traffic from Buena Vista facility traffic, Harkins Slough Road would be realigned to the northeast perimeter of the Project area, adjacent to the north and east property lines. This realignment would keep the general public on Harkins Slough Road, outside the facility fence. The 90-degree turn would require stop signs to control traffic in each direction.[4]

The portion of the realigned Harkins Slough Road extending along the north side of the transfer station would be located south of and avoiding the existing drainage ditch. The portion of the realigned road extending along the east side near the transfer station entrance would be adjacent to a steep slope with oak woodland, requiring construction of a 2:1 slope where the realigned road crosses over this slope. This 2:1 slope would provide stability for the road while minimizing required tree removal.[5] Also, refer to the description of Retaining Walls below.

Vehicular Circulation/Traffic Flow (Solid Waste Hauling). Vehicular circulation and traffic flow are shown on **Figure 2-3**, Project Traffic Flow, and in **Appendix A**, Sheets C400 to C405. Self-haulers would enter the facility at the existing entrance on Buena Vista Drive and travel north and east on the internal facility road that is located within the current landfill footprint to Transfer Station A (refer to red arrows on **Figure 2-3**). Self-haulers would enter Transfer Station A at grade on the east side of the building, unload their solid waste inside on the waste tipping floor and large diverted recyclable items (e.g., mattresses, carpet, electronic waste, tires, appliances, organics) inside at designated areas, and exit on the west side of the building. Self-haulers would use the same internal facility road to exit the facility onto Buena Vista Drive.

Transfer trucks are commercial semi-trucks hauling 40- to 55-foot enclosed trailers and would be used to consolidate large solid waste loads for transfer to a regional landfill. The ReGen Monterey Landfill is located 19 miles south in the City of Marina and is used for planning and analysis purposes based on capacity and relative proximity. Transfer trucks would be used instead of smaller trucks to reduce the number of trips needed to convey waste to other locations, and to focus the use of specialized waste collection trucks on neighborhood and commercial waste collection. Transfer trucks would also be used to consolidate and transfer some recyclable materials and organic waste materials to other locations as needed. Large recyclable items (e.g., mattresses, carpet, large appliances) would be loaded separately into trailers and drop boxes via a loading dock and hauled to appropriate recycling facilities.

Transfer trucks servicing Transfer Station A would enter the facility at the existing entrance on Buena Vista Drive, travel south and east on the internal facility road (like the transfer trucks going to

[4] The County of Santa Cruz Public Works Division, Roads & Transportation, approved the proposed realignment of Harkins Slough Road and the addition of stop signs at this location, and determined it would not present a design hazard or disrupt traffic flow because of the relatively low volume of vehicle trips to land uses on this portion of Harkins Slough Road (County's Rountree Medium (Jail) Facility, residences at Buena Vista Migrant Center and Tierra Alta affordable housing complex, and landfill employees).

[5] Several design options were considered, including a 3:1 slope, larger retaining wall with minimal slope, and a 2:1 slope. It was determined that the 2:1 slope at the road base would result in the least amount of tree removal.

Transfer Station B), pass Transfer Station B, and continue on the internal facility road traveling in a counterclockwise direction around the landfill to the east side of Transfer Station A (refer to blue arrows on **Figure 2-3**). Transfer trucks would then enter the load out tunnel from the east and exit the tunnel on the west. After loading at Transfer Station A, the transfer trucks would merge onto the same internal road used by self-haulers to exit the facility onto Buena Vista Drive. No facility traffic would use Harkins Slough Road. Trucks hauling large, diverted recyclables trailers and boxes would use the same route but not use the load out tunnel. Instead, these trucks would back into a loading dock on the outside of Transfer Station A. There are typically three to five loads of large, diverted recyclable items shipped from the Buena Vista facility each week.

Vehicles bypassing the Buena Vista facility to access the County's Buena Vista Migrant Center (farmworker housing and childcare facility) Tierra Alta Affordable Housing, County's Rountree Medium (Jail) Facility, and the few neighboring properties would use the realigned Harkins Slough Road. The only transfer station-related traffic on Harkins Slough Road would be the same as existing conditions for County staff arriving/departing from work.

Retaining Walls. Retaining walls would be required where vehicles enter and exit the below grade portion of the transfer station. Additionally, a retaining wall would be required along the north and east perimeter of the realigned Harkins Slough Road to maintain a level roadway. On the east side, the retaining wall would end where there are steep slopes with oak woodland and the roadway curves inward toward the transfer station entrance. As stated above, in this area, the roadway would be supported by a 2:1 slope with small retaining wall at the base of the roadway.

Lighting. Exterior site lighting would be kept to a minimum to what is required for safety and operational needs during normal operating hours from 7:00 am to 5:00 pm. All lighting would be affixed to structures or on standards not exceeding the structure height, and the lighting would be directed downward and away from adjacent open space land to the north and east. Lighting may include motion sensor site lighting, which would be limited to areas where needed for security (e.g., office and scale area) and would be avoided in other areas.

Vegetation Removal and Restoration. Construction of Transfer Station A and the realignment of Harkins Slough Road requires removal of existing on-site shrubs, grasses, and trees. During and after the realignment of Harkins Slough Road, approximately 350 linear feet of the existing drainage, extending from the culvert beneath the unpaved roadway westward toward Buena Vista Drive, would be restored to enhance ecological and hydrologic functions and values of this feature (refer to Environmental Enhancement and Habitat Restoration Features below under 3. Landfill Closure and Revegetation).

Utilities. In general, the Project would connect to existing utility systems.

- Water services lines for domestic and fire suppression would be extended onto the Transfer Station A site from the existing water tanks located at the neighboring County's Rountree Medium (Jail) Facility, requiring the installation of new connection pipelines extending south to north between the landfill and Harkins Slough Road to Transfer Station A. The transfer station would include a fire detection and suppression system.
- Wastewater from Transfer Station A operations would be collected in an underground holding tank adjacent to the office and pumped out and hauled as needed to a wastewater treatment facility. Wastewater from operations would include any contact water internal to the transfer station, including the tipping floor where there may be contact water from waste on the floor or from washing the building interior with a pressure washer. An oil/water separator would be installed to separate any unwanted liquids from wastewater. For restrooms, wastewater would

be collected in a separate holding tank that would be pumped regularly as needed and hauled for wastewater treatment.

- Stormwater surface runoff from new impervious surfaces built within Transfer Station A facility limits would be collected at the low point on the back (north) side of the transfer station, directed toward the transfer station, and conveyed via storm pipe infrastructure into the landfill's existing stormwater channel. Portions of the existing stormwater channel between Harkins Slough Road and the landfill perimeter fence (cement lined ditch) would be displaced by Transfer Station A and thus would be replaced with a buried storm pipe extending around the north side of the transfer station and then similarly drain to the existing system. Filtration measures would be taken to prevent unwanted solid waste or contaminated stormwater from entering the stormwater system. A number of options could be used such as but not limited to filter socks or bags, Stormceptor units, drop inlets and oil water separators. Contact water from within the transfer station would be collected and held in a storage tank for pump and haul removal. The realigned Harkins Slough Road would drain in the direction of the transfer station facility to prevent an increase of stormwater runoff to the existing perimeter ditch to the north of the property and to the open space east of the property. Stormwater would be conveyed from the new road to the facility via sheet flow, storm pipe, or a combination of both to the proposed stormwater conveyance systems located adjacent to Transfer Station A.
- Electricity would be provided to the site by connecting to the existing electrical lines. Additionally, there would be a backup diesel generator and/or solar panels at the transfer station site.
- An electrical heating, ventilation, and air conditioning unit would be provided on the roof above the office.

Transfer Station B (Franchise Haulers)

Transfer Station B would serve franchise haulers and larger commercial vehicles and would be located at the current site of the maintenance building in the south portion of the site. Construction and operation of the transfer station requires the demolition of the current heavy equipment and vehicle maintenance building, as well as the current landfill office building. Refer to **Figure 2-1**, Transfer Station B, in the southern portion of the site, and **Appendix A**, Sheets C202 and C302.

Maintenance Building Demolition. The existing maintenance shop and office building (three separate structures totaling approximately 9,700 square feet) would be demolished and replaced with the new transfer station, and the existing functions and facilities would be incorporated into the new transfer station.

Building Structure. The transfer station structure would be approximately 26,000 square feet and include a two story office space (approximately 3,800 square feet available), locker rooms/restrooms, a large vehicle maintenance shop (20 feet x 135 feet) and 8 to 10 parking spaces for County employees would be available in a similar location to the existing unpaved parking area on Rountree Lane, which would be paved and striped as part of the Project. Like Transfer Station A, Transfer Station B would include full-depth tunnel for transfer trailer loading, requiring excavation up to 20 feet deep. The exterior building height would be 40 feet tall. Transfer Station B would be constructed in the south-central portion of the property in an area approximately 110 feet above mean sea level. The proposed overall height of Transfer Station B would be approximately 150 feet above mean sea level.

Vehicular Circulation/Traffic Flow (Solid Waste Hauling). Vehicular circulation and traffic flow are shown on **Figure 2-3** and in **Appendix A**, Sheets C400 to C405. Franchise and commercial waste haulers would enter the facility at the existing entrance on Buena Vista Drive and then travel south and east on the internal facility road. They would enter the transfer station on the west side of the building, unload solid waste inside on the tipping floor, and exit on the east side of the building. To navigate back to the Buena Vista Drive entrance/exit, empty franchise and commercial waste trucks would continue on the internal facility perimeter road traveling in a counterclockwise direction around the landfill, merging with empty self-hauler traffic after passing Transfer Station A, before exiting the facility. Transfer trailer trucks, which consolidate solid waste and transfer it to a regional waste disposal facility (e.g., ReGen Monterey Landfill), would also follow the same path as franchise and commercial waste haulers.

Retaining Walls. Retaining walls would be required where transfer trucks enter and exit the below grade portion of the transfer station.

Lighting. Exterior site lighting would be kept to a minimum to what is required for safety and operational needs during normal operating hours from 7:00 a.m. to 5:00 p.m. Lighting may include motion sensor site lighting. All lighting would be affixed to structures or on standards not exceeding the structure height, and the lighting would be directed downward and away from adjacent land to the south.

Utilities. In general, the Project would connect to existing utility systems:

- Water service lines for domestic and fire suppression would be extended to Transfer Station B from the existing water lines on site, which convey water from the existing water tanks located at the County's Rountree Medium (Jail) Facility and are currently serve the maintenance facility located on this site. The building would include a fire detection and suppression system.
- Wastewater from Transfer Station B would be collected in an underground holding tank adjacent to the office and pumped out and hauled as needed to a wastewater treatment facility. Like Transfer Station A, this wastewater includes any contact water internal to the transfer station, including the tipping floor where there may be contact water from waste on the floor or from washing the building interior with a pressure washer. An oil/water separator would be installed to separate any unwanted liquids from wastewater. For restrooms, wastewater would be collected in a separate holding tank that is pumped regularly as needed for wastewater treatment.
- Stormwater surface runoff from Transfer Station B would be conveyed via curbing and v-ditches to a series of catch basins located within the paved area, similar to current conditions. The ultimate outfall would be the existing outfall located east of the facility into the perimeter ditch. Improvements would be made to this outfall to ensure it is adequate to handle any increase in flow, if needed.
- Electricity would be provided to the site by connecting to the existing electrical lines. The existing overhead lines south of the existing buildings may need to be relocated. Additionally, there would be a backup diesel generator and/or solar panels at the transfer station site.
- A heating, ventilation, and air conditioning unit would be provided on the roof above the office or on the ground adjacent to the office. The heating, ventilation, and air conditioning unit would be electric to replace the electricity and gas unit, which is currently used on site.

Accepted Waste

As stated above, there would be two transfer stations. Transfer Station A would be located in the northeast corner of the County's landfill property and would serve self-haulers (residents and businesses). Transfer Station B would be located at the current site of the maintenance building in the south portion of the site and would serve franchise haulers and larger commercial vehicles. Consistent with current operations, both transfer stations would accept the following waste:

- Household and/or commercial garbage, upholstered furniture, painted wood, treated wood waste, large non-recyclable metal items, rancid waste, and waste that requires special handling as determined by landfill staff.
- Recyclable materials (source separated for recycling) including metals, glass bottles and jars, presorted plastic containers, bagged stretchy (film) plastic, books/paper, and cardboard.
- Organic waste (source separated for composting) including clean sorted wood and yard waste (no dirt, treated or painted lumber, poison oak, pampas grass, yucca, palm, root balls); food waste (no raw meat, grease, or liquids); sheetrock/gypsum board; and pallets.
- Construction and demolition debris (source separated), including clean concrete, clean asphalt, baserock, brick, tile and porcelain.
- Large recyclables, including appliances, mattresses, box springs, clean carpet and foam padding (6' wide or less, rolled separately), electronic waste (TVs, computers, printers, small appliances), tires, 1-5 gallon empty propane tanks, and agricultural plastics.

Also consistent with current operations, the Buena Vista facility would continue to accept household hazardous waste at its household hazardous waste facility for recycling and off-site disposal (e.g., cleaning products, automotive products, batteries), but does not accept waste that is defined as hazardous by Resource Conservation and Recovery Act and/or California Code of Regulations Title 22. Hazardous waste, asbestos (friable and non-friable), radioactive waste, and untreated medical waste (biohazardous or infectious waste) are not currently allowed and would not be allowed for disposal with Project implementation. Additionally, although current operations accept soil that meets screening requirements and dead animals, neither transfer station would accept dead animals or soil of any kind (Santa Cruz County 2024).

Gas Monitoring

Transfer Stations A and B would both have gas monitoring sensors installed, similar to the gas monitoring devices currently used at the existing Buena Vista maintenance facility (where Transfer Station B is proposed) and at the Ben Lomond Transfer Station. The purpose is to monitor subsurface gas that could potentially migrate from the landfill to beneath the transfer station structures to ensure the levels do not exceed 5 percent, in compliance with California Department of Resources Recycling and Recovery (CalRecycle) regulations.

Landfill gas controls are installed at the landfill and include the landfill gas well controls and the landfill gas collection and conveyance system. These landfill gas controls work to collect and flare the gas on site to ensure landfill gas does not migrate away from the landfill boundary to cause a hazard in the surrounding area or structures (such as the new transfer stations).

2. Organics Diversion Facility

The County would continue to divert organic materials (e.g., vegetation/yard waste, food waste) at the Buena Vista facility. The organics diversion operation is necessary to comply with the organic diversion requirements of state law outlined in Senate Bill 1383, which requires 75 percent of California's organic waste to be diverted from landfill disposal by 2025 and converted to reusable materials (compost, mulch, electricity, or biofuel).

The County is considering the following two options for the ODF at the Buena Vista facility. Refer to **Figure 2-1**, Organics Diversion Facility Options 1 and 2 in orange shading.

ODF Option 1 would be a continuation of the existing operation, currently located on the active landfill near the northern facility boundary, southwest of and near the proposed Transfer Station A. To maintain sufficient landfill area for Option 1, waste disposal in the Current Active Landfill would likely cease between 2028 and 2030.

ODF Option 2 would be relocated from the currently active landfill to the "top deck" of the Old Landfill in the southern facility boundary. For Option 2, development would occur as soon as feasible and waste disposal in the Current Active Landfill would continue until the currently active landfill reached final permitted grades, which is projected to be between 2030 and 2038.

For both options, the organics diversion operation would be operated by the County or by a contractor selected by the County. Small public loads would be unloaded at Transfer Station A and moved by facility personnel to the preprocessing area. Larger public loads by landscapers could be unloaded at Transfer Station A or directed to the preprocessing area. Larger loads by franchise haulers would be unloaded at the preprocessing area.

Incoming organic materials would be segregated, as necessary, into appropriate stockpiles (food waste, yard waste, wood waste, mixed organics, etc.) and preprocessed. The specific preprocessing steps would differ, depending on if Option 1 or Option 2 is selected. Preprocessing may include de-packaging food waste, trash and contaminant removal, chipping/grinding wood waste, stockpiling green waste, and other organic feedstock preprocessing tasks.

ODF Option 1: On-Site Preprocessing on Current Landfill and Off-Site Composting

The organics diversion operation would preprocess organic materials for off-site composting at the Monterey Bay Regional Waste Management District (ReGen Monterey) and other sites located in the Monterey Bay region. This operation would be similar to the current organics diversion operation at the Buena Vista facility, located in the northern portion of the active landfill, but there would be minor changes to the layout and a different access road.

The existing preprocessing area would be moved to a higher elevation on the landfill, placed above landfill cover, and accessed from the existing road on the east side instead of the north side. Specifically, there are three levels at the current landfill. Level 1 includes the current organics diversion operation (preprocessing and stockpiling for off-site composting), as well as sorting construction debris (lumber, plywood, sheetrock). Level 2, which has been elevated by the accumulation of landfill waste, is currently receiving solid waste. Level 3 is inactive and filled to final elevation. As Level 2 fills to final elevation, solid waste will be added to Level 1. With the implementation of ODF Option 1, Level 1 would be filled to final elevation of 140 feet above mean sea level, leaving enough room for ODF Option 1, which would be in the area of current Level 2 near the Transfer Station A site. The highest structure at ODF Option 1 would be the roof structure that

would not exceed 40 feet in height. Added to the proposed final ground surface elevation, the ODF Option 1 facility would not exceed 180 feet above mean sea level.

The proposed ODF Option 1 facility would include site and civil engineering improvements to the organics diversion area to improve regulatory compliance, especially related to water quality. The facility would be paved and include a roof structure for the portion of the area receiving and preprocessing for food waste to limit stormwater contact and control runoff from the facility.; Straw wattles and hay bales would be used around perimeter of stockpile storage area. Stormwater runoff would be directed by diversion berms into larger stormwater conveyance channels. The area may also include stormwater check dams to slow down the runoff to minimize erosion. Additionally, the County would implement contact water management features which may include segregated collection of water that contacts food waste, with transfer of contact water to the landfill leachate management system.,

ODF Option 2: On-Site Preprocessing and Composting on Old Landfill Site

The organics diversion operation would be relocated from the current landfill to the Old Landfill and would include preprocessing, composting, and post-processing steps to produce finished compost on site (within the County-owned landfill property). The Old Landfill ground elevation is approximately 90 to 100 feet above mean sea level. The proposed ODF Option 2 facility would be paved and would include a roof structure(s) to limit stormwater contact and control runoff from the facility. The height of the tallest structure (depackager building) would be approximately 40 feet. Final ODF Option 2 facility elevation would not exceed 140 feet above mean sea level.

Preprocessing would include depackaging of food waste, grinding of yard waste, and mixing of food waste with yard waste. Food and green waste will be mixed in an estimated volumetric ratio to achieve an appropriate moisture content and carbon to nitrogen ratio. The mixed feedstocks would then be composted in a mass-bed aerated static pile (MASP) system, also called covered aerated static pile compost facility. If the County determines the operation is visible from Buena Vista Drive (a County designated scenic roadway), the County would install large native shrubs or trees in containers along the northern perimeter of the site to screen views.

The MASP system uses fans to blow air into and through the piles (aerated static pile method) to aerate the organic materials and may include the addition of water to achieve optimal moisture content to accelerate the decomposition process. Aeration trenches are included in the concrete floor and allow air to flow into the piles and collect any contact water. Contact water is routed to a storage tank and then recycled back into the composting process.

The proposed MASP system consists of two mass beds, which are divided into 10 zones for Phase 1 and 8 zones for Phase 2. The back wall of the MASP is a cast-in-place concrete push wall, with Phase 1 being 300 feet long; Phase 2, 240 feet long. Moveable concrete blocks are used for side walls and have a length of 100 feet. Each zone is 30 feet wide.

Material is loaded into the MASP one zone at a time until the full length of each zone is filled. Material can be piled to a total height of 9 feet, without cover material. One foot of biocover material (e.g., finished compost) is placed over the mixed feedstocks to serve as an in-situ biofilter. On average, each Phase 1 zone can hold 950 cubic yards of material. The entire MASP system has a volumetric capacity of around 50,000 cubic yards and can process an estimated 160,000 tons per year.

The mixed feedstocks will be processed in two phases in the MASP. The residence time for Phase 1 will be 2 to 3 weeks. After Phase 1, material will be unloaded and moved to a new zone for Phase 2 of the MASP process for another 2 to 3 weeks.

The MASP system requires four fans (i.e., one per 4 to 5 zones). Each fan is designed to meet the estimated air requirement to keep the material oxygenated and cooled to 140°F or less at the time of peak microbial activity.

Water management is important to maintain moisture levels for optimum composting. The Option 2 composting operation will recover and reuse water whenever possible. During active composting in the MASP system, water evaporates because of the high temperatures. In addition, positive aeration tends to dry out the materials. The initial moisture target is approximately 60–65 percent. During feedstock mixing, water will be directly added to the initial mix.

Additional moisture can be added to each MASP zone through the use of a sprinkler system. Contact water from the MASP system is conveyed underground to storage tanks and recycled for moisture control in the composting process prior to demonstrating pathogen reduction. Clean, separated stormwater runoff will be directed to a small detention pond and pumped to a storage tank. Stormwater will be recycled for moisture addition to the compost after demonstration of pathogen reduction.

After the MASP process is complete, material is removed from Phase 2 and stockpiled at a curing pile location for 4 weeks, before being screened and then hauled off site to end user market. Finished compost is typically produced between 2 to 3 months, depending on temperature, moisture, and aeration of the pile which are carefully monitored during the process. Refer to **Appendix A**, Sheets C203 and C303.

Additional Information for ODF Options 1 and 2

Stormwater Management. For both ODF Options 1 and 2, the County would implement stormwater management practices to meet State regulatory compliance requirements. These include roof drains and catch basin inlet filters, which would be monitored and maintained. All paved impermeable surface areas would be swept three times a week during the wet season and once a week during dry season. Additionally, in accordance with the County's existing Industrial Activities Stormwater Pollution Prevention Plan for the Buena Vista Landfill, stormwater samples would be collected at designated sampling locations and analyzed. When samples are collected further visual observations would assess the quality of the discharged stormwater and adjust management practices as needed.

For Option 1, the existing operation area would be primarily paved with this area sloped to the north where the stormwater runoff would be directed by diversion berms into larger stormwater conveyance channels. To prevent overflows in the downstream channels, modifications may also include stone check dams, supplemental grassed channels, and erosion control matting to slow down the runoff to minimize erosion.

For Option 2, the top deck of the Old Landfill area would be primarily paved to accommodate operations. The existing grade slopes southeast conveying stormwater runoff into an existing drainage, which is a linear seasonal wetland swale, along the southern perimeter of the top deck adjacent to the existing railroad tracks. The design for Option 2 is to maintain the existing grades wherever possible. To accommodate increased stormwater runoff from the newly paved area, a new drainage ditch would be installed parallel to the existing seasonal wetland swale, located on the south portion of this landfill top deck. Paved stormwater berms may be used to direct the stormwater runoff into the new parallel drainage ditch. The new drainage ditch would include an outlet feature (e.g., diagonal swale, weir) at the downgradient end to tie into the existing seasonal wetland swale. Additionally, if Option 2 is approved, the seasonal wetland swale would be restored to an elevation contour that effectively conveys stormwater downgradient to Gallighan Slough and

planted with native wetland and riparian vegetation (refer to Environmental Enhancement and Habitat Restoration Features below under Section 5. Landfill Closure and Revegetation).The new parallel drainage ditch is intended to remain unvegetated and may include erosion control matting and stone check dams, as needed to reduce flow velocity and minimize erosion. Neither the new parallel drainage ditch and outlet feature nor the associated restoration of the seasonal wetland swale would be implemented if ODF Option 1 is approved instead of ODF Option 2.

Equipment. Both ODF Options 1 and 2 would include an equipment area to serve the needs of the organics diversion operations. Option 2 would include additional equipment specific to the composting process. Equipment needed for compost operation may include wheeled front loaders, skid steer loaders, material handler excavators, water truck, grinders/chippers, depackagers, fans, and trommel screens.

Structures. For Option 1, a roof structure would be installed for a portion of the area (e.g., receiving and preprocessing for food waste). For Option 2, all areas with organics materials would have a roof structure, and the height of the tallest structure (depackager building) would be approximately 40 feet. The stockpiles related to composting would be approximately 15 feet. For both Options 1 and 2, any roof structure or building would be built over an asphalt pad that will act as interim cover, and the roof structure would be engineered to avoid impacts to the landfill material.

Vehicular Circulation/Traffic Flow (Organics Hauling). Vehicular circulation and traffic flow are shown on **Figure 2-3** and in **Appendix A**, Sheets C400 to C405. For both ODF Options 1 and 2, vehicles would enter the existing main entrance on Buena Vista Drive. Small loads by public self-haulers would be directed on the internal facility road around the north side of the landfill to Transfer Station A, where the organics would be placed in a bin/box and hauled to the organics processing area (Option 1 or 2) by facility personnel, who would be more familiar with operations and circulation to ensure proper disposal and safety practices are followed.

For ODF Option 1, larger loads by franchise and commercial organics haulers would follow the internal facility road north, as if going to Transfer Station A, but continue past Transfer Station A to the ODF access road on the east side of the landfill.

For ODF Option 2, larger loads by franchise and commercial haulers would follow the internal facility road south, as if going to Transfer Station B, and use the existing internal road that leads to the "top deck" of the Old Landfill. A portion of the existing road would be improved with minor grading and asphalt paving to support heavy vehicle traffic. Traffic would circulate around the "top deck" of the Old Landfill in a counterclockwise direction and return to the exit on Buena Vista Drive.

Lighting. There is no planned lighting for both ODF Options 1 and 2.

Utilities. There are no existing utilities serving the Option 1 and Option 2 sites. Requirements for each option are described below:

- Water would be needed at both the Option 1 and Option 2 sites. Both sites would require dust suppression water to manage fugitive dust and debris from compost preprocessing operations. Additional water would be needed if Option 2 is selected to provide process water for composting materials on site. All water needs at both sites can be provided by water truck deliveries from on-site water wells or water storage tanks.
- Electric power would be needed for Option 2 to run the fans for the MASP system. Also, other power needs may include pumps to move process water and contact water effluent into and from tanks and other ancillary equipment. Also, options for electric grinders and trommel screens will be explored to reduce diesel-powered equipment air emissions. For Option 1, which

is status quo, diesel-powered equipment (e.g., loader, chipping grinder) is currently used but could be replaced with electric battery powered equipment.

3. Landfill Closure and Revegetation

Background

Buena Vista Landfill closure activities were first analyzed as part of the Final EIR prepared for the Proposed Buena Vista Sanitary Landfill Expansion in 1985 (Gilchrist & Associates 1985). The project description for that EIR included a brief description of the closure process, including the landfill cap, leachate, and landfill gas collection systems. The EIR was the environmental basis for a minor landfill modification to correct the total landfill acreage from 52 acres to 61 acres (May 2000) and to change alternative daily cover methods to conserve landfill space (April 2006).

Preliminary Landfill Closure Plan

The Buena Vista Landfill Preliminary Closure and Post-closure Maintenance Plan (Preliminary Landfill Closure Plan) was prepared in 2021 by Geosyntec based on the approved Project analyzed in the 1985 EIR, to meet current California Waste Discharge Requirements in Title 27 of the California Code of Regulations and Title 40 of the Code of Federal Regulations. The Plan was approved by CalRecycle, as the Enforcement Agency, in April 2022. In California, regulatory responsibility for design of final covers for municipal solid waste landfills is jointly held by the California Regional Water Quality Control Board and CalRecycle. Because the U.S. Environmental Protection Agency has approved California's municipal solid waste landfill closure design standards, state agencies have authority to approve landfill closures without further U.S. Environmental Protection Agency oversight.

The Preliminary Landfill Closure Plan provides preliminary design and construction guidelines for closing the landfill facility and establishing an economical and environmentally sound post-closure maintenance program to protect public health and the environment. The Preliminary Landfill Closure Plan (**Appendix D**) includes descriptions of:

- Final Cover System
- Final Face Grading, Slope Protection, and Erosion Control
- Surface Water Management System
- Landfill Gas Management System
- Groundwater Monitoring System
- Environmental Monitoring and Control System

Final Landfill Closure and Revegetation

As described in Chapter 1 under Active Landfill Closure, the active landfill area includes a portion that is already capped (shown on **Figures 1-3** and **2-1** with the green dashed boundary line) and a portion that is still active, the Current Active Landfill (shown on **Figures 1-3** and **2-1** with the pink dashed boundary line). Once final grades are achieved, the area in green shading on **Figure 2-1** (which includes portions of the active landfill area) would be closed and capped in accordance with California Code of Regulations, Title 27, which implements Subtitle D of the Resource Conservation

and Recovery Act, the federal framework that sets minimum standards for design, operation, and closure of municipal solid waste landfills.

Cap is the common term for the landfill cover system required by California and federal landfill closure regulations. The cap separates waste from the environment to control erosion by conveying stormwater runoff at non-scouring flow rates, minimize rain infiltration into the waste to prevent the production of leachate, and control landfill gas.

Final Cap. As discussed in the Preliminary Closure and Postclosure Plan (**Appendix D**), the final cap will include the following layers (from bottom to top):

- **Foundation Layer –** 24 inches of clay placed and compacted to a minimum of 90 percent of maximum dry density (American Society for Testing and Materials [ASTM] D1557)[6] to provide a stable surface for the overlying barrier layer.
- **Barrier Layer –** a low conductivity layer of high or linear low density polyethylene underlain by a geosynthetic clay liner on the top deck only (i.e., no geosynthetic clay liner on the slopes). The barrier layer minimizes significant moisture infiltration into the landfill and controls/contains landfill gas.
- **Drainage Layer –** 6 inches of high permeability sand or gravel or a geocomposite drainage layer, where flow calculations indicate that a drainage layer is required for slope stability or to prevent raveling. A collection piping network would also be necessary. A drainage layer is used to stabilize the required vegetative layer and maintain the integrity of the barrier layer.
- **Vegetative Layer –** 12 inches of topsoil which contains no waste and is capable of sustaining native vegetation and robust plant growth to protect the landfill cap from erosion and support a mixture of grassland and coastal scrub species. On the top deck, in areas beyond the formerly capped areas, the thickness of the vegetative layer can be increased from 12 inches to a minimum of 24 inches to allow the planting of shallow-rooted native shrubs and perennial bunchgrasses.

Final Cover (Grading). The final cover (i.e., final site face) would be constructed at a slope of approximately 3:1 (3-foot horizontal to 1-foot vertical) and at approximately 3 percent on the landfill top deck. Some slopes, particularly on the west side, are currently steeper than 3:1, and those slopes would be flattened to 3:1 at least 2 years prior to the final cover being placed. Another option to avoid regrading steeper slopes would be to design an alternative final cover system to maintain final cover stability without changing these slopes.

Revegetation. For additional slope protection and erosion control, the final cover would be hydroseeded with a mixture of native and sterile herbaceous (i.e., grassland) species in the fall, prior to the rainy season. Hydroseeding would continue annually until grasses and forbs are established and self-sustaining, thereby reducing erosion and stormwater infiltration. There would be no irrigation system and minimal ongoing maintenance (e.g., mowing), which would be employed as needed to reduce fire hazards and preserve traffic sight lines along interior roadways. Water trucks could be used during the germination period if necessary, during drought or low rain years while the planted vegetative cover is establishing.

In accordance with Title 27 and as stated above, the vegetative layer would consist of no less than one foot of soil which contains no waste, is capable of sustaining native or other suitable plant

[6] ASTM D1557 is the ASTM Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Modified Effort to ensure the foundation soil is properly compacted to achieve strength, stability, and low permeability. ASTM D1557 sets the laboratory procedures for determining the maximum dry density and optimum moisture content of the soil when compacted.

growth, and is initially planted (and later replanted as needed to provide effective erosion resistance) with native or other suitable vegetation having a root depth not exceeding the depth of the drainage layer.[7]

Stormwater Management System. The proposed stormwater management system will control flows on the landfill surface after the final cover has been placed; prevent infiltration, inundation, and ponding on the landfill final cover; minimize erosion of final cover; minimize erosion, slope failure, washout, and over-topping of associated stormwater conveyances; and minimize sediments carried off-site. Stormwater is currently managed by routing drainage within the landfill area to a water quality unit using ditches and channels. In addition, a drainage ditch currently exists around the landfill perimeter. Landfill areas that do not drain to the water quality unit are hydroseeded. A water quality unit was installed as part of Module 5 construction to replace the former sedimentation basin that used to occupy the Module 5 area. As the landfill starts to approach final grades, additional water quality units may be installed, as necessary to manage stormwater. The water quality units will be sized as part of final closure for the site. Additional information regarding drainage and stormwater runoff, including the location of discharge points, is included in Section 3.10, Hydrology and Water Quality.

Structures/Lighting. No structures or lighting are proposed as part of the landfill closure and post-closure maintenance plan.

Environmental Monitoring and Control Systems at Closure. Environmental monitoring and control systems include groundwater monitoring; leachate control and monitoring; surface water control and monitoring; and landfill gas control and monitoring. Closure of the landfill will not require modifications to existing environmental monitoring and control systems. Details for ongoing environmental monitoring are provided in an excerpt from the Landfill Preliminary Closure Plan in **Appendix D** (Section 4.6).

The selection of ODF Option 1 or Option 2 would affect the timing of closure for Module 4B and 5 of the landfill, as well as the closure cap design. The Revegetation Plan would include guidelines for planting a mixture of grassland species, as provided by a qualified biologist.

Environmental Enhancement and Habitat Restoration Features

The County is planning the following environmental enhancement and habitat restoration features as part of the Project to improve the functions and values (i.e., ecosystems services) of biological and aquatic resources within the Buena Vista Landfill facility limits (**Figure 2-4**, Environmental Enhancement and Habitat Restoration Features).

Restoration of Harkins Slough Road Drainage. An existing seasonal to perennial drainage (hereinafter Harkins Slough Road Drainage) flows along the north side of Harkins Slough Road, from the unpaved roadway accessing the property to the north of the Landfill (the westernmost corner of the site proposed for Transfer Station A) westward to Buena Vista Drive. This drainage would be minimally impacted by the construction of Transfer Station A and the Harkins Slough Road realignment. In addition, as part of the Project, the drainage would be required to accommodate increased stormwater runoff from new impervious surfaces at Transfer Station A.

The Project also includes the restoration of approximately 800 linear feet of the drainage, which would include regrading the unvegetated channel to an elevation profile designed to repair existing

[7] If a geocomposite is used for drainage instead of 6-inch drain layer, then the depth to the barrier layer would be a little over one foot.

incision and bank failure, and transport sediment without deposition (i.e., channel aggradation). Restoration would also include planting suitable riparian vegetation (such as willows, dogwood, and elderberry) on the upslope (north) embankment and replacing the iron bark eucalyptus trees with native trees, including riparian species and (above the break in bank) coast live oak, California bay, or other appropriate native tree species. Native low growing vegetation would be planted on the south (roadside) embankment. The final restoration design would retain and enhance the ecological functions and values[8] of the drainage and be developed by a qualified water resources engineer and qualified biologists, in coordination with the County Environmental Planning Section.

Culvert Modification with Small Wildlife Crossing at Main Entrance. An existing culvert is positioned beneath the driveway at the main landfill entrance from Buena Vista Drive, and it conveys an unnamed tributary (hereinafter Buena Vista Drive Tributary) to Gallighan Slough. As part of the Project, the grade of the landfill entrance would be modified to meet the new grade of Buena Vista Drive[9]. This activity would not require any work within the tributary. The Project also includes adding a ledge within the culvert to facilitate safe passage of the federally threatened California red-legged frog and other small wildlife species under most hydrologic conditions. A known breeding pond for California red-legged frog exists approximately 0.7 miles northwest of the wildlife crossing, and an individual California red-legged frog was observed in Channelized Gallighan Slough, south (downstream) of the landfill entrance. The culvert modifications would be developed in coordination with qualified biologists and County Transportation Division engineers, and would not compromise culvert capacity.

Culvert Replacement under Internal Roadway to Old Landfill. An existing 7-foot-diameter culvert conveys Channelized Gallighan Slough beneath the internal roadway leading to the Old Landfill within the landfill property. The existing culvert is undersized, resulting in upstream backwater ponding and sediment deposition, and would be replaced with a larger structure (e.g., a larger culvert with a natural streambed or with a clear-span bridge) Design to reduce the hydraulic constriction and associated flooding and sedimentation upstream within Channelized Gallighan Slough and the Buena Vista Drive Tributary. Sediment are largely derived from nearby row-crop agricultural fields. The final design would be developed in coordination with qualified biologists to incorporate wildlife passage (as needed and feasible, depending on the final design) and would accommodate existing utilities (e.g., landfill gas pipe and water pipe along the south side of the roadway).

The larger capacity replacement culvert or bridge would improve ecological and hydrologic conditions in channelized Gallighan Slough, as well as in Buena Vista Drive Tributary, by maintaining sediment transport competence and reducing aggradation of the stream channels, thereby extending the return interval for maintenance and reducing frequent flood conditions near the current Landfill main entrance. Specifically, reducing sediment deposition in the channels would maintain a more stable bed, bank, and ordinary high-water mark while improving overall ecological conditions of the streams by supporting open-water riverine conditions and an associated diverse riparian habitat. The upsized culvert or bridge would restore functional riverine habitat and reduce or eliminate the conversion to instream freshwater marsh features which have established on the agricultural sediments. The instream freshwater marsh that has developed within the Buena Vista

[8] Ecological functions are the natural processes and physical, chemical, and biological activities within an ecosystem, such as nutrient cycling or carbon sequestration, that maintain its health and stability. "Ecological values" are the benefits derived from the functions such as habitat and refuge for plants and wildlife, water storage and flood control, water quality protection and purification, groundwater recharge, and food chain support**.**

[9] As part of a separate project, the County is planning to rehabilitate Buena Vista Drive, which includes raising the roadway along the landfill frontage to improve the geometry and address local flooding issues,

Drive Tributary is associated with the following negative ecological effects: shorter hydroperiod; lack of running water, pools or riffles; poor water quality (e.g., turbidity, less dissolved oxygen); loss of temperature gradients (that support species diversity); absent or degraded habitat for invertebrates (which are the basis of the food chain for fish and amphibians); and diminished hydrologic capacity of the stream, exacerbating flood risk. The larger capacity culvert or bridge would reduce or eliminate this conversion of habitat from riverine to instream freshwater marsh. Extensive freshwater marsh habitat would remain at the confluence with Gallighan Slough and in off-channel locations along the streams.

Restoration of Old Landfill Wetland and Drainage (ODF Option 2 Only). ODF Option 2 would be located on the top deck of the Old Landfill. An existing wetland swale and drainage is present, along the southern half of the southwestern boundary, between the Old Landfill and the Santa Cruz Branch Rail Line railroad tracks. This aquatic feature flows directly to Gallighan Slough. If ODF Option 2 is selected, the wetland and drainage would be restored and enhanced as part of the Project.

ODF Option 2 includes a new drainage ditch to be installed parallel to and northeast of the existing seasonal wetland swale to accommodate increased stormwater runoff from the ODF Option 2 facility. The new drainage ditch would tie into the seasonal wetland and drainage downgradient from the ODF Option 2 facility through an outlet feature between the ditch and wetland swale.

Additionally, to restore the naturalized aquatic feature, the existing seasonal wetland and drainage would be recontoured to channel elevations that existed prior to the 2022–2023 storm season, and accumulated sediments would be removed to restore native wetland vegetation and wildlife habitat. The wetland feature was inundated by agricultural sediments during the 2022-2023 storm season, and the depressional swale that existed previously was filled in such that there was no longer a topographic transition between the Old Landfill deck and the adjacent wetland. While wetland vegetation (primarily arroyo willow and relictual cattails) persists in some locations, ponding, pooling, and variation in wetland type, depth and associated vegetation was eliminated, along with diverse habitat for common and sensitive amphibians. The restoration design would restore variation in wetland depth (i.e., ponding), and herbaceous freshwater emergent marsh would be re-established.

The restoration design would be developed by a qualified biologist in coordination with the County Environmental Planning Section. The seasonal wetland and drainage would not be restored if ODF Option 2 is not approved.

Wildlife Movement Corridor between Gallighan Slough and Harkins Slough. To facilitate opportunities for wildlife movement between key aquatic features (Gallighan Slough and Harkins Slough), a wildlife movement corridor would be established across the southern portion of the closed landfill. This would include planting low growing, shallow-rooted native perennial vegetation[10] on portions of the landfill cap (where feasible). Where there is sufficient soil depth in the vegetative layer of the cap above the barrier membrane, shallow-rooted native perennial species (including suffrutescents,[11] shrubs, and vine plantings) would be planted. Native perennial plantings would require a minimum of 24 inches (30–36 inches is preferred) of vegetative layer/topsoil on top of the barrier membrane; therefore, perennial plantings would be limited to locations where this is feasible (where more topsoil can be added without causing potential slope

[10] A 20-year study demonstrated that the roots of shallow-rooted scrub vegetation grow laterally when reaching the landfill cap and do not penetrate the cap (Holl and McStay 2014).

[11] A suffrutescent plant has a woody lower portion at the base of its stems that persists year to year, while the upper softer growth is herbaceous (non-woody).

stability issues). Downed logs would be placed on flatter portions of the corridor and any appropriate areas of the already closed landfill to provide shelter for wildlife.

Wildlife Directional Features at Key Locations. Directional fencing and other protective features would be included in the final project design to direct wildlife away from high operational activity areas. For example, fencing would be included to direct wildlife away from internal roadways and toward Gallighan Slough, which extends between the north and south portions of the landfill. It would also include fencing around Transfer Station A to direct wildlife toward adjacent open space and drainages.

Future Public Access/Recreation Opportunities

This EIR does not address potential future public access and recreation opportunities that might be feasible at the Buena Vista Landfill site after landfill closure, because those potential future activities are too uncertain to consider at this time. The County cannot speculate on potential future uses at the closed landfill site, until the Final EIR is certified and either the Proposed Project or a Project alternative is approved.

Future public access and passive recreation opportunities (e.g., walking trails) have independent utility, separate from the Proposed Project and Project alternatives considered in this EIR. These opportunities will be considered as part of the legally mandated Final Landfill Closure Plan, which is approved and permitted by state agencies (not the Santa Cruz County Board of Supervisors), after this EIR is certified by the Board of Supervisors. The focus of a landfill closure plan is ongoing safe management of closed landfill sites, which is the appropriate time to consider future public access and recreational opportunities.

Approval of the Final Landfill Closure Plan will be made at the discretion of CalRecycle and the Regional Water Quality Control Board. However, County Recycling and Solid Waste staff will coordinate with Coastal Commission staff, County Parks staff, and County Planning staff to develop a proposal for public access and passive recreation opportunities to be included as part of the Final Landfill Closure Plan. At that time, the County will also determine if those future activities require supplemental California Environmental Quality Act evaluation (e.g., EIR addendum or supplemental EIR).

4. Optional Improvements

The Project could also include the following improvements and features to support the primary Project purpose and components described above. Therefore, they are described and analyzed in this EIR. Refer to **Figure 2-1**, blue shading.

4a. Internal Access Road Improvements

The Project could include improvements to the existing internal access roads, which are currently dirt/gravel. The roads identified for use would be examined to determine if improvements are necessary to support Project implementation. If determined necessary, the roads would be resurfaced in accordance with Santa Cruz County and Caltrans specifications to include subbase compaction, geotextiles, aggregates, and asphalt mix as required.

4b. Scale House Upgrades

Upgrades could include additional scales with radio frequency identification to improve traffic flow and scale house operations. If additional scales were installed, they would be located on the existing pavement. No excavation or trenching is anticipated.

4c. Recycling Center Upgrades

The existing recycling center could be expanded on site and/or relocated to accommodate recovery of more mandated materials, increase transportation efficiency, and include a marketing and storage facility for sale and reuse. The existing recycling center is located south of the existing scale house, and no excavation or trenching is anticipated if it stays at this location. If all or a portion of the recycling activities are relocated, it would be to the currently active landfill area to the northeast, where the planned ODF Option 1 could be located; and like ODF Option 1, the height of the recycling facilities would not exceed 40 feet. Transfer Station A would also accept recyclable materials that would be transferred to the recycling center.

4d. Equipment Parking and Storage Area

A new parking and storage area for facility trucks and equipment could be located on the south side of the property on vacant, undeveloped land owned by the County (refer to **Figure 2-1**, blue shading labeled "4d"). The area is approximately one acre in size and would be used for storage and aboveground fueling/charging of the County's transfer station vehicles. Initially, the site would provide both diesel fuel and alternative vehicle fueling because the County's diesel trucks will be replaced by alternative fuel vehicles over time. The parking and storage area would not be open to County employees or the public.

The site elevation is approximately 110 feet above mean sea level and would be paved, sloping from north to south with surface runoff entering the existing drainage swale. Project design would maintain the existing grade and capture stormwater runoff with a bioswale, underground recharge chambers, or use of a Stormceptor system to capture debris and oils while allowing stormwater to flow efficiently. Other measures that may be implemented include gravel disconnect areas, level spreaders or check dams.

No building structures would be proposed for this location, but aboveground storage tanks may be used for diesel fueling, which would not exceed 20 feet in height, for a maximum facility elevation of approximately 130 feet above mean sea level. Exterior site lighting would be kept to a minimum to what is required for safety and operational needs during normal operating hours from 7:00 a.m. to 5:00 p.m. All lighting would be affixed to standards would be tall enough to provide vehicle clearance, but not substantially taller, and would be directed downward and away from adjacent land to the south.

All improvements would be designed on County land and would not encroach upon the City of Watsonville parcel that sits within the County parcel. Construction of the equipment parking and storage area would require removal of trees in the southeastern portion of the parcel.

5. General Plan/Local Coastal Program Land Use Designation and Zoning Map Amendments

The Project components described above require the following amendments for consistency, as described further below:

a. Amend the Agricultural Resource Map to remove the Type 3 agricultural resource designation from the parcel;

b. Amend the County General Plan/LCP Land Use Designation maps to redesignate the 35 acres on parcel APN 052-021-33 currently designated Agriculture (AG) to Public Facility/Institutional (P); and

c. Amend the County Zoning Map for this parcel from CA-AIA (Commercial Agriculture – Airport Influence Area) on this parcel to PF-AIA (Public Facilities – Airport Influence Area).

The County-adopted General Plan/LCP Land Use Designation Map and Zoning Map Amendment will require certification by the California Coastal Commission, because the Project is located in the Coastal Zone, and to ensure consistency with the County LCP.

5a. Agricultural Resources Map Amendment

The General Plan/LCP Land Use Plan maintains by County ordinance specific agricultural land type designations for parcels containing Agricultural Resources, based on the criteria set forth in the General Plan/LCP. The designated Agricultural Resource land types (Types 1-3) reflect the soil types associated with the parcel's land, and the adopted Agricultural Resource Maps identify the distribution of the Agricultural Resource land in the County. The resource type associated with parcel APN 052-021-33 is Type 3, which is identified as viable agricultural land within the Coastal Zone (prime farmland, unique farmland, and prime rangeland).

The Project includes removal of the Type 3 resource designation from APN 052-021-33 where Transfer Station A (including the Harkins Slough Road realignment), ODF Option 1, and some of the optional improvements (internal access road improvements and equipment parking and storage area) are proposed; and revising the adopted Agricultural Resource Map. The removal of the Type 3 designation and revision of the Agricultural Resource Map includes a requirement to prepare an agricultural viability study. The County General Plan/LCP also requires an agricultural viability study to be prepared in conjunction with a project that proposes to convert commercial agricultural and prime agricultural lands to non-commercial land uses.

5b. General Plan/Local Coastal Program Amendment

Any amendment to eliminate or add a Type 1, Type 2, or Type 3 agricultural land designation constitutes a change to the County General Plan/LCP and must be processed concurrently with a General Plan/LCP amendment. The amendment also requires a change to the General Plan/LCP Land Use Designation maps to redesignate the 35 acres on parcel APN 052-021-33 currently designated Agriculture (A) to Public Facility/Institutional (P).

5c. Zoning Map Amendment

The 35 acres of APN 052-021-33 are currently zoned CA-AIA, as shown on **Figure 2-2**, and would be amended to PF-AIA. The CA zone district use chart contained in Santa Cruz County Code, Section 13.10.312, does not allow the proposed use currently. This zone district limits uses to agricultural production exclusively and incidental uses that support agricultural production. Thus, a rezoning to PF-AIA is included to support the Project.

Pursuant to Santa Cruz County Code, Section 18.40.055(B), amendment to the Zoning Ordinance or Zoning Map may be initiated by a resolution of intention adopted by the Board of Supervisors upon its own motion or upon the recommendation of the Planning Commission, or an application by a property owner or other interested party having the owner's authorization.

Pursuant to Santa Cruz County Code, Section 18.40.055(C), amendments to the County Zoning Map shall be processed as a legislative action requiring a recommendation by the Planning Commission and approval by the Board of Supervisors, pursuant to Santa Cruz County Code, Chapter 18.10, and in accordance with the requirements of this section.

2.5 Project Operation

There are currently 40–45 staff working at the Buena Vista site, and it is anticipated there would be similar staffing levels with Project implementation.

The hours of operation for the transfer stations would be Monday through Saturday, from 7:00 a.m. to 5:00 p.m., with the facility open to the public from 7:30 a.m. to 3:30 p.m. Monday through Saturday (except 7:30 a.m. to 2:30 p.m. on Wednesdays), which are the same as the current hours of operation. The types and quantities of waste associated with the Project components are summarized in **Table 2-1**.

Table 2-1. Project Operation Information

	Existing Permitted Activities			Planned Activities
	Disposal	**Composting**	**Transfer/Processing**	**Transfer/Processing**
Activity	Solid Waste Landfill (to close when full)	Green Material Composting Operation [to continue]	Medium Volume Transfer/Processing Facility	Large Volume Transfer/Processing Facility
Hours of Operation[1]	Mon–Sat 7:00 a.m.–5:00 p.m.	Mon–Sat 7:00 a.m.–5:00 p.m.	Mon–Sat 7:00 a.m.–5:00 p.m.	Mon–Sat 7:00 a.m.–5:00 p.m.
Maximum Allowed Daily Tonnage	1,196 tons per day permitted disposal	12,500 cubic yards	Less than 100 tons per day	1,295 tons per day in 2028 based on CPI of 2%
Maximum Allowed Traffic Flow	1,547 trips per day weekdays 2,428 trips per day weekends	(refer to permitted disposal)	(refer to permitted disposal)	(refer to permitted disposal)
Total Permitted Acreage	126.00 Total acres (61.00 Disposal acres)	126.00 Total acres (0.00 Disposal acres)	126.00 Total acres (0.00 Disposal acres)	126.00 Total acres (0.00 Disposal acres)
Types and Quantities of Waste Allowed	Wood Waste, Tires, Sludge, Mixed Municipal, Metals, Inert, Industrial, Green Materials, Dead Animals, Contaminated Non-Hazardous Soil, C&D, Agricultural	Wood Waste, Green Materials, Food Waste	Mixed Municipal	Wood Waste, Tires, Sludge, Mixed Municipal, Metals, Inert, Industrial, Green Materials, Dead Animals, C&D, Agricultural

Note:

[1] Public access hours are Monday through Saturday, from 7:30 a.m. to 3:30 p.m. (except 7:30 a.m. to 2:30 p.m. on Wednesdays).
C&D = construction and demolition; CPI = Consumer Price Index

2.6 Project Construction

2.6.1 Schedule, Duration, Hours

The County's planned construction schedule for the four primary Project components and included Environmental Enhancement and Restoration Features (EERF) is below. The specific timeline for the optional Project elements (internal access road improvements, scale house upgrades, recycling center modifications, and equipment parking and storage area) is unknown but would occur during the same timeframes as feasible if constructed. All construction would be coordinated to maintain and minimize conflict with ongoing landfill, recycling, and organics diversion operations:

- 2027-2029
  - ODF (pending Option and approvals needed)
    - Restoration of South Drainage (if ODF Option 2 selected [*EERF*])
  - Culvert Replacement at Old Landfill Entrance (EERF)
  - Harkins Slough Road Realignment
  - Transfer Station A
  - Harkins Slough Road Drainage Restoration (EERF)
- 2029-2030
  - Transfer Station B
- 2028–2038
  - Landfill Closure and Revegetation
  - Wildlife Movement Corridor between Gallighan Slough and Harkins Slough (*EERF*)
  - Timeframe Dependent on Approval of Buena Vista Drive Rehabilitation Project
  - Culvert Modification with Small Wildlife Crossing at Landfill Main Entrance (*EERF*)
  - Recontouring Buena Vista Drive Drainage Channel (part of the County's Buena Vista Drive Rehabilitation Project)

Construction would occur between the hours of 8:00 a.m. and 5:00 p.m., Monday through Friday. Additionally, construction could also occur between the hours of 9:00 a.m. and 5:00 p.m. on Saturdays, Sundays, or national holidays with advanced written approval from the County's Building Official.

2.6.2 General Methodology

In general, the construction methodology would include installation of erosion and sediment controls, demolition of existing structures, clearing and grubbing, utility location and relocation, excavation, filling, grading, placement of concrete retaining walls and foundations, installation of metal structures, and placement of crushed aggregate base and paved surface.

All proposed structures, including Transfer Stations A and B, would be designed and constructed in conformance with the most recently adopted California Building Code design parameters, which are specifically tailored to minimize the risk of structure failure due to seismic hazards, and recommendations identified in the geotechnical reports prepared for the Project.

Additionally, because the project would disturb more than one acre, the County would be subject to National Pollutant Discharge Elimination System Construction General Permit (Order No. 2012-0006-DWQ) adopted by the State Water Resources Control Board, and thus be required to prepare and implement a Stormwater Pollution Prevention Plan. The Stormwater Pollution Prevention Plan would include erosion and sediment controls, runoff water quality monitoring, means of waste disposal, implementation of approved local plans (e.g., County General Plan/LCP Policy 6.3.4, Erosion Control Plan Approval Required for Development), control of construction sediment and erosion control measures, maintenance responsibilities, and non-stormwater management controls. Additionally, the construction site(s) would be inspected before and after storms to identify stormwater discharge from the construction activity and to identify and implement erosion controls, where necessary.

Project Construction Timing

Project construction is estimated to begin between late 2027 and 2029. The summary that follows provides additional information specific to the Project components. Construction estimates for each proposed project element are summarized in **Table 2-2** at the end of this section.

Construction –2027 to 2029

The realignment of Harkins Slough Road, construction of Transfer Station A and the selected ODF are anticipated to take place between late 2027 and 2029. The optional equipment parking and storage area may also be developed during this timeframe.

Construction of the proposed project elements are estimated to involve approximately 15 acres, excavate approximately 27,000 cubic yards of soil, export between 1,800 and 2,100 cubic yards of waste, and import between 42,000 and 55,600 cubic yards of aggregate/asphalt/concrete, depending on the selected ODF option.

If the optional equipment parking and storage area is also developed during this timeframe, an additional one (1) acre will be under construction with an additional 100 cubic yards of soil excavated at that site and import of approximately 250 cubic yards of soil and an additional 4,200 cubic yards of roadway aggregate and asphalt.

Construction –2029 to 2030

Construction of Transfer Station B is anticipated to take place between spring 2029 and summer 2030. Construction of this proposed project element is estimated to involve approximately 3 acres, excavate approximately 5,000 cubic yards of soil, export approximately 3,000 cubic yards of waste, and import approximately 3,000 cubic yards of soil. Transfer Station B construction will also import approximately 8,300 cubic yards of aggregate/asphalt/concrete.

Landfill Closure – 2028 to 2038

The schedule for landfill closure will depend on the rate at which waste is received from the public, the efficiency of source separation to divert recyclable materials and organic waste from landfill disposal, and the selected ODF developed at the site. If ODF Option 1 is selected, the landfill is likely to close between 2028 and 2030 because of the need to reserve a flat area on the landfill site to develop that facility. If ODF Option 2 is selected, the preprocessing and composting facility would be developed on the Old Landfill, which would allow the landfill to reach maximum capacity and defer closure to between 2032 and 2038.

Regardless of timing, both closure options would involve between 50.5 and 50.7 acres of land, import of between 162,891 and 163,529 cubic yards of landfill cover, and between 11,223 and 13,946 cubic yards of aggregate and asphalt.

Transfer Stations

- Transfer Station A
  - Installation of erosion and sediment controls
  - Earthwork and grading to prepare for Harkins Slough realignment
  - Installation of Harkins Slough retaining wall
  - Installation of realigned Harkins Slough Road
  - Extension of utilities
  - Installation of Transfer Station A
  - Paving around facility
- Transfer Station B
  - Installation of erosion and sediment controls
  - Demolition of maintenance building and office trailer
  - Relocation of utilities as needed
  - Relocation of waste if encountered
  - Earthwork and grading to prepare for building installation
  - Installation of Transfer Station B
  - Paving around facility

Organics Diversion Facility

- Option 1: On-site Preprocessing on Current Landfill and Off-site Composting
  - Solid waste disposal until landfill within 2 feet of design final grade
  - Compaction of area as needed to prevent initial settlement
  - Installation of interim cover
  - Installation of stormwater berms as needed to divert stormwater away from organics
  - Paving facility
  - Installation of canopy(s) over drop off areas
- Option 2: On-site Preprocessing and Composting on Old Landfill Site
  - Installation of erosion and sediment controls
  - Installation of concrete pads
  - Installation of stormwater collection/recycle system
  - Paving of facility

- Installation of composting equipment (e.g., chip and grind, depackager)
- Installation of canopy over organics receiving, compost processing, and curing areas

Landfill Closure and Revegetation

- Grading of landfill to foundation layer design grades, flatten slopes greater than 3:1 if needed
- Relocation of waste as encountered during grading
- Installation of geosynthetic closure cap system
- Placement of protective cover soil while installing stormwater management measure if needed
- Placement of topsoil for vegetative establishment
- Seeding and outplanting[12] entire area for vegetative establishment

Equipment Parking and Storage Area

- Installation of erosion and sediment controls
- Installation of fueling/charging utilities
- Paving of facility

2.6.3 Construction Equipment and Staging

Expected construction equipment includes excavators, dump trucks, loaders, bulldozers, concrete trucks, concrete pump trucks, cranes, and smooth or sheepsfoot compactors. No pile driving is anticipated.

Staging material and equipment would take place in the disturbed work areas. If additional space is needed, the Old Landfill top deck would be used for earthwork stockpiles or to store equipment. Staging of material and equipment would be at least 100 feet from any drainages or include secondary containment for fueling and maintenance of equipment.

Primary containment for equipment and maintenance and fueling includes: the containers and tanks (including portable fuel tanks) holding fuel and fluids (often double-walled); equipment fuel tanks, hydraulic systems, and reservoirs; and piping and valves for fluid transfer.

Secondary containment is a backup containment system. If the primary containment system leaks or fails, it is a safeguard measure used to prevent accidental releases or spills of toxic or hazardous substances to the environment (water, soil, air). Examples include drip pans, spill trays, absorbent mats, and polyethylene or polypropylene sheeting. Secondary containment should have the capacity to hold the contents of portable fuel tanks, as well as the fuel and fluid tanks, systems, and reservoirs of all equipment.

Spill kits will be present on the site at all times and will include absorbent materials, booms, disposal bags, and Personal Protective Equipment (e.g., gloves, goggles, coveralls).

[12] Outplanting is transplanting from a nursery bed, greenhouse, or other location to an outside area.

2.6.4 Construction Vehicle Access

Construction vehicles would access the Project area from State Highway 1 to Buena Vista Drive and Harkins Slough Road. The existing Harkins Slough Road would remain in use while the realigned Harkins Slough Road is being constructed around the north side of Transfer Station A. Although there could be temporary lane closures during construction, there would be no planned road closures. Emergency access and general access to the landfill, County's Rountree Medium (Jail) Facility, farmworker housing, affordable housing, and other facilities would be retained throughout construction with traffic controls.

2.6.5 Best Management Practices

The following construction best management practices will be included in the final design plans and construction specifications and will be included in the required Mitigation Monitoring and Reporting Program for the project (**Appendix E**):

1. Limit vehicle speeds on unpaved roads to a maximum of 25 miles per hour.
2. Limit fugitive dust by watering exposed dirt surfaces in construction areas twice daily, keeping all trenches dry to protect their integrity.
3. Apply soil stabilizers on inactive construction areas (disturbed lands unused for four consecutive days) and cover inactive storage piles.
4. Apply native hydro-seed or non-toxic binders to exposed areas after cut/fill operations.
5. Install perimeter protection (e.g., silt fence, fiber rolls) for construction near drainages and open space, including Transfer Station A (including Harkins Slough Road realignment), ODF Option 2 (if selected), and culvert and roadway improvements near drainages, to prevent contaminated construction runoff from leaving the construction site.
6. Minimize removal or disturbance of existing vegetation outside the footprint of project construction activities.
7. Limit site access and parking, equipment storage, and stationary construction activities to the designated staging areas to the maximum extent feasible.
8. Store, maintain, and refuel all equipment and materials in designated portions of the staging areas in accordance with permit requirements. As such, no staging will occur in areas with sensitive biological resources. Staging of material and equipment will be at least 100 feet from any drainages or include secondary containment for fueling and maintenance of equipment[13]. Spill kits will be present on site at all times and will include absorbent materials, booms, disposable bags, and Personal Protective Equipment (gloves, goggles, coveralls).
9. Prior to staging equipment on site, clean all equipment caked with mud, soils, or debris from off-site sources to avoid introducing or spreading invasive exotic plant species.
10. Position all stationary equipment, such as motors, pumps, generators, and/or compressors, over drip pans.

[13] Examples of secondary containment include drip pans, spill trays, absorbent mats, and polyethylene or polypropylene sheeting. Secondary containment should have the capacity to hold the contents of portable fuel tanks, as well as the fuel and fluid tanks, systems, and reservoirs of all equipment.

11. Erosion and sediment control measures shall be maintained continuously, repaired when and as necessary and shall be inspected within 24 hours of each rainfall event. Seeded areas shall be checked regularly and shall be watered, fertilized, reseeded and mulched as necessary to obtain a dense stand of grass.
12. All drain inlets shall be protected from siltation (e.g., inlet filters, fiber rolls, gravel bags). Ineffective protection devices shall be immediately replaced and the inlet cleaned. Flushing is not an acceptable method of cleaning.
13. When the crushed stone construction entrance has been covered with soil or has been pushed into the soil by construction traffic, it shall be replaced with a depth of stone equal to that of original application.
14. All materials used for fill or back-fill shall be free of wood, roots, rocks, boulders or any other non-compactable soil type material. Unsatisfactory materials also include human-made fills and refuse debris derived from any source. All material shall be inspected and approved by the County's construction manager and/or other qualified personnel.
15. Materials used to construct embankments for any purpose, back-fill around drainage structures or in utility trenches or any other depression requiring fill or back-fill shall be compacted the percentage determined by the County's construction manager and/or other qualified personnel following in ASTM Standard D-1557.
16. Certifications for materials including, but not limited to stone, concrete, pipes, precast units, handrails, stabilization mats, traffic signal items, must be provided to and approved by the County's construction manager and/or other qualified personnel prior to installation.
17. Embankment fill and trench back-fill shall be placed in lifts at a maximum uncompacted depth of 8-inches and 6-inches, respectively. Density test types and frequencies will be per the design engineer's recommendations.
18. Any discrepancies found between the drawings and specifications and site conditions or any inconsistencies or ambiguities in drawings or specifications shall be immediately reported to the County's construction manager and the design engineer, in writing, who shall promptly address such inconsistencies or ambiguities. Work done by the contractor after his discovery of such discrepancies, inconsistencies or ambiguities shall be done at the contractor's risk.

Table 2-2. Construction Estimates

Construction Information	Transfer Station A	Transfer Station B	Organics Diversion Facility		Landfill Closure and Revegetation		Equipment Parking and Storage Area
			ODF Option 1	ODF Option 2	ODF Option 1	ODF Option 2	
Construction Duration	12 months (Between summer 2027 and spring 2029)	12 months (Between spring 2029 and summer 2030)	6 months (Between summer 2027 and spring 2029)	12 months (Between summer 2027 and spring 2029)	26 months (Between 2028 and 2030)	26 months (Between 2032 and 2038)	3 months (Estimated between summer 2027 and spring 2029)
Construction Area	5 acres	3 acres	10 acres	10 acres	50.5 acres	50.7 acres	1 acres
Estimated Total Disturbance	5 acres	3 acres	10 acres	10 acres	50.5 acres	50.7 acres	1 acres
Earthwork Quantities							
Excavation Volume	24,000 cubic yards	1,000 cubic yards	0 cubic yards	3,000 cubic yards			100 cubic yards
Excavation Depth	Up to 25 feet for full-depth tunnel	Up to 20 feet for full-depth tunnel	Up to 1 foot for grading	Up to 3 feet for grading and utilities	0	0	Up to 4 feet for utility trench
Embankment Construction/Fill/Landfill Cover	6,000 cubic yards	4,000 cubic yards	0 cubic yards	0 cubic yards	162,891 cubic yards	163,529 cubic yards	350 cubic yards
Estimated Import and Export Materials (from Watsonville area in south Santa Cruz County)							
Roadway Aggregate	12,900 cubic yards	7,000 cubic yards	24,000 cubic yards	28,000 cubic yards	7,482 cubic yards	9,297 cubic yards	4,000 cubic yards
Asphalt	600 cubic yards	300 cubic yards	1,000 cubic yards	12,000 cubic yards	3,741	4,649	200 cubic yards
Portland Concrete	1,500 cubic yards	1,000 cubic yards	0 cubic yards	2,600 cubic yards	0 cubic yards	0 cubic yards	0 cubic yards
Estimated Export/Waste	18,000 cubic yards	3,000 cubic yards	0 cubic yards	3,000 cubic yards	0 cubic yards	0 cubic yards	0 cubic yards
Estimated Import Soil	0 cubic yards	3,000 cubic yards[1]	0 cubic yards	0 cubic yards	162,891 cubic yards	163,529 cubic yards	250 cubic yards

Table 2-2. Construction Estimates

Construction Information	Transfer Station A	Transfer Station B	Organics Diversion Facility		Landfill Closure and Revegetation		Equipment Parking and Storage Area
			ODF Option 1	ODF Option 2	ODF Option 1	ODF Option 2	
Estimated Pavement							
Roadways/Parking Lots	99,000 square feet	25,000 square feet	11,000 square feet	400,000 square feet	202,000 square feet	251,000 square feet	45,000 square feet
New Impervious Surface	131,700 square feet	51,000 square feet	308,000 square feet	460,000 square feet	202,000 square feet	251,000 square feet	45,000 square feet
Estimated Tree Removal	138	0	0	0	0	0	16

Notes: ODF = organics diversion facility

[1] Excess soil from Transfer Station A that is stockpiled on site can be used to supplement import soils

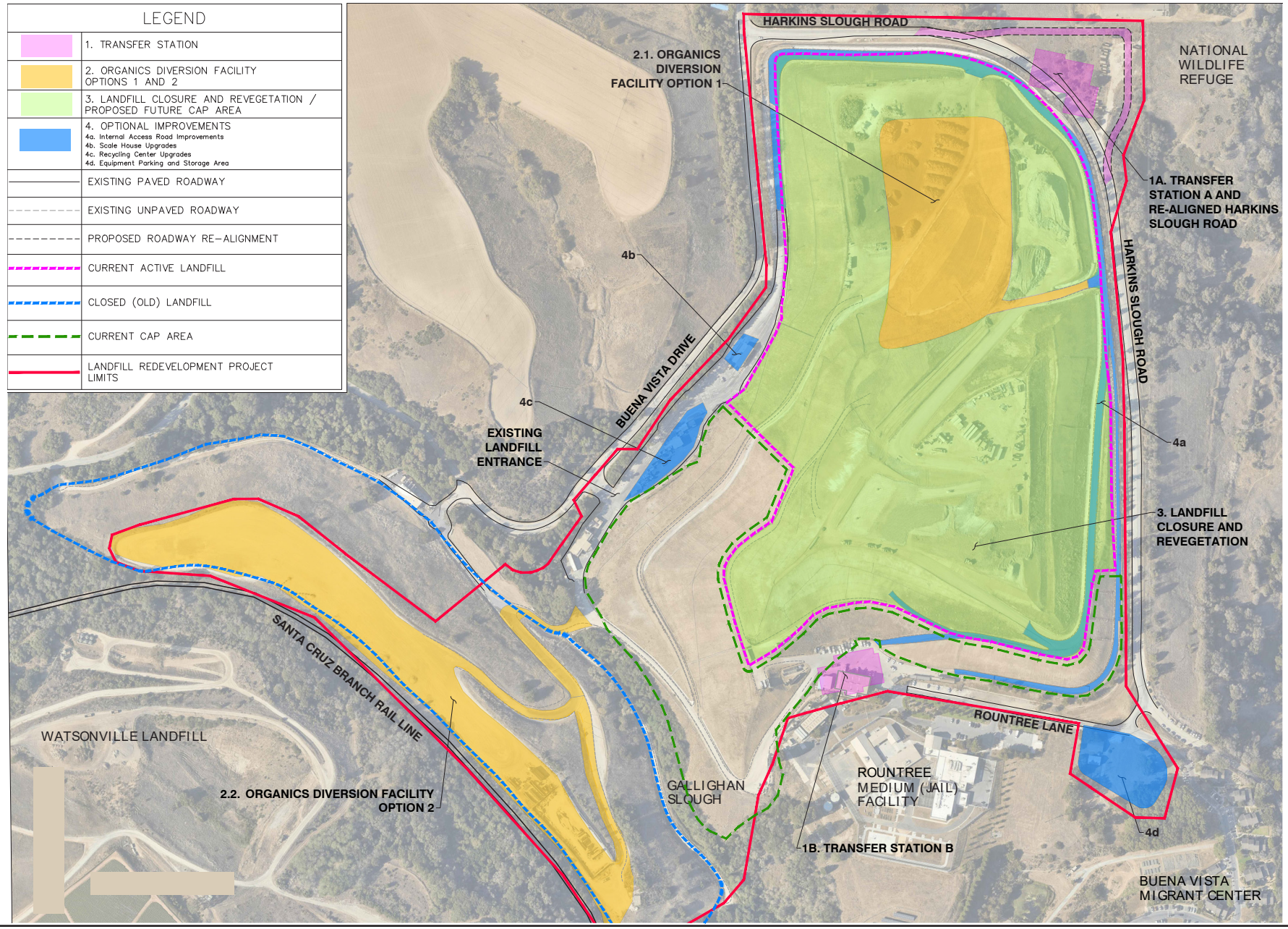
2.7 Required Permits and Approvals

The required permits and approvals for the Project are listed in **Table 2-3,** Anticipated Permits and Approvals Required for Project Implementation.

Table 2-3. Anticipated Permits and Approvals Required for Project Implementation

Agency	Anticipated Permit/Approval
County of Santa Cruz	▪ EIR Certification ▪ Agricultural Policy Advisory Commission Review and Approval Recommendation (including Agricultural Buffer Setback Reduction) ▪ Removal of Type 3 Resource Designation from the Agricultural Resource Map ▪ General Plan/LCP Land Use Designation Map Amendments ▪ Rezone from CA-AIA to PF-AIA ▪ Project Approval ▪ Coastal Development Permit ▪ Conditional Use Site Development Permit ▪ Tree removal ▪ Grading Permit ▪ Building Permit ▪ Riparian Corridor and Wetlands Protection Ordinance Exception
California Coastal Commission	▪ LCP Amendment certification
California Department of Fish and Wildlife	▪ Section 1602 Lake and Streambed Alteration Agreement
California Regional Water Quality Control Board, Water Quality Division	▪ Section 401 Water Quality Certification
Caltrans Division of Aeronautics and Federal Aviation Administration	▪ Issuance of a No Hazard Determination
U.S. Fish and Wildlife Service	▪ Section 7 consultation under the Endangered Species Act and incidental take authorization
U.S. Army Corps of Engineers	▪ Section 404 permit
CalRecycle	▪ Update to the existing Joint Technical Document or current Solid Waste Facilities Permit (SWFP-SWIS No. 44-AA-0004) and or a new SWFP(s) ▪ Closure SWFP

Notes: CA-AIA = Commercial Agriculture-Airport Influence Area; CalRecycle = California Department of Resources Recycling and Recovery; EIR = Environmental Impact Report; LCP = Local Coastal Program; PF-AIA = Public Facilities-Airport Influence Area; SWFP = Solid Waste Facilities Permit; SWIS = Solid Waste Information System



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Source: SCS Engineers 2025.

Harris & Associates

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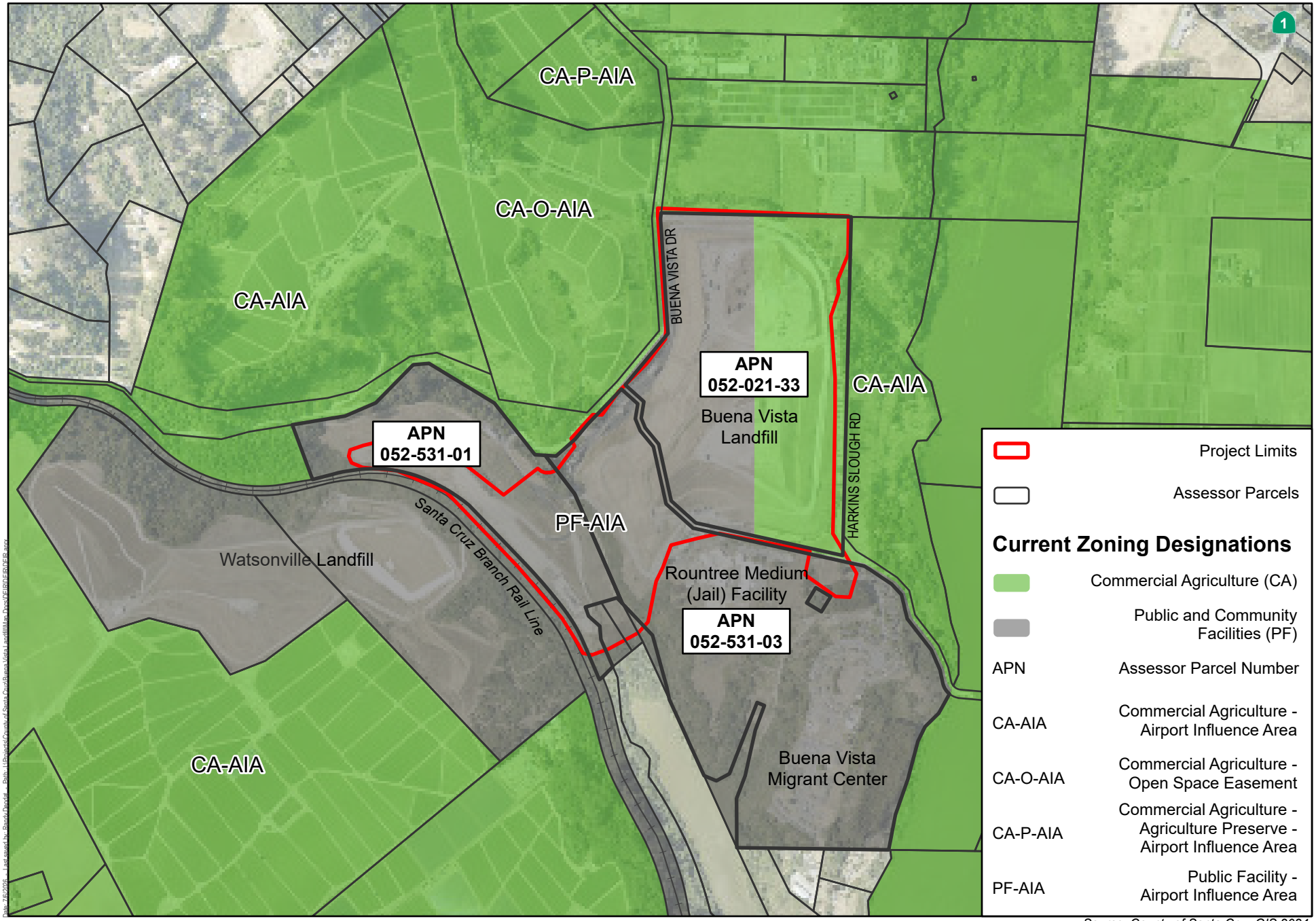
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Figure 2-1

Project Overview

Buena Vista Landfill Redevelopment Project



Source: County of Santa Cruz GIS 2024.

Harris & Associates

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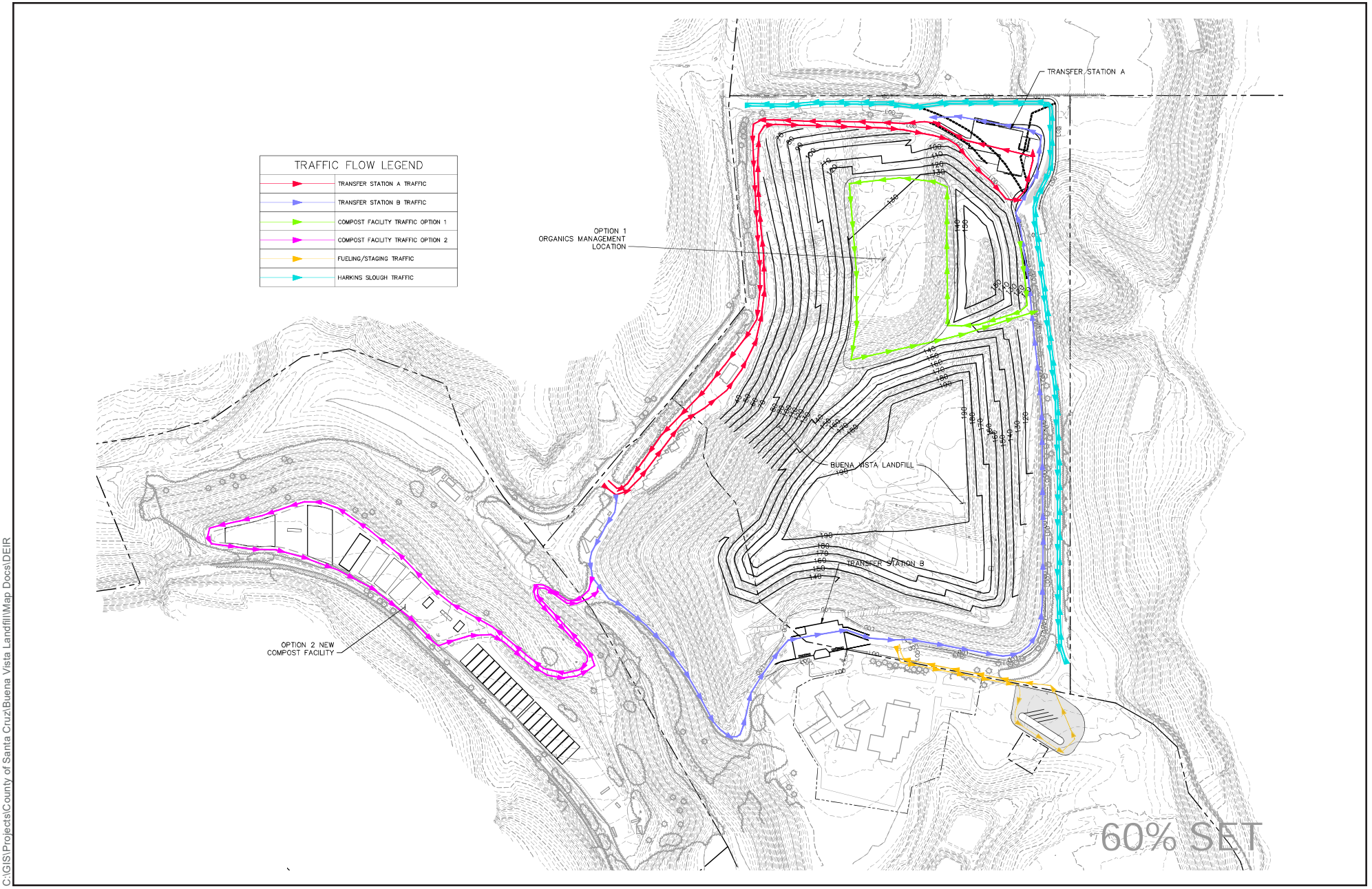
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Figure 2-2

Landfill Parcels and Current Zoning

Buena Vista Landfill Redevelopment Project



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Source: SCS Engineers 2024.

Harris & Associates

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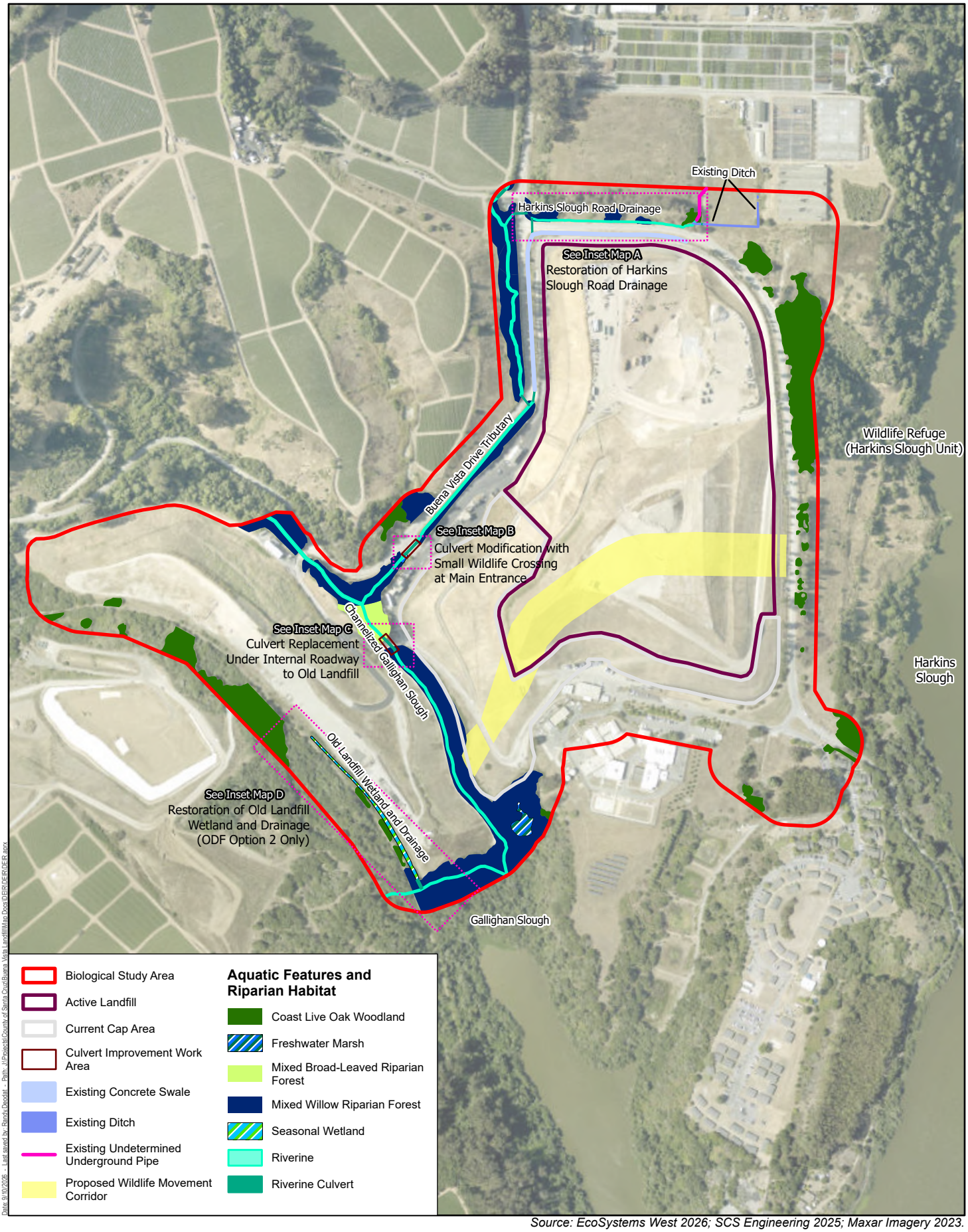
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Figure 2-3

Project Traffic Flow

Buena Vista Landfill Redevelopment Project



Source: EcoSystems West 2026; SCS Engineering 2025; Maxar Imagery 2023.

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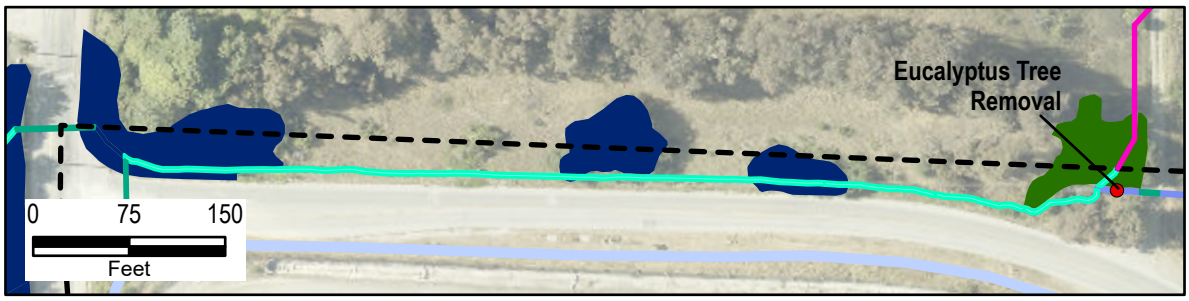
Figure 2-4a

Environmental Enhancement and Habitat Restoration Features

Buena Vista Landfill Redevelopment Project

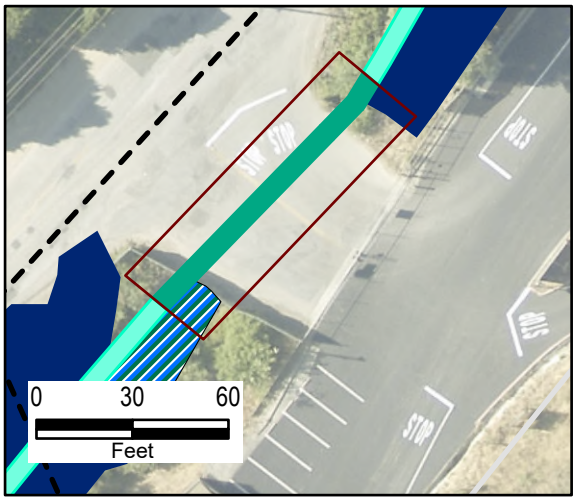
Inset Map A

Restoration of Harkins
Slough Road Drainage



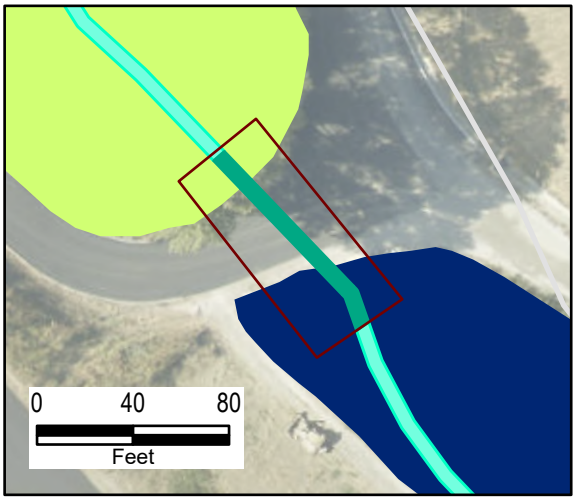
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Culvert Modification with Small
Wildlife Crossing at Main Entrance



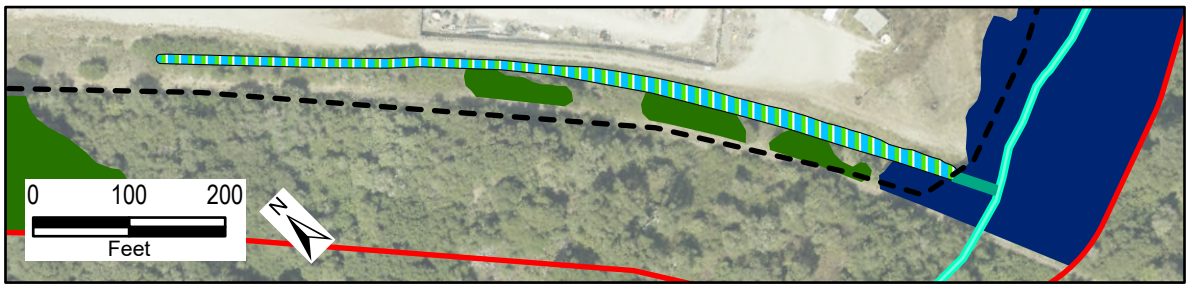
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Culvert Replacement Under
Internal Roadway to Old Landfill



Inset Map D

Restoration of Old Landfill Wetland
and Drainage (ODF Option 2 Only)



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Source: EcoSystems West 2026; SCS Engineering 2025; Maxar Imagery 2023.

Harris & Associates

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Figure 2-4b
Environmental Enhancement and
Habitat Restoration Features
Buena Vista Landfill Redevelopment Project

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3 Environmental Impact Analysis

Chapter 2, Project Description, includes a description of physical and operational features of the **Buena Vista Landfill Redevelopment Project** (Project). This chapter includes a discussion of the potential environmental impacts that could result from project implementation. The Project alternatives developed during the scoping process, as well as the No Project alternative, are evaluated in Chapter 5, Project Alternatives.

This chapter is divided into sections for each of the following environmental or resource topics identified in Appendix G of the California Environmental Quality Act (CEQA) Guidelines:

1. Aesthetics and Scenic Resources
2. Agricultural Resources
3. Air Quality
4. Biological Resources
5. Cultural Resources
6. Energy
7. Geology and Soils
8. Greenhouse Gas Emissions
9. Hazards and Hazardous Materials
10. Hydrology and Water Quality
11. Land Use and Planning
12. Mineral Resources
13. Noise
14. Population and Housing
15. Public Safety and Services
16. Recreation
17. Transportation
18. Tribal Cultural Resources
19. Utilities and Services Systems
20. Wildfire

Existing Conditions and Regulatory Setting

In each resource section, the Existing Conditions discussion describes the existing or baseline conditions for the resources in the study area; the Regulatory Setting discussion describes applicable plans, policies, and regulations. The study area varies depending on the resources. The study area is the same as the Project area for some resources and is larger for other resources, such as air quality.

Impacts and Mitigation Measures

The Methodology and Significance Thresholds discussion for each environmental topic describes the methodology used to identify potential impacts and the criteria used to determine the significance of those potential impacts. A "significant effect" is defined by the CEQA Guidelines, Section 15382, as the following:

> A substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance. An economic or social change by itself shall not be considered a significant effect on the environment, but may be considered in determining whether the physical change is significant.

For each potential impact, one of the following significance determinations is made and presented in bold:

- **No Impact.** The Project or any Project alternative would have no adverse effect at all on environmental conditions or would have a beneficial effect by reducing the severity of existing environmental problems or hazards.
- **Less than Significant.** An impact that may be adverse but does not exceed the identified significance threshold levels and does not require mitigation measures. Although CEQA does not require the formulation or adoption of mitigation measures for less than significant effects, the County of Santa Cruz (County), in approving the Project or any Project alternative, could formulate conditions of approval that could further lessen the environmental effect.
- **Less than Significant with Mitigation.** An impact that can be reduced to below the significance threshold level with the adoption of identified mitigation measures. The identification of an impact that would require mitigation would require the County to adopt findings pursuant to Section 15091 of the CEQA Guidelines as part of its process for approving either the Project or any Project alternative that would also cause such impacts.
- **Significant and Unavoidable.** An impact that cannot be reduced to below the significance threshold level, even with the adoption of any recommended mitigation measures. The identification of a significant and unavoidable impact would require the County to adopt a Statement of Overriding Considerations pursuant to Section 15093 of the CEQA Guidelines if the County chooses to approve the Project or any Project alternative that would also result in such impacts.

The thresholds used to determine the significance of a potential impact differ based on the environmental topic and largely follow Appendix G of the CEQA Guidelines. Appendix G provides a checklist that includes a number of factual inquiries for each required environmental topic.

Notably, lead agencies are under no obligation to use these inquiries from Appendix G of the CEQA Guidelines in fashioning thresholds of significance (Save Cuyama Valley v. County of Santa Barbara (2013) 213 Cal.App.4th 1059, 1068). Rather and with few exceptions, "CEQA grants agencies discretion to develop their own thresholds of significance" (CEQA Guidelines, Section 15064[d]). Even so, it is a common practice for lead agencies to use the language from the inquiries set forth in Appendix G to fashion thresholds. The County has done so in this Environmental Impact Report (EIR), as described under the Significance Thresholds discussion in each section of this chapter.

In the Project Impact Analysis discussion, the threshold is presented first, followed by the potential impact[1] associated with that threshold. Each discussion concludes with the significance

[1] In the impact discussions throughout this EIR, the terminology "potential impact" and "impact" are used synonymously. All the impacts discussed are potential impacts because the Project is proposed (not approved). Additionally, in some cases, an impact is a possibility and not a certainty.

determination (in bold) and any required mitigation measures. If a mitigation measure applies to a specific Project component (e.g., Transfer Station A), it is indicated in mitigation measure statement. In cases where the mitigation measure for an impact could have a significant environmental impact in another issue area, this impact is discussed and evaluated as a secondary impact.

Approach to Cumulative Impacts

The cumulative impact analysis for each issue area is presented in Chapter 4, Other CEQA-Required Discussions. The term "cumulative impacts" refers to "two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts" (CEQA Guidelines, Section 15355).

A cumulative impact can result from the combination of two or more individually significant impacts or the combination of two or more impacts that are individually less than significant but constitute a significant change in the environment when considered together. To analyze a proposed project's contribution to cumulative impacts, CEQA requires the lead agency to identify past, present, and probable future projects in the vicinity of the proposed project, summarize their effects, identify the incremental contribution of the proposed project to any significant cumulative impacts occurring in the project region, and recommend mitigation measures as appropriate (CEQA Guidelines, Section 15130[b]). Mitigation measures should focus on any cumulatively considerable incremental contribution from the proposed project or alternative to any significant cumulative effect created by the past, present, and probable future projects, together with the proposed project or alternative (CEQA Guidelines, Section 15130[a][3]; refer also to CEQA Guidelines, Section 15126.2[a][4]).

For each resource topic, cumulative impacts were determined in the following manner:

- Determine if there is a significant cumulative impact under future conditions with the Project. If yes, then;
- Determine if the Project would or would not make a cumulatively considerable (i.e., significant) contribution to the identified significant cumulative impact.

The potential cumulative impacts associated with the Proposed Project for all the resource topics are summarized in Section 4.1, Cumulative Impact Analysis, in Chapter 4, which includes additional information on the methodology. The potential cumulative impacts associated with Alternative 3 (Combined Facilities on Adjacent Property), which is analyzed at the same level of detail as the Proposed Project, are discussed in the detailed analysis of Alternative 3 in Chapter 6, at the end of each resource topic section (Sections 6.1-6.20).

Summary of Impacts and Mitigation Measures

At the beginning of each resource section, a summary table provides the potential Project impacts and any required mitigation measures. The Executive Summary at the beginning of this EIR summarizes all impacts and mitigation measures. The Mitigation Monitoring and Reporting Program includes all the mitigation measures in their entirety (**Appendix E**).

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3.1 Aesthetics and Scenic Resources

This section presents a discussion of existing visual resources in and around the Project area and an evaluation of potential impacts of the Buena Vista Landfill Redevelopment Project (Project) on those resources. A summary of the potential impacts is presented in **Table 3.1-1**. All figures are presented at the end of Section 3.1.

Table 3.1-1. Summary of Project Impacts Related to Aesthetics

Impact	Significance before Mitigation	Mitigation	Significance after Mitigation
AES-1. The Project would not have an adverse effect on scenic resources and vistas or degrade the existing visual character or quality of public views of the site or its surroundings.	Less than Significant	None Required	Less than Significant
AES-2. The Project would not damage scenic resources within a state scenic highway.	No Impact	None Required	No Impact
AES-3. The Project would not create a significant source of substantial light and glare that would adversely affect daytime or nighttime views.	Less than Significant	None Required	Less than Significant
Beneficial Effects: Landfill closure and revegetation would result in beneficial effects to views of the landfill from public roadways because there would be less ongoing landfill activities and more vegetation on the elevated landfill.			

Note: The impact, significance determination, and mitigation apply to the project as a whole, considering all project components, unless otherwise noted.

3.1.1 Existing Conditions

Regional Setting

The Buena Vista Landfill is located between Highway 1 and the Pacific Ocean in unincorporated southern Santa Cruz County (**Figure 1-1**, Regional Location, in Chapter 1, Introduction). This region west of Highway 1 is within the California Coastal Zone and is dominated by agricultural uses and undeveloped open space and sloughs, as well as rural residences and public facilities (e.g., Buena Vista Landfill, Watsonville Landfill, Santa Cruz Branch Rail Line, Rountree Medium (Jail) Facility.

Santa Cruz County is known for its scenic resources, which include ocean views, agricultural fields, wooded forests, open meadows, and mountain hillside views (Santa Cruz County 2024). The ocean views, agricultural fields, as well as the Watsonville Slough systems and wetlands, are primary scenic resources in southern Santa Cruz County.

Project Area Setting

The Buena Vista Landfill is located between Harkins Slough Road and Buena Vista Drive, a County-designated scenic roadway. The Project area, which includes the Buena Vista Redevelopment Project limits shown on **Figure 2-1**, Project Overview, in Chapter 2, Project Description, is heavily disturbed by historical and current landfill activities.

The Project area is located amid low lying hills that gradually slope westward toward the coastline between Highway 1 and the Pacific Ocean and is adjacent to lands zoned for public facilities and agricultural uses.

Agricultural uses are located to the northwest, north, and northeast of the landfill site and include row crops, greenhouses, horse stables, and fallow lands. The undeveloped open space to the east, between Harkins Slough Road and Harkins Slough, includes grasses, trees, and woody vegetation. It is federally owned land managed by the U.S. Fish and Wildlife Service as a National Wildlife Refuge for the benefit of native plant and wildlife species.

Public facilities are located to the southeast, south, and southwest of the landfill site. These facilities include the publicly owned Buena Vista Migrant Center (farmworker housing and childcare facility) and Tierra Alta affordable housing on Tierra Alta Drive to the southeast. The County's Rountree Medium (Jail) Facility, as well as wastewater treatment detention basins, are located to the south. The Santa Cruz Branch Rail Line, owned by the Santa Cruz County Regional Transportation Commission, extends along the south side of the Buena Vista "Old Landfill" on the southwest of the City of Watsonville's landfill accessed from San Andreas Road.

Visual Character and Scenic Resources

The Project area is characterized as a highly disturbed environment from historical and current landfill operations, with no notable scenic resources or vistas available to the public. The ongoing operation of heavy machinery, accumulation of debris, and continuous addition of waste have resulted in a landscape with irregular terrain, extensive modifications, and low visual quality.

The surrounding land uses in the vicinity of the Buena Vista Landfill further shape the visual context of the area. As described above, the surrounding land uses include agricultural uses to the northwest, north, and northeast; undeveloped open space to the east; and public facilities to the southeast, south, and southwest. The rolling hills of agricultural fields and undeveloped open space, including the National Wildlife Refuge and Harkins Slough to the east, are considered to have high visual quality. However, there are limited views from public roadways and access points due to intervening topography and vegetation.

Harkins Slough, the largest slough in the Watsonville system, receives drainage from Larkin Valley on the east side of Highway 1 and then continues south to join Watsonville Slough east of San Andreas Road. Gallighan Slough extends through the landfill from the west side of Buena Vista Drive (in a combination of culvert and open drainage) and merges with Harkins Slough south of the landfill. Harkins Slough is visible from portions of Harkins Slough Road west of Highway 1.

There are no other publicly accessible viewpoints of a scenic resource or vista within, adjacent to, or of the Project area.

According to the County's General Plan/Local Coastal Program (LCP), there are no "designation of coastal special scenic areas and special communities" within a 2-mile radius of the Project area, indicating that the Project is not located near any designated scenic viewpoints or protected visual landscapes. The nearest designated Coastal Scenic Area and Community is Seascape Beach Estates, located 4 miles northwest of the Buena Vista Landfill, which is sufficiently distant to avoid any direct visual or aesthetic impacts from the Project (Santa Cruz County 2024).

Designated Scenic Roadways

A portion of **Buena Vista Drive**, from San Andreas Road to Larkin Valley Road, is a county-designated scenic roadway (Santa Cruz County 2024). This designated portion extends along the west side of the Buena Vista Landfill. The approximately 4-mile-long roadway extends from San Andreas Road west of

the Project area on the south side of Highway 1 to Freedom Boulevard near Watsonville Airport on the north side of Highway 1. The 2-mile portion of Buena Vista Drive between Highway 1 and San Andreas Road is a windy road that provides views of the trees and vegetation along the roadway, with intermittent views of rural and agricultural land and intermittent views of the landfill, including the landfill entry chain link and mesh fencing, small portions of landfill structures, portions of frontage roadway, and other landfill activities, for approximately 0.9 miles.

San Andreas Road, which is located 1.2 miles southwest of the landfill and is the terminus of Buena Vista Drive, is also a county-designated scenic roadway. The approximately 8.5-mile-long roadway extends from Highway 1 to the northwest to West Beach Street to the south (Santa Cruz County 2024). The roadway provides views of rural and agricultural land, but no views of the Buena Vista Landfill due to the distance, topography, and intervening vegetation.

State Route 1 (SR-1), also referenced as Highway 1 throughout this Environmental Impact Report, is located approximately 1 mile north of the landfill and is eligible for designation as a state scenic highway (Santa Cruz County 2024). The landfill is not visible from SR-1, and similarly, SR-1 is not visible from the landfill due to the distance and intervening topography and landscape features.

Light and Glare

The landfill primarily operates during daylight hours, which reduces the need for extensive site lighting. However, there is existing security lighting at the entrances and exits that is visible from the public roadways. This includes views from Buena Vista Road where there are bright lights on standards and buildings near the public main entrance where the scale house, recycling center, and hazardous materials collection areas are located, as well as the old landfill exit gate just south of the main entrance. This also includes views from Rountree Lane where there are existing bright lights on standards and buildings near the landfill's staff office, maintenance building, and employee entrance, as well as existing substantial bright lighting at the Rountree Medium (Jail) Facility. Collectively, these existing lights create a glow over the landfill area that is visible from the surrounding area and noted roadways. These existing lights are less visible from Harkins Slough Road, as it extends around the landfill from Buena Vista Drive to Rountree Lane.

3.1.2 Regulatory Setting

This section describes the federal, state, and local plans, policies, and laws relevant to aesthetics for the Project.

Federal

No federal regulations related to aesthetics are applicable to the Project.

State

California Coastal Act

The California Coastal Act, enacted in 1976, establishes procedures for the review of proposed developments in the Coastal Zone and policies for the protection of coastal resources and public access to the coastline. The following Coastal Act regulations in the Public Resources Code pertain to aesthetics.

SECTION 30251

The scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance. Permitted development shall be sited and designed to protect views to and along the ocean and scenic coastal areas, to minimize the alteration of natural landforms, to be visually compatible with the character of surrounding areas, and, where feasible, to restore and enhance visual quality in visually degraded areas. New development in highly scenic areas, such as those designated in the California Coastline Preservation and Recreation Plan prepared by the Department of Parks and Recreation and by local government, shall be subordinate to the character of its setting.

SECTION 30253

New development shall do all of the following:

(a) Minimize risks to life and property in areas of high geologic, flood, and fire hazard

(b) Assure stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area or in any way require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs

(c) Be consistent with requirements imposed by an air pollution control district or the state Air Resources Board as to each particular development

(d) Minimize energy consumption and vehicle miles traveled

(e) Where appropriate, protect special communities and neighborhoods that, because of their unique characteristics, are popular visitor destination points for recreational uses

Local

Santa Cruz County General Plan/Local Coastal Program

The Conservation and Open Space Element of the Santa Cruz County General Plan/LCP includes objectives and policies to protect visual resources (Santa Cruz County 2024). Key policies relevant to the Project are listed below:

- **Policy ARC-5.1.2 (LCP) Development Within Visual Resource Areas.** Recognize that designated visual resources of Santa Cruz County possess diverse characteristics that are worthy of protection. Require projects in visual resource areas to be evaluated against the context of their unique environments and regulate structure height, setbacks, materials, and design to protect these resources consistent with the objectives and policies of this section.
- **Policy ARC-5.1.3 (LCP) Protection of Public Vistas and Scenic Assets.** Protect significant public vistas and public scenic assets as identified in Policy ARC-5.1.1, even those that are not mapped and designated as visual resource areas, scenic roads, coastal special scenic areas, or other unique features, by minimizing disruption of landform and aesthetic character caused by grading operations, timber harvests, utility wires and poles, signs, inappropriate landscaping and structure design. Provide necessary landscaping to screen development that is unavoidably sited within these vistas. Proposed landscaping within public vistas should be sited and designed to retain existing public views of vistas and scenic assets especially for coastal designated visual resources.

- **Policy ARC-5.1.4 Preserving Natural Buffers.** Preserve the vegetation and landform of natural wooded hillsides that serve as a backdrop for new development. Also comply with Policy ARC-5.1.8 regarding protection of ridgetops and natural landforms.
- **Policy ARC-5.1.6 (LCP) Preserving Ocean Vistas.** Where public ocean vistas exist, require these vistas be retained to the maximum extent possible as a condition of approval for any new development.
- **Policy ARC-5.1.7 (LCP) Open Beaches and Blufftops.** Do not permit or allow the placement of new permanent structures that would be visible from a public beach, except where allowed on existing parcels of record, or for shoreline protection, public beach access, or public ocean viewing, and where consistent with Santa Cruz County Code, Chapter 13.11. Use the following criteria:

  (1) Allow infill structures (typically residences and accessory structures on existing lots of record) where compatible with the pattern of existing development.

  (2) Require shoreline protection and access structures to use natural materials and finishes to blend with the character of the area and integrate with the landform.

  In addition, Policy ARC-5.2.1 (LCP) Designates scenic roads and highways in the County and requires that public vistas from these roads be afforded the highest level of protection. Buena Vista Drive is considered a county-designated scenic roadway, and portions of the Project area are visible from Buena Vista Drive. San Andreas Road and Highway 1 are also designated scenic routes; however, they are located far from the Project area and are not visible from the site.

Santa Cruz County Code

Chapter 13.20.130 (Design criteria for Coastal Zone developments) of the County Code outlines design criteria for projects sited anywhere in the Coastal Zone. Criteria relevant to the Project include the following:

- **Visual Compatibility.** All new development shall be sited, designed, and landscaped to be visually compatible and integrated with the character of surrounding neighborhoods or areas.
- **Minimum Site Disturbance.** Grading, earthmoving, and removal of major vegetation shall be minimized. Developers shall be encouraged to maintain all mature trees over 6 inches in diameter except where circumstances require their removal, such as obstruction of the building site, dead or diseased trees, or nuisance species. Special landscape features (rock outcroppings, prominent natural landforms, tree groupings) shall be retained.
- **Ridgeline Development**. Ridgeline protection shall be ensured by restricting the height and placement of buildings and landscape species and by providing landscape screening in order to prevent projections above the ridgeline that are visible from public roads or other public areas.
- **Landscaping.** Development shall include landscaping meant to provide visual interest and articulation, to complement surrounding landscaping (including landscaping in adjacent rights-of-way), to screen and/or soften the visual impact of development, and to help improve and enhance visual resources. When a landscaping plan is required, new or replacement vegetation shall be consistent with water-efficient landscape regulations, compatible with surrounding vegetation, and shall be suitable to the climate, soil, and ecological characteristics of the area.
- **Fences, walls, and hedges**. Development shall be sited and designed so that it does not block or significantly adversely impact significant public views and scenic character, including by situating lots, access roads, driveways, buildings, and other development (including fences, walls, hedges and other landscaping) to avoid view degradation and to maximize the effectiveness of

topography and landscaping as a means to eliminate, if possible, and/or soften, if not possible, public view impacts.

County Code, Chapter 13.10, outlines zoning regulations and other regulations governing scenic quality, and Chapter 13.11 imposes requirements for site, architectural, and landscape design review. County Code, Section 13.11.070(C)(4) for Lighting includes:

> (a) All site, building, security, and landscape lighting shall be directed onto the site and away from adjacent properties. Light sources shall not be visible from adjacent properties. Light sources can be shielded by landscaping, structure, fixture design, or other physical means. Building and security lighting shall be integrated into the building design.
>
> (b) All lighted parking and circulation areas shall utilize low-rise light poles or light fixtures attached to the building. Light poles to a maximum height of 15 feet are allowed.
>
> (c) Area lighting shall be high-pressure sodium vapor, metal halide, fluorescent, or equivalent energy-efficient fixtures.

3.1.3 Methodology and Significance Thresholds

Methodology

The assessment of impacts to scenic vistas, scenic resources, and visual character involves qualitative analysis that is inherently subjective in nature. Different viewers react to viewsheds and aesthetic conditions differently. Visual or aesthetic resources are generally defined as both the natural and built features of the landscape that contribute to the public's experience and appreciation of the environment. Depending on the extent to which a project's presence would alter the perceived visual character and quality of the environment, a visual or aesthetic impact may occur.

This analysis compares existing visual conditions in and around the Project area to those anticipated after implementation of the Project. The Project area was observed and photographed along with its surrounding context during both daylight and nighttime. The Project design plans (**Appendix A**) were analyzed to determine aesthetic impacts of the Project.

The only public views are from surrounding public roadways, including Buena Vista Drive which is a county-designated scenic roadway, Harkins Slough Road, and Rountree Lane. There are no designated scenic vistas or other public viewing locations in the Project vicinity with views of the Project area (landfill property). Although the Buena Vista Landfill is open to the public, it is not considered a public view for purposes of this analysis because, in general, the public does not go to the landfill for views of the surrounding area.

The following eight viewpoints were identified to describe the potential change in public views from Project development. These viewpoints are described further in the impact discussion and are shown on **Figures 3.1-1 to 3.1-10.** All figures are located at the end of this section:

- **Viewpoint 1:** Views of Old Landfill from Buena Vista Drive (Facing Southeast)
- **Viewpoint 2:** View of Old Landfill from Buena Vista Drive (Facing Southwest)
- **Viewpoint 3:** View of Current Landfill from Buena Vista Drive (Facing East)
- **Viewpoint 4:** View of Current Landfill from Buena Vista Drive/Harkins Slough Road Intersection (Facing Southeast)
- **Viewpoint 5:** View of Transfer Station A Site from Harkins Slough Road (Facing East)

- **Viewpoint 6:** View of Transfer Station A Site from Harkins Slough (Facing North)
- **Viewpoint 7:** View of Equipment Parking and Storage Site from Rountree Lane/Tierra Alta Drive Intersection (Facing South)
- **Viewpoint 8:** View of Transfer Station B Site from Rountree Lane (Facing West)

Significance Thresholds

The introduction in Chapter 3, Environmental Impact Analysis, states that the significance thresholds used in this analysis are based on Appendix G of the California Environmental Quality Act Guidelines, which provides a sample Initial Study checklist that includes a number of factual inquiries related to the subject of aesthetics and other environmental topics. Thus, the letters and thresholds presented below correspond with the questions in the Appendix G Initial Study checklist.

For purposes of this Environmental Impact Report, a significant impact would occur if implementation of the Project resulted in any of the following conditions:

A. Have a substantial adverse effect on a scenic resource or vista.

B. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway.

C. In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings. (Public views are those that are experienced from a publicly accessible vantage point). If in an urbanized area, conflict with applicable zoning and other regulations governing scenic quality.

D. Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area.

In applying these thresholds to the impact analysis below, the County is concerned only with visual impacts from public views and not from private views, which is common industry practice. The County has discretion to make this distinction and does so because requiring mitigation for impacts to purely private views would give private landowners a kind of power over land uses on adjacent or nearby properties that they do not enjoy under California law (refer to Mira Mar Mobile Community v. City of Oceanside [2004] 119 Cal.App.4th 492-493, quoting Wolford v. Thomas [1987 190 Cal.App.3d 347, 358, for the proposition that “California landowners do not have a right of access to air, light and view over adjoining property”).

Regarding Threshold A, a scenic resource or vista is defined as a publicly accessible viewpoint that provides views of high visual quality or highly valued landscape. As stated above, there are no publicly accessible viewpoints of a scenic resource or vista within, adjacent to, or of the Project area. Therefore, the analysis considers if the Project would have a substantial adverse effect on quality of views from the eight public viewpoints identified above.

Regarding Threshold B, the analysis evaluates potential effects to views of and from Highway 1, which is the closest highway and is eligible for designation as a state scenic highway.

Regarding Threshold C, the Project area and surrounding area are considered a non-urbanized area. Therefore, the analysis evaluates if the Project would substantially degrade the existing quality of public views of the site and its surroundings from the eight viewpoints identified above.

Regarding Threshold D, the analysis considers new sources of substantial light or glare that could be introduced in the Project area.

For Thresholds A and C, the analysis considers if the Project would adversely affect the quality of views from the eight public viewpoints identified above (**Figure 3.1-1**). Visual quality and value are subjective based on the viewer's perception and sensitivity. It is reasonable to assume that most viewers consider views of the ocean, mountains, and undeveloped open space and rural areas to be high quality.

Visual sensitivity can be described as viewer awareness of visual changes in the environment and is based on viewers' activities from public areas near a particular site. From the eight public viewpoints identified for this analysis, viewers are driving on public roadways. There are no pedestrian or bicycle facilities (e.g., sidewalks, bike lanes), pullouts, or rest areas along the roadways. Thus, it is reasonable to assume that viewers would be focused on driving, particularly along windy Buena Vista Drive, and may be less aware of visual changes in the surrounding area.

3.1.4 Project Impact Analysis

For each impact, the discussion is separated into Project construction, Project operation, and Project components as needed to describe the potential impact. The overall conclusion or significance determination is presented at the end of the discussion, as well as in parentheses at the end of the numbered impact statement.

As described in Chapter 2, the Project components include:

1. Transfer Stations (Transfer Station A and Transfer Station B)
2. Organics Diversion Facility (ODF) Options 1 and 2
3. Landfill Closure and Revegetation
4. Optional Elements: a) Internal Access Road Improvements, b) Scale House Upgrades, c) Recycling Center Upgrades, d) Equipment Parking and Storage Area
5. General Plan/Local Coastal Program Land Use Designation and Zoning Map Amendments

Threshold A:	Have a substantial adverse effect on a scenic resource or vista.
Threshold C:	In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings. (Public views are those that are experienced from publicly accessible vantage point). If in an urbanized area, conflict with applicable zoning and other regulations governing scenic quality.

Impact AES-1 THE PROJECT WOULD NOT HAVE AN ADVERSE EFFECT ON SCENIC RESOURCES AND VISTAS OR DEGRADE THE EXISTING VISUAL CHARACTER OR QUALITY OF PUBLIC VIEWS OF THE SITE OR ITS SURROUNDINGS. (LESS THAN SIGNIFICANT)

Construction

During Project construction, there would be excavators, dump trucks, loaders, bulldozers, concrete trucks, cranes, and compactors throughout the Project area. The most visible activities from public viewpoints would be associated with constructing Transfer Station A and the optional equipment parking and storage area (shown as 1a and 4d, respectively, on **Figure 2-1**), which would be visible from Harkins Slough Road and the Rountree Lane/Tierra Alta Drive intersection. Construction of other Project components in the current and old landfill areas would be obscured by topography and vegetation and would have limited visibility from surrounding public roadways.

For all Project components, the visibility of construction equipment and activities would be temporary and localized, with no substantial or lasting obstructions to public views of scenic resources in the area. Given the existing industrial nature of the landfill site and current landfill activities that involve trucks, bulldozers, and other equipment, these temporary changes would not substantially alter the overall visual character or quality of public views in the area. Therefore, construction-related impacts would be **Less than Significant**. No mitigation is required.

Operation

The following discussion describes how Project implementation would change views from the eight identified public viewpoints (**Figure 3.1-1**), and if the change would substantially degrade the existing visual quality of the views or otherwise adversely affect scenic resources.

VIEWPOINT 1: VIEW OF OLD LANDFILL FROM BUENA VISTA DRIVE (FACING SOUTHEAST)

VIEWPOINT 2: VIEW OF OLD LANDFILL FROM BUENA VISTA DRIVE (FACING SOUTHWEST)

Views of the landfill along windy Buena Vista Drive are fleeting and partially blocked by dense trees, making portions of the landfill only briefly visible to drivers. From Viewpoint 1, the far east portion of the old landfill is visible in the background above the tree line in the foreground, primarily to northbound motorists (**Figure 3.1-2**). From Viewpoint 2, the old landfill exit gate and the front middle portion of the old landfill is visible in the background to motorists in both directions (**Figure 3.1-3**). The old landfill is shaped like a mesa (hill with flat top) and is currently used for equipment storage and stockpiles of debris, which are generally not visible from Viewpoint 1 but can be seen from Viewpoint 2. However, stockpiles may extend to the far west side near Buena Vista Drive when necessary to accommodate debris from winter storms, fires, and major construction projects, which could be visible from Viewpoint 1.

The only Project component that could be visible from Viewpoints 1 and 2 is ODF Option 2, which would be located on top of the old landfill. ODF Option 2 would introduce new facilities associated with preprocessing, composting, and post processing including several stockpiles, a depackager building (50'x150'), and up to 18 bunkers for the Mass-Bed Aeration System. Refer to **Figure 3.1-1** for the location and **Appendix A** (Sheet C203) for design detail. The facilities that could be visible from Viewpoint 1 are the stockpiles (up to approximately 15 feet in height) at the far west end. The facilities that could be visible from Viewpoint 2 are the stockpiles and the de-packager building (which would be approximately 40feet in height) to be located in the center of the site. The facility's planned design aligns with the existing industrial landscape of the Buena Vista Landfill, thus maintaining visual consistency with the site's disturbed and industrial character. If the facilities are visible from Viewpoints 1 and 2, they would not substantially degrade the existing visual quality of the views or otherwise adversely affect scenic resources compared to existing conditions. Further, any views of the new facility would be distant, elevated, and fleeting to passing motorists. Finally, as stated in Section 2.4, Project Components (under Additional Information for ODF Options 1 and 2, Vegetation Removal and Landscaping), the County would install large shrubs or trees in containers along the northern perimeter of the facility if needed to screen views of ODF Option 2 from Buena Vista Drive. Therefore, the impact would be **Less than Significant**. No mitigation is required.

VIEWPOINT 3: VIEW OF CURRENT LANDFILL FROM BUENA VISTA DRIVE (FACING EAST)

Viewpoint 3 is located at the main entrance to the current landfill, where vehicles are moving consistently in and out of the area (**Figure 3.1-4**). From Viewpoint 3, the current landfill is visible and

dominates the background view, although this is the portion of the landfill that is already capped (closed). The active portion of the landfill is visible in the top and left portion of the photo. As vehicles enter the landfill, the scale house and recycling center are to the left, and the household hazardous waste materials drop-off is to the right. Although these facilities are not visible on **Figure 3.1-4**, they are briefly visible to motorists traveling in both directions on Buena Vista Drive. The Project components that might be visible from Viewpoint 3 include landfill closure and revegetation in the top portion of the current landfill to be closed and revegetated, the recycling center upgrades, and continued use of the main entrance (refer to **Figure 3.1-1** for the location). The existing recycling center could be relocated and expanded to enhance its capacity for processing mandated materials, becoming more visible from the main entrance and Viewpoint 3. However, it would be a continuation of an existing use that aligns with the existing industrial landscape of the Buena Vista Landfill, thus maintaining visual consistency with the site's disturbed and industrial character. Landfill closure and revegetation includes capping the landfill and revegetating the area, so active landfill operations would no longer be visible from Viewpoint 3, which is considered a beneficial effect of the Project. These modifications are expected to result in only minor changes to public views and would not substantially degrade the existing visual quality of the views or otherwise adversely affect scenic resources compared to existing conditions. Further, views of the landfill would continue to be distant, elevated, and fleeting to passing motorists. Therefore, the impact would be **Less than Significant.** No mitigation is required.

VIEWPOINT 4: VIEW OF CURRENT LANDFILL FROM BUENA VISTA DRIVE/HARKINS SLOUGH ROAD INTERSECTION (FACING SOUTHEAST)

Viewpoint 4 from the Buena Vista Drive/Harkins Slough Road intersection provides a broad view of the current landfill and its ongoing operations from the far northwest corner of the landfill property (**Figure 3.1-5**). The northern portion of the current landfill is where activities are most visible because of the proximity to public roadways and the active nature of the area.

Once past the scale house at ground level, the internal roadway ascends to three distinct levels. On Level 1, primary activities include breaking down and stockpiling organic materials (to be transported off site for composting), as well as sorting construction debris such as lumber, pallets, and sheetrock. This area is frequently active, with tractors and woodchippers visibly engaged in these processes (**Figure 3.1-5**). Level 2, which has been elevated by the accumulation of landfill waste over time, is currently receiving, sorting, and burying solid waste. Level 3 is currently inactive, mostly filled to final elevation, and used for intermittent landfill construction materials stockpiles. The ongoing operations contribute to a landscape characterized by uneven terrain and noticeable signs of continuous landfill activity, resulting in a highly disturbed environment visible from portions of Buena Vista Drive and Harkins Slough Road near the Buena Vista Drive/Harkins Slough Road intersection (Viewpoint 4).

The Project components that might be visible from Viewpoint 4, as well as portions of Harkins Slough Road that extend along the northern landfill boundary, include ODF Option 1 and landfill closure and revegetation (refer to **Figure 3.1-1** for the location). ODF Option 1 would be a continuation of existing landfill activities, whereby organic materials are preprocessed and then stockpiled before being transported for off-site composting, with minor changes to the layout. The ODF operation would continue to shift locations as the landfill continues to fill. Once the landfill is closed and capped, the ODF operation would be placed on landfill cover. Modifications to the ODF layout include asphalt paving, a roof structure over the area receiving and preprocessing food waste, storm water management features, and accessing the facility from the existing road to the east side instead of the north side. The modifications and relocation to a higher level would not result a substantial change in

views, would likely be less visible from public roadways due to the increased elevation and distance, and would occur in an area characterized by existing disturbed land and existing ongoing industrial operations. Aside from the ongoing ODF operation, landfill closure and revegetation include capping the landfill and revegetating the area, so proposed operations would not likely be visible from Viewpoint 4, which is considered a beneficial effect of the Project.

These proposed modifications are expected to result in only minor changes to public views and would not substantially degrade the existing visual quality of the views or otherwise adversely affect scenic resources compared to existing conditions. Further, views of the landfill would continue to be distant, elevated, and fleeting to passing motorists. Therefore, the impact would be **Less than Significant**. No mitigation is required.

VIEWPOINT 5: VIEW OF TRANSFER STATION A SITE FROM HARKINS SLOUGH ROAD (FACING EAST)

VIEWPOINT 6: VIEW OF TRANSFER STATION A SITE FROM HARKINS SLOUGH ROAD (FACING NORTH)

Viewpoint 5 is from Harkins Slough Road facing east as it approaches the proposed Transfer Station A site (**Figure 3.1-6**), and Viewpoint 6 is from Harkins Slough Road facing north as it abuts the proposed Transfer Station A site (**Figure 3.1-7**). Harkins Slough Road extends along the northern and eastern perimeter of the landfill, from Buena Vista Drive to Tierra Alta Drive, and is primarily used by landfill staff, Rountree Medium (Jail) Facility staff and visitors, and residents who live in the residential complex on Tierra Alta Drive. Existing public views from the roadway include open views of the landfill and landfill operations to the west and south, trees along the landfill perimeter, wooded open space to the east (between the roadway and Harkins Slough), and the proposed Transfer Station A site to the north. The proposed Transfer Station A site is currently undeveloped land with oak trees, overgrown weedy vegetation, and unpaved roads. The site is landfill property currently used for storing approximately 10 large metal collection bins (i.e., roll-off boxes) and long-term storage of other landfill equipment (**Figure 3.1-8**).

The proposed Project component that would be visible from Viewpoints 5 and 6 on Harkins Slough Road would be Transfer Station A, which would serve self-haulers (residents and businesses). Proposed landfill closure and revegetation activities would also be visible from Harkins Slough Road. However, because the closure and revegetation component would be at a high, distant elevation from the roadway and result in improved views of the surrounding area, this discussion focuses on the visual changes resulting from proposed Transfer Station A.

The existing trees and vegetation on the site would be removed to allow construction of Transfer Station A, a 32,700-square-foot facility measuring 40 feet in height. Refer to **Figure 3.1-1** for the location and **Appendix A** (Sheet C200) for design detail. The facility would provide for the transfer of solid waste from self-haulers to transfer trucks for off-site disposal and include office space, restrooms, and nine parking spaces outside the main structure. Additionally, Harkins Slough Road would be realigned to extend around Transfer Station A along the northeast perimeter of the site, separating local public traffic from traffic associated with the Buena Vista facility.

The development of the site with proposed Transfer Station A would remove existing vegetation on the site and introduce a large structure, and the realignment of Harkins Slough Road would also be noticeable. These proposed modifications would result in moderate changes to existing public views from Harkins Slough Road. However, with the existing large current landfill dominating views along Harkins Slough Road, these proposed changes are anticipated to have a minor impact on the overall visual character of the area. The proposed new facilities would integrate into the existing industrial

landscape, maintaining consistency with the site's historical use and disturbed conditions. Although oak trees and vegetation on the site would be removed, as well as trees along the landfill perimeter where the existing roadway curves, there would still be stretches of intact trees and vegetation along the north and east sides of Harkins Slough Road, as it extends between Buena Vista Drive and Tierra Alta Drive. As a result, while the development of proposed Transfer Station A would result in moderate changes to public views, it would not substantially degrade the existing visual context of the area or otherwise adversely affect scenic resources compared to existing conditions. Therefore, the impact would be **Less than Significant**. No mitigation is required.

VIEWPOINT 7: VIEW OF EQUIPMENT PARKING AND STORAGE SITE FROM ROUNTREE LANE/TIERRA ALTA DRIVE INTERSECTION (FACING SOUTH)

Viewpoint 7 is from the intersection of public roadways, Rountree Lane and Tierra Alta Drive, as they extend west and southeast, respectively, from Harkins Slough Road on the southeast side of the landfill. Rountree Lane is used by landfill staff to access the landfill, and by Rountree Medium (Jail) Facility staff and visitors. Tierra Alta Drive is used to access the residential complex to the southeast of the landfill. Existing public views from this intersection include the landfill to the north and a vacant dirt lot and surrounding eucalyptus trees to the south (**Figure 3.1-9**). Existing development behind the eucalyptus trees includes the residential complex to the southeast and wastewater treatment basins to the southwest.

The primary proposed Project component that would be visible from Viewpoint 7 is the optional equipment parking and storage area that would be constructed on the vacant lot owned by the County to the south of the intersection. Refer to **Figure 3.1-1** for the location and **Appendix A** (Sheet C204) for design detail. Proposed landfill closure and revegetation may also be visible from this intersection to the north. However, because this component would be at a high, distant elevation from the roadway and result in improved views of the surrounding area, this discussion focuses on the visual changes resulting from constructing the proposed equipment parking and storage area.

Public views of the site would change from a vacant dirt lot to a paved parking and storage area with aboveground fueling/charging for the County's transfer station vehicles. The proposed development would effectively be a parking lot for refueling and storing vehicles, and there would be no new large or tall permanent structures. Views of the existing trees and vegetation around and beyond the lot would be retained. Although development of the proposed equipment parking and storage area would result in minor to moderate changes to existing public views from the public roadways, it would not substantially degrade the existing visual context of the area or otherwise adversely affect scenic resources compared to existing conditions. Therefore, the impact would be **Less than Significant**. No mitigation is required.

VIEWPOINT 8: VIEW OF TRANSFER STATION B SITE FROM ROUNTREE LANE (FACING WEST)

Viewpoint 5 is located on Rountree Lane, a public roadway located on the south side of the landfill, used primarily by landfill staff and Rountree Medium (Jail) Facility staff and visitors. The Rountree Medium (Jail) Facility is located on the south side of the road, an unpaved parking area and the current landfill is located on the north side of the road, and the landfill staff access gate and maintenance buildings are located at the road terminus (**Figure 3.1-10**). The landfill's existing maintenance shop and office include three structures totaling approximately 9,700 square feet. The area is used for various operation and maintenance functions related to the landfill and is paved to accommodate heavy equipment and landfill vehicles. The existing area is highly industrial and characterized by a disturbed landscape.

The primary proposed Project component that would be visible from Viewpoint 8 is Transfer Station B, which would serve franchise haulers and larger commercial vehicles. Proposed landfill closure and

revegetation may also be visible from Rountree Lane. However, because this component would be at a high, distant elevation from the roadway and result in improved views of the surrounding area, this discussion focuses on the visual changes resulting from constructing Transfer Station B.

The existing maintenance shop and office buildings would be demolished, along with several small outbuildings adjacent to the existing water tank, and would be replaced by the proposed Transfer Station B, which would cover approximately 26,000 square feet and be 40 feet in height. The facility would feature a two-story office space, a large vehicle maintenance shop, 8 to 10 parking spaces for County employees, and minor internal road improvements to serve the transfer station. The existing unpaved parking area on Rountree Lane would be paved and striped as part of the proposed Project. Refer to **Figure 3.1-1** for the location and **Appendix A** (Sheet C202) for design detail.

Existing public views of the site would change by intensifying the development on this portion of the landfill, by replacing the existing maintenance and office buildings (comprising 9,700 square feet) with the proposed Transfer Station B (comprising 26,000 square feet), resulting in a more developed and structured environment, including the paved parking area outside the gate. Despite these changes, the proposed facility would blend into the existing industrial context of the site and surrounding area. The proposed Project would not substantially degrade the existing visual context of the area or otherwise adversely affect scenic resources compared to existing conditions. Therefore, the impact would be less than significant.

In summary, the Project, including the primary components and optional improvements, as well as the associated General Plan/LCP land use designation and zoning map amendments, would not adversely affect scenic resources or vistas or substantially degrade the existing visual character or quality of public views of the area or its surroundings compared to existing conditions. Therefore, the impact would be **Less than Significant.** No mitigation is required.

Threshold B:	Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway.

Impact AES-2 THE PROJECT WOULD NOT DAMAGE SCENIC RESOURCES WITHIN A STATE SCENIC HIGHWAY. (NO IMPACT)

SR-1, also referenced as Highway 1 throughout this Environmental Impact Report, is the closest state highway to the Project area. SR-1 is recognized for its scenic qualities and is eligible for designation as a state scenic highway under the California Scenic Highway Program. SR-1 is also designated as a County scenic roadway by the County General Plan/LCP. SR-1 runs along the California coast, offering drivers views of some of the most picturesque landscapes in the state, including ocean views, coastal cliffs, and rural countryside. This highway is known for its visual appeal and its role in connecting various scenic and recreational destinations.

The Buena Vista Landfill is located approximately one mile south of SR-1. The Project area and SR-1 are separated by intervening topography, including hills and vegetation, which block any direct line of sight between the two locations. Due to the landfill's location and the surrounding landscape features, the Project area is not visible from SR-1. Vehicles transporting solid waste from the transfer stations to the regional facility would travel on SR-1. The use of SR-1 would be similar to existing conditions, whereby solid waste collection trucks and other large trucks use the highway for transportation; and there would be no effect on resources within or views from SR-1. Consequently, the scenic resources within SR-1 and the scenic views motorists enjoy from SR-1 would not be affected by the Proposed Project.

Therefore, the Project, including the primary components and optional improvements, as well as the associated General Plan/LCP land use designation and zoning map amendments, would not in any way damage or otherwise adversely affect any scenic resources—including but not limited to trees, outcroppings, and historic buildings—within a state scenic highway. There would be **No Impact.**

Threshold D:	Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area.

Impact AES-3 THE PROJECT WOULD NOT CREATE A SIGNIFICANT SOURCE OF SUBSTANTIAL LIGHT AND GLARE THAT WOULD ADVERSELY AFFECT DAYTIME OR NIGHTTIME VIEWS. (LESS THAN SIGNIFICANT IMPACT)

Construction

Construction activities for the proposed Project would not occur during nighttime hours, eliminating potential light impacts during the evening. During the day, potential glare may arise from the reflection of sunlight off metal and glass surfaces of construction equipment. This glare could briefly affect drivers on nearby roadways, such as Harkins Slough Road, during certain phases of construction, including the development of Transfer Station A and the parking/fueling area.

Given that construction would be limited to daylight hours and the roadways in question would experience relatively low traffic volumes, the anticipated glare effects are expected to be minimal. Therefore, the impact of glare during construction is anticipated to be **Less than Significant**. No mitigation is required.

Operation

Once fully operational, some of the proposed Project components would include low level lighting as described in Section 2.4 and below for proposed Transfer Stations A and B.

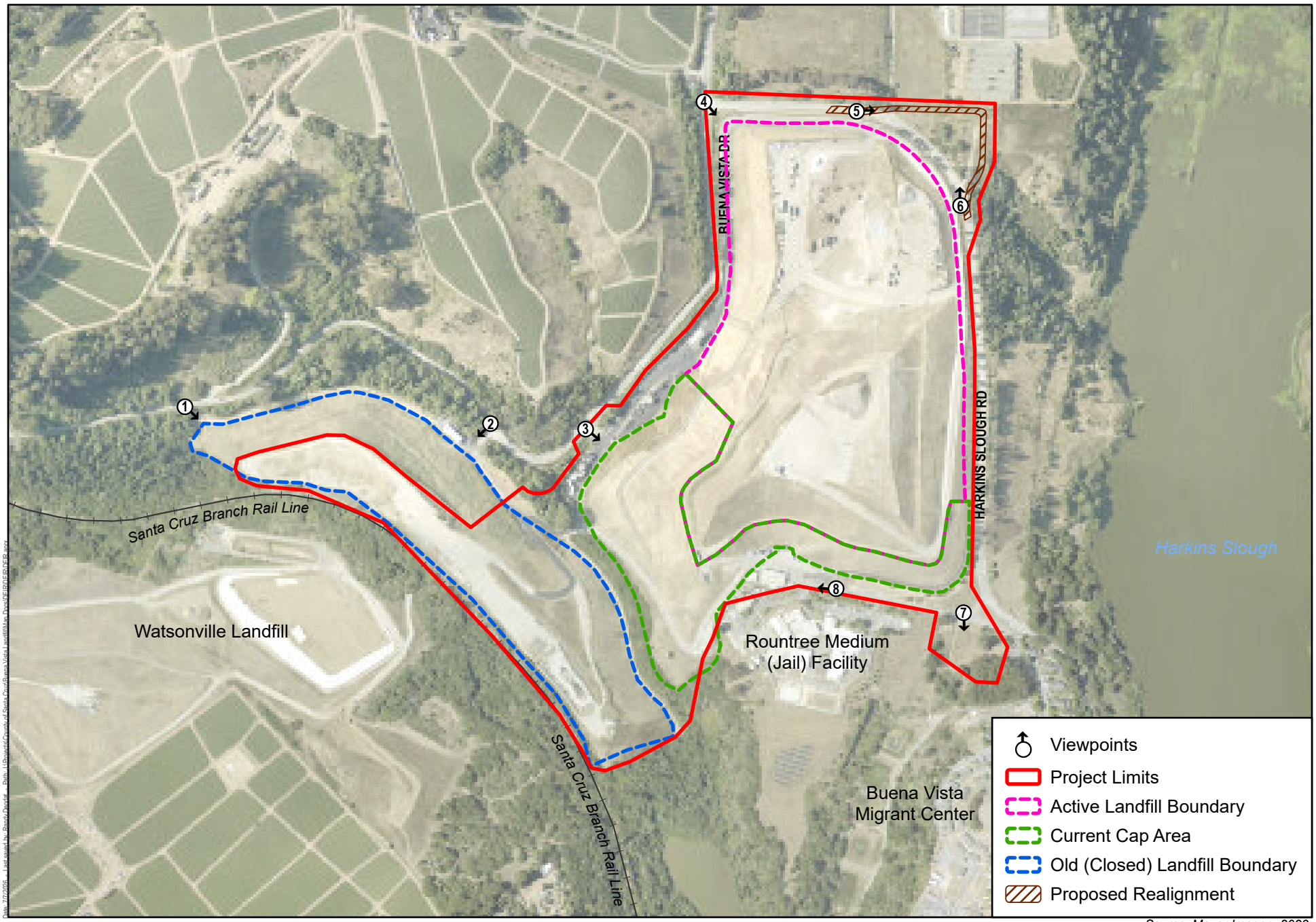
Transfer Station A. The site currently has no lighting. The exterior site lighting at Transfer Station A would be kept to a minimum to what is required for safety and operational needs during normal operating hours from 7:00 am to 5:00 pm. Lighting may include motion sensor site lighting, but all lighting would be affixed to structures or on standards not exceeding the structure height, and would be directed downward and away from adjacent land to north and east, so it would not create substantial light that could adversely affect nighttime views in the area.

Transfer Station B. The site currently has substantial exterior lighting at the existing office and maintenance building area within the gated landfill, and there is substantial exterior lighting at the adjacent Rountree Medium (Jail) Facility. The existing office and building maintenance area, including the exterior lighting, would be removed for development of Transfer Station B. Like Transfer Station A, new exterior lighting would be kept to a minimum for what is required for safety and operational needs during normal operating hours from 7:00 am to 5:00 pm. Therefore, the proposed Project would not create substantial light that could adversely affect nighttime views in the area.

Optional Equipment Parking and Storage Area. There could be minimal lighting installed for security at the optional parking and storage area on Rountree Lane. Any new exterior lighting would be kept to a minimum for what is required for safety and operational needs and would be directed downward and away from adjacent land to the south and southeast. Therefore, the Project would not create substantial light that could adversely affect nighttime views in the area. Further, the existing trees between the parking and storage area would minimize light spillover into the residential area.

There is no planned lighting for ODF Options 1 and 2, optional road improvements, or for landfill closure and revegetation. There is substantial existing exterior lighting at the main entrance where the scale house and recycling center are located. If the optional recycling center and scale house upgrades include lighting, it would not be new additional lighting. Existing lighting conditions would be maintained. Therefore, operation of the proposed Project would not create a new source of substantial light or glare that would adversely affect day or nighttime views in the area, compared to existing conditions.

In summary, the Project, including the primary components and optional improvements, as well as the associated General Plan/LCP land use designation and zoning map amendments, would not create a significant source of substantial light and glare that would adversely affect daytime or nighttime views. The impact would be **Less than Significant**. No mitigation is required.



Source: Maxar Imagery 2023.

Harris & Associates

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0 400 800

Feet

Figure 3.1-1

Viewpoint Locations

Buena Vista Landfill Redevelopment Project





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Source: Harris and Associates 2024.

Harris & Associates

Figure 3.1-2

Viewpoint 1: Views of Old Landfill from Buena Vista Drive (Facing Southeast)



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Source: Harris and Associates 2024.

Harris & Associates

Figure 3.1-3

Viewpoint 2: View of Old Landfill/Employee Exit from Buena Vista Drive (Facing Southwest)



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Source: Harris and Associates 2024.

Harris & Associates

Figure 3.1-4

Viewpoint 3: View of Current Landfill from Buena Vista Drive (Facing East)

Buena Vista Landfill Redevelopment Project





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Source: Harris and Associates 2024.

Figure 3.1-5

Viewpoint 4: View of Current Landfill from Buena Vista Drive/Harkins Slough Road Intersection (Facing Southeast)

Buena Vista Landfill Redevelopment Project

Harris & Associates





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Source: Harris and Associates 2024.

Figure 3.1-6

Viewpoint 5: View of Transfer Station A Site from Harkins Slough Road (Facing East)

Buena Vista Landfill Redevelopment Project

Harris & Associates





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Source: Harris and Associates 2024.

Harris & Associates

Figure 3.1-7

Viewpoint 6: View of Transfer Station A Site from Harkins Slough Road (Facing North)

Buena Vista Landfill Redevelopment Project



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Source: Google Earth 2024.

Harris & Associates

Figure 3.1-8

Aerial View of Transfer Station A Site

Buena Vista Landfill Redevelopment Project





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Source: Harris and Associates 2024.

Harris & Associates

Figure 3.1-9

Viewpoint 7: View of Equipment Parking and Storage Site from Rountree Lane/Tierra Alta Drive Intersection (Facing South)





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Source: Harris and Associates 2024; Google Earth 2024.

Harris & Associates

Figure 3.1-10

Viewpoint 8: View of Transfer Station B Site from Rountree Lane (Facing West)

Buena Vista Landfill Redevelopment Project

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3.2 Agricultural Resources

This section presents the environmental and regulatory setting for agricultural resources and an evaluation of potential impacts of the Buena Vista Landfill Redevelopment Project (Project) on those resources. **Table 3.2-1** presents a summary of potential Project impacts related to agricultural resources.

Table 3.2-1. Summary of Project Impacts Related to Agricultural Resources

Impact	Significance before Mitigation	Mitigation	Significance after Mitigation
AG-1. The Project would not convert Important Farmland to non-agricultural use.	No Impact	None Required	No Impact
AG-2. The Project would not conflict with existing zoning for agricultural use or a Williamson Act contract.	Less than Significant	None Required	Less than Significant
AG-3. The Project would not conflict with existing zoning for, or cause rezoning of, forest land or timberland, or result in the loss of forest land or conversion of forest land to non-forest use.	No Impact	None Required	No Impact
AG-4. The Project would not involve other changes in the existing environment which could result in conversion of farmland to non-agricultural use.	Less than Significant	None Required	Less than Significant

Note: The impact, significance determination, and mitigation apply to the project as a whole, considering all Project components, unless otherwise noted.

3.2.1 Existing Conditions

Overview of Agriculture in Santa Cruz County

Agriculture has historically played an important role in Santa Cruz County, and it continues to be a major economic sector. Agricultural lands are areas that have been determined to be most suitable for a diversity of commercial and noncommercial farming operations such as the production of food, fiber, and ornamental crops, livestock, small family farming, and animal raising (Santa Cruz 2021).

According to the County's most recent Crop Report (Santa Cruz County 2024a), the total gross production value of the County's agricultural commodities was approximately $742 million, including a timber value of $6.3 million. Fruit crops were the single largest production category by dollar value. Berries dominate this category, including strawberries, raspberries, and blackberries. Taken together, berry production represented approximately 60 percent of the County's total gross production value. Nursery crops represented the second largest category, including key crops such as potted plants, landscape plants, Christmas trees, and cut flowers and cut greens. Together, these two categories accounted for approximately 82 percent of the County's direct farm production values.

The California Department of Conservation identifies and designates important farmlands throughout the state as part of its Farmland Mapping and Monitoring Program (FMMP). The FMMP rating system classifies farmland according to the following criteria:

- **Prime Farmland.** Farmland with the best combination of physical and chemical features able to sustain long term agricultural production. This land has the soil quality, growing season, and moisture supply needed to produce sustained high yields. These are Class I and Class II soils.

- **Farmland of Statewide Importance.** Farmland similar to Prime Farmland but with minor shortcomings, such as greater slopes or less ability to store soil moisture. Land must have been used for irrigated agricultural production at some time during the four years prior to the mapping date.
- **Unique Farmland**. Farmland of lesser quality soils used for the production of the state's leading agricultural crops. This land is usually irrigated, but may include non-irrigated orchards or vineyards as found in some climactic zones in California.
- **Farmland of Local Importance**. Land of importance to the local agricultural economy as determined by each County's board of supervisors and a local advisory committee.
- **Grazing Land**. Land on which the existing vegetation is suited to the grazing of livestock. This category was developed in cooperation with the California Cattlemen's Association, University of California Cooperative Extension, and other groups interested in the extent of grazing activities. The minimum mapping unit for Grazing Land is 40 acres.
- **Urban and Built-Up Land**. Land occupied by structures with a building density of at least 1 unit to 1.5 acres, or approximately 6 structures to a 10-acre parcel. This land is used for residential, industrial, commercial, construction, institutional, public administration, railroad and other transportation yards, cemeteries, airports, golf courses, sanitary landfills, sewage treatment, water control structures, and other developed purposes.
- **Other Land**. Land not included in any other mapping category. Common examples include low density rural developments; brush, timber, wetland, and riparian areas, not suitable for livestock grazing; confined livestock, poultry or aquaculture facilities; strip mines, borrow pits; and water bodies smaller than 40 acres. Vacant and nonagricultural land surrounded on all sides by urban development and greater than 40 acres is mapped as Other Land.

"Important Farmland" includes those areas designated as Prime Farmland, Farmland of Statewide Importance, or Unique Farmland under the FMMP. In total, Santa Cruz County has approximately 13,147 acres of Prime Farmland, 2,190 acres of Farmland of Statewide Importance, and 3,273 acres of Unique Farmland (DOC 2020). The majority of this Important Farmland is located in the southeast portion of the County, in the Pajaro River Valley surrounding Watsonville.

Santa Cruz County has a large concentration of organic farms. Just over 30 percent of all Santa Cruz County farms are certified organic (California Grown 2024).

Project Area

The Project area is a developed landfill and is classified as Urban and Built-Up Land on maps prepared for the FMMP. A small portion of the Project area (the vacant site owned by the County on the south side of the Rountree Lane/Harkins Slough Road intersection) is classified as Other Land pursuant to the FMMP.

The eastern portion of Assessor's Parcel Number (APN) 052-021-33 is zoned Commercial Agriculture and Airport Combining Zone (CA-AIA) (**Figure 2-2**, Landfill Parcels and Current Zoning). However, the Project area has been used as a regional landfill since the 1960s, and no conventional commercial agricultural activities have occurred on site since 1993.

The surrounding area is a mix of uses. The area to the south and southeast includes the County's Rountree Medium (Jail) Facility, wastewater facilities, Buena Vista Migrant Center (farmworker housing and childcare facility), and Tierra Alta affordable housing. The area to the southwest

includes the Santa Cruz Branch Rail Line, Watsonville landfill, and undeveloped space in between. The area to the north includes undeveloped land, greenhouses, and other structures (with no observable history of farming); and a landscape nursery and equestrian facility are further north. The area to the east consists of undeveloped open space with grasses, trees, and woody vegetation that is national wildlife refuge; and Harkins Slough is further east. The areas to the west and northwest on the other side of Buena Vista Drive are mixed farmlands on large, open tracts with farmable soils.

County Agricultural Resources Land Type

The General Plan/Local Coastal Program (LCP) Land Use Plan designates, by ordinance, specific agricultural land type designations for parcels identified as commercial agricultural land, based on the criteria set forth in the General Plan/LCP and maintains Agricultural Resource Maps identifying the distribution of lands considered suitable to the commercial production of food, fiber and ornamental crops and livestock. The mapped agricultural resource land type associated with parcel APN 052-021-33 is Type 3, which is identified as viable agricultural land within the Coastal Zone (Prime Farmland, Unique Farmland, and Prime Rangeland). Type 3 land is further defined by the Agricultural Land Preservation and Protection Ordinance (16.50.040) as follows:

Type 3 "Coastal Zone Prime Agricultural Land." This category includes all of the following lands outside the urban services line and the rural services line within the Coastal Zone in Santa Cruz County:

(1) Land which meets the U.S. Department of Agriculture Soil Conservation Service criteria of prime farmland soils and which are physically available (i.e., open lands not forested or built on) for agricultural use.

(2) Land which meets the California Department of Food and Agriculture criteria for prime rangeland soils and which are physically available (i.e., open lands not forested or built on) for agricultural use.

(3) Land planted with fruit or nut-bearing trees, vines, bushes, or crops which have a nonbearing period of less than five years, and which normally return during the commercial bearing period on an annual basis from the production of unprocessed plant production not less than $200.00 per acre; the $200.00 per acre value shall be utilized to establish a base value per acre as of 1965. This base value per acre figure shall be adjusted annually in accordance with any change in the San Francisco Bay Area Consumer Price Index to reflect current values.

(4) Land which has returned from the production of unprocessed agricultural plant products an annual gross value of not less than $200.00 per acre for three of the five previous years, as provided in subsection (C)(3) of this section.

(5) Land which meets the California Department of Food and Agriculture criteria for unique farmland of Statewide importance and which is physically available (i.e., open lands not forested or built on) for agricultural use. The criteria for "prime farmland soils," "prime rangeland soils," and "unique farmland of Statewide importance" are further defined in the General Plan/LCP glossary.

3.2.2 Regulatory Setting

This section describes the federal, state, regional, and local plans, policies, and laws relevant to the portion of the Project area zoned Commercial Agriculture and Airport Combining Zone (CA-AIA) and agricultural uses to the north and northwest of the Project area.

Federal

No federal regulations related to agriculture are applicable to the Project.

State

Farmland Mapping and Monitoring Program

The California Department of Conservation's FMMP monitors the conversion of the state's farmland to and from agricultural use. County-level data is collected, and a series of maps are prepared that identify eight classifications and uses based on a minimum mapping unit size of 10 acres. The program also produces a biennial report on the amount of land converted from agricultural to non-agricultural use. The program maintains an inventory of state agricultural land and updates the Important Farmland Series Maps every 2 years. The FMMP is an informational service only and does not constitute state regulation of local land use decisions.

Under the FMMP, agricultural land is rated according to several variables, including soil quality and irrigation status, with Prime Farmland being considered the most optimal for farming practices.

California Land Conservation Act of 1965 (Williamson Act)

The California Land Conservation Act of 1965—commonly referred to as the Williamson Act—enables local governments to enter into contracts with private landowners for the purpose of restricting specific parcels of land to agricultural or related open space use. In return, landowners receive property tax assessments that are much lower than normal because they are based upon farming and open space uses as opposed to full market value of the land. Local governments receive an annual subvention of forgone property tax revenues from the state via the Open Space Subvention Act of 1971. Participation in this program is voluntary, requiring 100 contiguous acres of agricultural land under one or more ownerships to file an application for agricultural preserve status. After an agricultural preserve has been established, the land in the preserve is automatically restricted to agricultural and agriculturally compatible uses, and the landowners may enter into a Williamson Act land use contract. The land may also be subject to agricultural rezoning.

After a contract has expired, the landowners may remove the subject property from an agricultural preserve. Prior to the expiration of a contract, a landowner also has the option to petition to cancel the contract. Contract cancellation requires the landowner to pay a substantial fee as outlined in California Government Code, Section 51280-51287.

Approximately 20,000 acres are preserved under Williamson Act contracts in the County. The County of Santa Cruz stipulates eligibility for Williamson Act contracts according to land use designation and property size (Santa Cruz County 2024b). The State of California discontinued the subvention funding from the state budget in 2009. As a result, the County of Santa Cruz placed a moratorium on new Williamson Act Contracts in 2013. Regardless, the Project area is not under Williamson Act contract.

California Right to Farm Act

The California Right to Farm Act (California Civil Code, Section 3482.5) details that a farming activity cannot be a public nuisance if all of the following factors are met:

a. The activity is in support of the production of an agricultural commodity
b. The agricultural activity is commercial in nature

c. The activity is conducted "in a manner consistent with proper and accepted customs and standards as established and followed by similar agricultural operations in the same locality"
d. The farming activity must have been in operation for at least three years
e. The farming activity was not a nuisance at the time it began

The California Right to Farm Act does not require best management practices; rather it allows adherence to accepted customs and practices. In addition, the statute specifically states that the Act prevails over any contrary provision of a city or county ordinance or regulation but does allow cities and counties to require disclosures be given to prospective home buyers that a dwelling is situated near an agricultural operation.

California Organic Food and Farming Act

The California Organic Food and Farming Act (COFFA) was signed by the governor in 2016. COFFA updated California's State Organic Program fee schedule and streamlined the organic registration process. The State Organic Program supports the National Organic Program. COFFA ensures that the State Organic Program processes stay up to date and aligned with National Organic Program processes. By reducing the fees and paperwork associated with organic registration, COFFA supports organic farmers and facilitates growth of organic agriculture in California.

Local

Santa Cruz County Agricultural Commissioner's Office

The Santa Cruz County Agricultural Commissioner conducts outreach and provides some oversight to agricultural production in the County. The Agricultural Commissioner's office is divided into two departments consisting of the Agricultural Department and the Weights and Measures Department. The Agricultural Department conducts the majority of the outreach and assembles the annual Crop Report, in addition to certifying producers for farmers markets, overseeing nursery inspections, and oversight of the County's Organic Program. The Weights and Measures Department primarily oversees agricultural manufacturing in the County and end-product measuring at locations, such as grocery stores. Requirements for pesticides and organic producers entail participation and oversight from the California Environmental Protection Agency, the County Agricultural Commissioner, and the California Department of Food and Agriculture, which has oversight of all agricultural products.

Santa Cruz County General Plan/Local Coastal Program

The County of Santa Cruz General Plan/LCP (Santa Cruz County 2024b) provides a framework for development and growth in the County. The Agriculture, Natural Resources, and Conservation Element of the General Plan includes objectives and policies to protect agricultural resources. For example, Objective 5.13 recognizes agricultural as a priority land use and favors preserving and promoting agriculture on designated commercial agricultural lands.

Key agricultural policies pertinent to the Project are listed below for informational purposes (Santa Cruz County 2024b):

- **Policy ARC-1.3.1, Conversion of Commercial Agricultural Lands.** Consider conversion and/or development of commercial agricultural lands to non-agricultural uses only when all of the following criteria are met:
    - It is determined that the land is not viable for farming or for other allowable agriculture uses, and that it is not likely to become viable in the future (See Policy ARC-1.3.2); and
    - Findings are made that new information has been presented to demonstrate that the conditions on the land in question do not meet the criteria for commercial agricultural land; and
    - The conversion of such land or use to non-agricultural uses will not impair the viability of, or create potential conflicts with, other commercial agricultural lands in the area; and
    - The conversion of such land is concentrated on the site or parcel to the minimum area necessary to achieve the objectives of the proposed conversion.
- **Policy ARC-1.3.2, Determining Agricultural Viability.** Require a viability study to be conducted in conjunction with an application that proposes to convert commercial agricultural and prime agricultural lands to non-agricultural land uses, to include but not limited to an economic feasibility evaluation which contains at least:
    - An analysis of the gross revenue from the agricultural products grown in the area for the five years immediately preceding the date of filing the application.
    - An analysis of the operational expenses, excluding the cost of land, associated with the production of agricultural products grown in the area for the five years immediately preceding the date of filing the application.
    - An identification of the geographic area used in the analyses. The area shall be of sufficient size to provide an accurate evaluation of the economic feasibility of agricultural uses for the land stated in the application.

  Recommendations regarding viability shall be made by the Agricultural Policy Advisory Commission based on evaluation of the viability study and the following criteria: parcel size, sizes of adjacent parcels, degree of non-agricultural development in the area, inclusion of the parcel in utility assessment districts, soil capabilities and topography, water availability and quality, and proximity to other agricultural use.
- **Policy ARC-1.4.1, Agricultural Buffers Required.** In order to prevent or minimize potential land use conflicts, nonagricultural habitable uses such as residences (excluding farmworker housing), habitable accessory structures and non-agricultural commercial businesses that are located on land adjacent to a parcel in the Commercial Agriculture or Agriculture Preserve zone districts are required to provide a 200-foot buffer setback to the property line of the adjacent commercial agricultural parcel, unless an exception, as provided in ARC-1.4.2, is approved to reduce the extent of the agricultural buffer.
- **ARC-1.4.2 (LCP) Reduced Agricultural Buffer Setbacks.** Any reduction in the 200-foot agricultural buffer setback may only occur as approved by the APAC or other County decision-maker, as established by the Agricultural Land Preservation and Protection ordinance.

Santa Cruz County Code

Chapter 16.50 (Agricultural Land Preservation and Protection) of the Santa Cruz County Code is intended to support and encourage continued agricultural operations in the County and to forewarn prospective purchasers and residents of property adjacent to agricultural operations of the necessary sounds, odors, dust and hazardous chemicals that may accompany agricultural operations:

Santa Cruz County Code 16.50.010(C)

> Accordingly, no agricultural activity, operation, or facility or appurtenances thereof shall be or become a nuisance, public or private, if it has been conducted and maintained for commercial purposes, and in a manner consistent with proper and accepted customs and standards as established and followed by similar agricultural operations, and in a manner consistent with all applicable federal, state, and local laws, regulations, permits and approvals, and the conditions thereof, after it has been in operation for more than 3 years if it was not a nuisance when it began…

Santa Cruz County Code 16.50.080(A) Preservation of Type 3 agricultural lands requires:

> Lands designated as Type 3 agricultural land shall be maintained in the Commercial Agriculture ("CA") Zone District, or if within an area designated as a timber resource, be maintained in the Timber Production ("TP") Zone District, or if within a public park owned either by a public agency, or by a nonprofit that is organized to protect or provide agricultural, open space, timber and/or recreation lands and uses, be maintained in the Parks and Recreation ("PR") Zone District. Type 3 land shall not be rezoned to any other zone district unless the Type 3 designation is first removed pursuant to SCCC 16.50.050.

Accordingly, rezoning of agricultural resource land types requires an agricultural viability analysis for determination of whether new information has become available regarding the appropriateness of any specific agricultural resource land type redesignations and rezoning. This would potentially include Type 3, Type 2, or Type 1 resource type land.

Additionally, to prevent or minimize potential conflicts between either existing or future commercial agricultural and other land uses that involve habitable structures or other areas of intensive human activity, Santa Cruz County Code section 16.50.095 outlines requirements for agricultural buffer setbacks. Agricultural buffers are designed to provide a physical barrier to noise, dust, odor, and other effects which may be a result of normal commercial agricultural operations. Santa Cruz County Code 16.50.095(B) establishes the requirements for development subject to agricultural buffer setbacks:

> (B)(2) Requirements for Development Projects. All development for habitable uses, including residential habitable accessory structures and primary and accessory dwellings; for commercial, industrial, recreational, or institutional uses where the public will gather or be stationed for work; for agricultural uses involving intensive human activity (such as facilities for public assembly, sleeping quarters or workplace facilities where employees are stationed); and for outdoor areas designed for intensive human use that are within 200 feet of the property line of any parcel containing Type 1, Type 2, or Type 3 commercial agricultural land shall provide and maintain a 200-foot buffer setback from the Type 1, Type 2 or Type 3 commercial agricultural land. The 200-foot agricultural buffer setback shall incorporate vegetative or other physical barriers as determined necessary to minimize

potential land use conflicts. Where required to comply with agricultural buffer setback requirements, an accessory dwelling unit (ADU) 13.10.631.

Santa Cruz County Code 16.50.095(D) provides for conditional reductions to agricultural buffers:

> (D) Development Projects. Notwithstanding the buffer setback provisions of subsections (B) and (C) of this section, an agricultural setback distance of less than 200 feet may be established for developments on existing parcels of record when the Agricultural Policy Advisory Commission (APAC) makes one of the following findings in addition to the requirements in subsection (D)(3) of this section:
>
> (a) Significant topographic differences exist between the agricultural and nonagricultural uses that eliminates or minimizes the need for a 200-foot agricultural buffer setback;
>
> (b) Permanent substantial vegetation (such as a riparian corridor or woodland protected by the County's riparian corridor or sensitive habitat ordinances) or other physical barriers exist between the agricultural and nonagricultural uses that eliminate or minimize the need for a 200-foot agricultural buffer setback;
>
> (c) A lesser setback distance is found to be adequate to prevent conflicts between the nonagricultural development and the adjacent agricultural development and the adjacent agricultural land, based on the establishment of a physical barrier (unless it is determined that the installation of a barrier will hinder the affected agricultural use more than it would help it, or would create a serious traffic hazard on a public or private right-of-way) or the existence of some other factor that effectively supplants the need for a 200-foot agricultural buffer setback; or
>
> (d) The imposition of a 200-foot agricultural buffer setback would preclude building on a parcel of record in which case a lesser buffer setback distance may be permitted; provided, that the maximum possible setback distance is required, coupled with a requirement for a physical barrier (e.g., solid fencing and/or vegetative screening) to provide the maximum buffering possible, consistent with the objective of permitting building on a parcel of record.

Zoning Regulations

Santa Cruz County's Zoning Ordinance identifies specific zoning districts in the County and development standards that apply to each district. The County's agricultural zoning districts include Agriculture (A) and Commercial Agriculture (CA), and Agricultural Preserve (P) Combining district overlay. The Agriculture (A) zoning district provides for noncommercial agricultural uses, such as family farming and animal raising, and allows limited commercial agricultural activities on the small amount of agricultural land remaining in the County that is not designated as commercially suitable but that still constitutes a productive natural resource. The purposes of the Commercial Agriculture (CA) zoning district are to preserve the commercial agricultural lands in Santa Cruz County that are a limited and irreplaceable natural resource, and to protect their economic integrity. The Agricultural Preserve (P) combining district denotes lands under an agricultural preserve contract. The Agricultural Preserve (P) designation is used as an overlay to indicate parcels with Williamson Act agricultural preservation, or open space contracts.

According to Santa Cruz County GIS data and as shown on **Figure 2-2**, the Project area includes two zoning designations, both within the Airport Influence Area, denoted by the AIA Combining zone. This includes the Public and Community Facilities and AIA (PF-AIA) in the western portion of the Project area

and Commercial Agriculture and Airport Combining Zone (CA-AIA) in the eastern portion of the Project area. The area zoned Commercial Agriculture and Airport Combining Zone (CA-AIA) is approximately 35 acres of APN 052-021-33. The AIA combining zone is associated with the Watsonville Municipal Airport and is defined as the area within 2 miles of the airport's boundaries. The AIA is an area where airport-related factors like noise, overflight, safety, and airspace protection may affect land use or require restrictions on land use. However, no portion of the Project area is subject to Williamson Act agricultural preservation or open space contracts, or similar preservation easements (DOC 2024).

3.2.3 Methodology and Significance Thresholds

Methodology

This analysis considers the potential impacts of the Project with respect to agriculture, based on a review of site information, existing conditions, proposed activities, and the questions presented in Appendix G of the California Environmental Quality Act (CEQA) Guidelines (described under Significance Thresholds).

Significance Thresholds

The introduction in Chapter 3, Environmental Impact Analysis, states that the significance thresholds used in this analysis are based on Appendix G of the CEQA Guidelines, which provides a sample Initial Study checklist that includes a number of factual inquiries related to the subject of agricultural resources and other environmental topics. Thus, the letters and thresholds presented below correspond with the questions in the Appendix G Initial Study checklist.

For purposes of this EIR, a significant impact would occur if implementation of the Project would result in any of the following conditions:

A. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Important Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use

B. Conflict with existing zoning for agricultural use, or a Williamson Act contract

C. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))

D. Result in the loss of forest land or conversion of forest land to non-forest use

E. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use

3.2.4 Project Impact Analysis

For each impact, the discussion is separated into Project construction, Project operation, and Project components as needed to describe the potential impact. The overall conclusion or significance determination is presented at the end of the discussion, as well as in parentheses at the end of the numbered impact statement.

As described in Chapter 2, Project Description, the Project components include:

1. Transfer Stations (Transfer Station A and Transfer Station B)

2. Organics Diversion Facility (ODF Option 1 or ODF Option 2)
3. Landfill Closure and Revegetation
4. Optional Elements: a) Internal Access Road Improvements, b) Scale House Upgrades, c) Recycling Center Upgrades, d) Equipment Parking and Storage Area
5. General Plan/Local Coastal Program Land Use Designation and Zoning Map Amendments

Threshold A:	Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Important Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use

Impact AG-1 THE PROJECT WOULD NOT CONVERT IMPORTANT FARMLAND TO NON-AGRICULTURAL USE. (NO IMPACT)

The land in the Project area, as shown within the red boundary for "Landfill Redevelopment Project Limits" on **Figure 2-1**, is the County landfill and is not used for farming. It is classified as Urban and Built-Up Land on the California Department of Conservation Farmland Mapping and Monitoring Program (FMMP) (DOC 2026). A small portion of the Project area south of Rountree Lane/Harkins Slough Road intersection is identified as Other Land, which is the designation given to a variety of lands not suitable for livestock grazing or agricultural activities. This is the area where an optional Project element would pave the area for equipment parking and storage. No portion of the Project area is designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Important Farmland).

Therefore, the Project, including the primary components and optional improvements described above, as well as the associated General Plan/LCP land use designation and zoning map amendments, would not convert important farmland to non-agricultural use. There would be **No Impact**.

Threshold B:	Conflict with existing zoning for agricultural use, or a Williamson Act contract

Impact AG-2 THE PROJECT WOULD NOT CONFLICT WITH EXISTING ZONING FOR AGRICULTURAL USE OR A WILLIAMSON ACT CONTRACT. (LESS THAN SIGNIFICANT IMPACT)

The Buena Vista Landfill Redevelopment Project includes three key components: 1) Developing two new waste transfer stations at the existing landfill site to implement transfer station operations for waste handling and transport; 2) Improving the existing organics diversion process; and 3) Implementing the landfill closure and revegetation plan once site capacity is reached. The other components are 4) Optional elements (internal access road improvements, scale house, and recycling center upgrades, equipment parking and storage area) and 5) General Plan/LCP Land Use Designation and zoning map amendments (administrative updates to support the Project).

As stated above, the majority of the Project area is zoned Public and Community Facilities (PF-AIA), a portion of the Project area (35 acres) is zoned Commercial Agriculture and Airport Combining Zone (CA-AIA), and no portion of the Project area is enrolled in a Williamson Act contract. The 35 acres of the Project area zoned Commercial Agriculture and Airport Combining Zone (CA-AIA) is not currently being farmed or grazed, and there is no history of conventional farming or use of the property as rangeland (**Appendix B**). However, as currently zoned, some of the Project components (Transfer Station A, ODF Option 1, and optional equipment parking and storage area) would conflict with the existing zoning for agricultural use.

The Commercial Agriculture (CA) zone district use chart contained in Santa Cruz County Code, Section 13.10.312, does not allow the proposed uses. This zone district limits uses to agricultural production exclusively and incidental uses that support agricultural production. Principally permitted uses in the Commercial Agriculture (CA) zone include apiculture (bee keeping), berry and other vine crops, field crops, livestock raising, nursery crops, orchards, poultry and other fowl raising, and row crops. A range of other agricultural uses and associated uses, including farmworker housing, may be approved with administrative or Planning Commission review.

As stated above and described in Section 2.4, Project Components, the Project includes amendments to parcel APN 052-021-33, including General Plan/LCP Land Use Designation and zoning map amendments, to support the historical use of the property as a landfill and the proposed landfill redevelopment. This includes removal of the agricultural resources land Type 3 from the Agricultural Resource Map in the east portion of the Project area, where Transfer Station A (including the Harkins Slough Road realignment), ODF Option 1, and some of the optional improvements (internal access road improvements and equipment parking and storage area) are proposed. Any amendment to eliminate or add a Type 1, Type 2, or Type 3 agricultural land designation constitutes a change to the County General Plan/LCP and must be processed concurrent with a General Plan/LCP amendment. The amendment also requires a change to the General Plan/LCP Land Use Designation maps to redesignate the parcel's land use from Agriculture (A) to Public Facility/Institutional (P) and amending the County Zoning Map for this parcel from Commercial Agriculture and Airport Combining Zone (CA-AIA) to Public and Community Facilities (PF-AIA).

To support the proposed land use plan amendments and rezone from CA-AIA to PF-AIA, an Agricultural Viability Study for the Proposed Project (**Appendix B**) was prepared to conduct an agriculture-based evaluation of the condition and status of the 35 acres located in the eastern portion of land within APN 052-021-33. Based on the analysis, the study concluded that the 35-acre area was never wholly appropriate for use as designated Commercial Agriculture (CA). In addition, the study determined that the poor and highly variable soil quality, native vegetation, proximity to the wildlife refuge, and topography were not and are not suitable for farming, nor would it be suitable for farming upon cessation of the existing landfill activities.

Therefore, the Project, including the primary components and optional improvements described above, as well as the associated General Plan/LCP land use designation and zoning map amendments, would not conflict with the existing zoning for agricultural use, nor a Williamson Act contract. The impact would be **Less than Significant**. No mitigation is required.

Threshold C:	Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))
Threshold D:	Result in the loss of forest land or conversion of forest land to non-forest use

Impact AG-3 THE PROJECT WOULD NOT CONFLICT WITH EXISTING ZONING FOR, OR CAUSE REZONING OF, FOREST LAND OR TIMBERLAND, OR RESULT IN THE LOSS OF FOREST LAND OR CONVERSION OF FOREST LAND TO NON-FOREST USE. (NO IMPACT)

The Project area is not considered by the County to be forest land, and it is not zoned TP (Timber Production District), a designation which is intended for growing and harvesting timber and other forest products. Therefore, the Project would not convert forest land to a non-forest use, nor conflict with existing zoning or cause rezoning of forest land or timberland.

The Project area currently includes two zoning designations, Public and Community Facilities and Airport Combining Zone (PF-AIA) and Commercial Agriculture and Airport Combining Zone (CA-AIA), and the Project includes rezoning the 35-acre portion of APN 052-021-33 from CA-AIA to PF-AIA. Timber production and harvesting is only permitted in CA-AIA zoning districts located outside the Coastal Zone, and it is not a permitted use in the PF-AIA zoning district. The Project area is located in the Coastal Zone. Therefore, timberland production is not a permitted use in the Project area under the current or proposed zoning.

In summary, the Project, including the primary components and optional improvements described above, as well as the associated General Plan/LCP land use designation and zoning map amendments, would not conflict with existing zoning for, or cause rezoning of, forest land or timberland, or result in the loss of forest land or conversion of forest land to non-forest use. There would be **No Impact**.

Threshold E:	Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or forest land to non-forest use

Impact AG-4 THE PROJECT WOULD NOT INVOLVE OTHER CHANGES IN THE EXISTING ENVIRONMENT WHICH COULD RESULT IN CONVERSION OF FARMLAND TO NON-AGRICULTURAL USE OR FOREST LAND TO NON-FOREST USE. (LESS THAN SIGNIFICANT IMPACT)

As discussed under Impact AG-1, the Project area is classified as Urban and Built-Up Land, with a small portion classified as Other Land, on maps prepared for the FMMP. The Project area does not include land used for farming or land classified as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. Therefore, the Project would not be converting farmland to a non-agricultural use.

As discussed under Impact AG-3, the Project area is not used or zoned for forest land, timberland, or timberland production. There are some trees located in the northeast corner of the landfill property that would be removed to construct Transfer Station A and realign Harkins Slough Road, but the County does not consider this area “forest land.” The undeveloped site is currently used for landfill storage, and there are approximately 10 storage containers (i.e., small shipping containers) on the site. The potential impacts associated with tree removal for Project construction are addressed in Section 3.4, Biological Resources. Therefore, the Project would not result in changes to the existing environment that could result in the conversion of farmland to non-agricultural uses or forest land to non-forest uses.

In summary, the Project, including the primary components and optional improvements described above, as well as the associated General Plan/LCP land use designation and zoning map amendments, would not involve other changes in the existing environment which, due to their location or nature, could result in conversion of farmland to non-agricultural use or forest land to non-forest use. The impact would be **Less than Significant**. No mitigation is required.

3.3 Air Quality

This section describes existing regional air quality, outlines the regulatory framework applicable to air quality management, and evaluates impacts related to criteria air pollutant emissions as a result of the Buena Vista Landfill Redevelopment Project (Project) construction and operation. **Table 3.3-1** presents a summary of potential impacts related to air quality.

Table 3.3-1. Summary of Project Impacts Related to Air Quality

Impact	Significance before Mitigation	Mitigation	Significance after Mitigation
AIR-1. The Project would not conflict with or obstruct implementation of the adopted MBARD AQMP.	Less than Significant	None Required	Less than Significant
AIR-2. The Project would not result in a cumulatively considerable net increase of any criteria pollutant for which the region is designated non-attainment.	Less than Significant	None Required	Less than Significant
AIR-3. The Project would not expose sensitive receptors to substantial pollutant concentrations.	Less than Significant	None Required	Less than Significant
AIR-4. The Project would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.	Less than Significant	None Required	Less than Significant

Notes: The impact, significance determination, and mitigation apply to the Project as a whole, considering all project components, unless otherwise noted.

AQMP = Air Quality Management Plan; MBARD = Monterey Bay Air Resources District

3.3.1 Existing Conditions

Regional and Project Area Setting

Climate and Topography

The Project area is located in the North Central Coast Air Basin (NCCAB). The NCCAB is composed of Monterey, Santa Cruz, and San Benito Counties and covers an area of more than 5,100 square miles. The air basin features varied vegetation, climate, and geography and includes portions of several mountain ranges, the Santa Lucia and Gabilan Range in Monterey and San Benito Counties, the southern portion of the Santa Cruz Mountains in Santa Cruz County, and the Diablo Range in the eastern half of San Benito County. The coastal terraces in the Santa Cruz area; the flat plains surrounding Watsonville, Salinas, and King Cities; and the southern Santa Clara Valley are markedly defined by these mountain ranges. The northwestern sector of the NCCAB, where the Project area is located, is dominated by the Santa Cruz Mountains (Santa Cruz County 2022).

The Pacific high-pressure cell (Pacific High), a semi-permanent high-pressure cell in the eastern Pacific Ocean, is the controlling factor in the NCCAB's climate. In the summer, the high-pressure cell is dominant and causes persistent west and northwest winds over the entire California coast. Air descends from the Pacific High and warms and dries as it descends, resulting in generally sunny skies and dry weather (NOAA 2024). The relatively cooler temperature of the Pacific Ocean creates a layer of cool air directly over the ocean. This stable temperature inversion of warm air over a cooler coastal layer of air creates an onshore air current that passes over cool ocean waters to bring fog

and relatively cool air into the coastal valleys. The warmer aloft air acts as a lid that inhibits vertical air movement and allows air pollutants to concentrate in the lower level.

The generally northwest–southeast orientation of mountainous ridges tends to restrict and channel the summer onshore air currents. Surface heating in the interior portion of the Salinas and San Benito Valleys creates a weak low pressure that intensifies the onshore air flow during the afternoon and evening.

In the fall, the surface winds become weak, and the marine layer grows shallow, dissipating altogether on some days. The airflow is occasionally reversed in a weak offshore movement, and the relatively stationary air mass is held in place by the Pacific High, which allows pollutants to build up over a period of a few days. It is most often during this season that north or east winds develop, transporting pollutants from either the San Francisco Bay Area or the Central Valley into the NCCAB.

During the winter, the Pacific High migrates southward and has less influence on the NCCAB. Air frequently flows in a southeasterly direction out of the Salinas and San Benito Valleys, especially during night and morning hours. The general absence of deep, persistent inversions and occasional storm systems usually result in good air quality for the basin as a whole in winter and early spring.

In the Project area, average annual temperatures in degrees Fahrenheit are relatively stable and range from winter lows in the upper 30s to summer highs in the middle 70s (WRCC 2024). The total average annual precipitation is approximately 29.33 inches, with the majority of rainfall occurring from November through March.

Air Pollutants of Primary Concern

The federal and state Clean Air Acts mandate the control and reduction of certain air pollutants. Under these acts, the U.S. Environmental Protection Agency (USEPA) and the California Air Resources Board (CARB) have established ambient air quality standards (AAQS) for certain "criteria pollutants" considered harmful to public health and the environment. Ambient air pollutant concentrations are affected by the rates and distributions of corresponding air pollutant emissions and by the climatic and topographic influences discussed above. The primary determinant of concentrations of non-reactive pollutants (such as carbon monoxide [CO] and particulate matter) is proximity to major sources. Ambient CO levels in particular usually closely follow the spatial and temporal distributions of vehicular traffic. A discussion of primary criteria air pollutants is provided below.

OZONE

Ozone is a colorless gas with a pungent odor. Most ozone in the atmosphere is formed as a result of the interaction of ultraviolet light, reactive organic gases (ROGs), and oxides of nitrogen (NO_x). ROG (the organic compound fraction relevant to ozone formation and sufficient equivalent for the purposes of this analysis to volatile organic compounds [VOCs][1]) is composed of non-methane hydrocarbons (with some specific exclusions), and NO_x is made of different chemical combinations of nitrogen and oxygen, mainly nitric oxide (NO) and nitrogen dioxide (NO_2). A highly reactive molecule, ozone readily combines with many different components of the atmosphere. Consequently, high levels of ozone tend to exist only while high ROG and NO_x levels are present to sustain the ozone formation process. Once the precursors have been depleted, ozone levels rapidly decline. Because these reactions occur on a regional rather than local scale, ozone is considered a regional pollutant.

[1] ROG is equal to VOC per Monterey Bay Air Resources District Rule 101, 2.32.

CARBON MONOXIDE

CO is an odorless, colorless, gas. CO causes a number of health problems, including fatigue, headache, confusion, and dizziness. The incomplete combustion of petroleum fuels in on-road vehicles and at power plants is a major cause of CO. CO is also produced during the winter from wood stoves and fireplaces. CO tends to dissipate rapidly into the atmosphere; consequently, violations of the state CO standard are generally associated with major roadway intersections during peak hour traffic conditions. Localized CO "hotspots" can occur at intersections with heavy peak hour traffic.

NITROGEN DIOXIDE

NO_2 is a by-product of fuel combustion, with the primary source being motor vehicles and industrial boilers and furnaces. The principal form of nitrogen oxide produced by combustion is NO, but NO reacts rapidly to form NO_2, creating the mixture of NO and NO_2 commonly called NO_x. NO_2 is an acute irritant. A relationship between NO_2 and chronic pulmonary fibrosis may exist, and an increase in bronchitis in young children at concentrations below 0.3 parts per million (ppm) may occur. NO_2 absorbs blue light and causes a reddish brown cast to the atmosphere and reduced visibility. It can also contribute to the formation of particulate matter 10 microns or less in size (PM_{10}) and acid rain.

PARTICULATE MATTER

Suspended particulate matter (airborne dust) consists of particles small enough to remain suspended in the air for long periods. Fine particulate matter includes particles small enough to be inhaled, pass through the respiratory system, and lodge in the lungs, with resultant health effects. Particulate matter can include materials such as sulfates and nitrates, which are particularly damaging to the lungs. Health effects studies resulted in revision of the Total Suspended Particulate Standard in 1987 to focus on particulates that are small enough to be considered "inhalable," (i.e., 10 microns or less in size). In July 1997, a further revision of the federal standard added criteria for particulate matter 2.5 microns or less in size ($PM_{2.5}$), reflecting recent studies that suggested that particulates less than 2.5 microns in diameter are of particular concern.

Current Air Quality

Federal and state standards have been established for ozone, CO, NO_2, sulfur dioxide (SO_2), lead, and fine particulates (PM_{10} and $PM_{2.5}$). **Table 3.3-2** summarizes the current federal and state standards for each of these pollutants. The primary standards listed below have been set at levels intended to protect public health. California standards are generally more restrictive than federal standards. Depending on if the standards are met or exceeded, the local air basin is classified as in "attainment" or in "non-attainment."

Table 3.3-2. Current Federal and State Ambient Air Quality Standards

Pollutant	Averaging Time	Federal Primary Standards	California Standard
Ozone	1-Hour	—	0.09 ppm
	8-Hour	0.070 ppm	0.070 ppm
Carbon Monoxide (CO)	8-Hour	9 ppm	9 ppm
	1-Hour	35 ppm	20 ppm
Nitrogen Dioxide (NO_2)	Annual	0.053 ppm	0.030 ppm
	1-Hour	0.1 ppm	0.18 ppm
Sulfur Dioxide (SO_2)	24-Hour	0.14 ppm	0.04 ppm
	1-Hour	0.075 ppm	0.25 ppm
Respirable Particulate Matter (PM_{10})	Annual	—	20 µg/m^3
	24-Hour	150 µg/m^3	50 µg/m^3
Fine Particulate Matter ($PM_{2.5}$)	Annual	9 µg/m^3	12 µg/m^3
	24-Hour	35 µg/m^3	—
Lead	30-Day Average	—	1.5 µg/m^3
	3-Month Average	0.15 µg/m^3	—

Source: CARB 2024a.

The Monterey Bay Air Resources District (MBARD) consists of all three counties in the NCCAB, including Santa Cruz County; therefore, the Project area is under the jurisdiction of the MBARD. The MBARD is responsible for air monitoring, permitting, enforcement, long-range air quality planning, regulatory development, education, and public information activities related to air pollution in the NCCAB. The MBARD monitors ambient air quality in the NCCAB at monitoring stations located in Carmel Valley, Davenport, Hollister, Salinas, Santa Cruz, Scotts Valley, and Watsonville.

The MBARD monitors air pollutant levels to measure and determine if air quality standards are met and, if they are not met, to develop strategies to meet the standards. As indicated above, depending on if the standards are met or exceeded, the air basin is classified as being in "attainment" or in "non-attainment," respectively. **Table 3.3-3** summarizes the federal and state attainment status for criteria air pollutants.

As shown in **Table 3.3-3**, the NCCAB is in attainment or unclassifiable status for all federal AAQS. For state AAQS, the NCCAB is currently in non-attainment status for respirable particulate matter (PM_{10}).

Table 3.3-3. Santa Cruz County Air Basin Attainment Status

Pollutant	Averaging Time	California Standards	Federal Standards
Ozone	1-Hour	Attainment	No Federal Standard
	8-Hour		Attainment
Respirable Particulate Matter (PM_{10})	Annual Arithmetic Mean	Non-Attainment	No Federal Standard
	24-Hour		Unclassified[a]
Sulfur Dioxide (SO_2)	24-Hour	Attainment	Unclassified/Attainment
	1-Hour		
Fine Particulate Matter ($PM_{2.5}$)	Annual Arithmetic Mean	Attainment	Attainment
	24-Hour	No State Standard	
Carbon Monoxide (CO)	8-Hour	Unclassified	Unclassified/Attainment
	1-Hour		
Nitrogen Dioxide (NO_2)	Annual Arithmetic Mean	No State Standard	Unclassified/Attainment
	1-Hour	Attainment	No Federal Standard

Source: CARB 2022a.
Notes:
[a] Unclassified; indicates data are not sufficient for determining attainment or non-attainment.
Attainment = Meeting air quality standards; Non-attainment = Exceeding air quality standards

Table 3.3-4 summarizes available annual air quality data for the County for the most recent years available at the MBARD's Soquel Avenue monitoring station and the San Juan Bautista-Nyland monitoring station. The Soquel Avenue monitoring station, located at 2544 Soquel Avenue in Santa Cruz (11 miles northwest of the Project area), is the closest station to the Project area. The San Juan Bautista-Nyland monitoring station, located at 100 Nyland Drive in San Juan Bautista (16 miles southeast of the Project area), is the closest station to monitor PM_{10} in the NCCAB that has data available for multiple years. The data collected at the MBARD-operated stations is shown in **Table 3.3-4**.

Table 3.3-4. Ambient Air Quality Data

Pollutant	Monitoring Station	2021	2022	2023
Ozone, ppm – Worst Hour	Soquel Avenue	0.072	0.060	0.070
Number of Days of State Exceedances (>0.09 ppm)		0	0	0
Ozone, ppm – Worst 8-Hour Average	Soquel Avenue	0.058	0.050	0.054
Number of Days of Federal/State Exceedances (>0.07 ppm)		0	0	0
Particulate Matter <10 microns, $\mu g/m^3$ Worst 24 Hours	San Juan Bautista-Nyland	56.1	53.4	79.8
Number of Samples of State Exceedances (>50 $\mu g/m^3$)		2	2	2
Number of Samples of Federal Exceedances (>150 $\mu g/m^3$)		0	0	0
Particulate Matter <2.5 microns, $\mu g/m^3$ Worst 24 Hours	Soquel Avenue	17.5	14.7	47.4
Number of Days Federal Exceedances		0	0	1

Source: CARB 2024b.
Notes: $\mu g/m^3$ = micrograms per cubic meter; ppm = parts per million

Given that the NCCAB is designated as non-attainment for PM_{10}, this is the primary pollutant of concern for the NCCAB. As indicated in **Table 3.3-4**, average PM_{10} concentrations exceeded the state standard for PM_{10} twice in each year from 2021 to 2023.

Sensitive Receptors

Certain population groups are more sensitive to air pollution than others, in particular children, older adults, and people with acute and chronic illnesses, especially those with cardio-respiratory diseases. As described in the MBARD's 2008 California Environmental Quality Act (CEQA) Air Quality Guidelines (MBARD Guidelines), a sensitive receptor is defined as any residence, including private homes, condominiums, apartments, and living quarters; education resources, such as preschools and kindergarten through grade 12 (K–12) schools; daycare centers; and healthcare facilities, such as hospitals or retirement and nursing homes (MBARD 2008). Residences and living quarters are located south of the Project area and include the Buena Vista Migrant Center (farmworker housing and childcare facility) and the Tierra Alta affordable housing complex on Tierra Alta Drive, as well as the Rountree Medium (Jail) Facility on Roundtree Lane (**Figure 2-1**, Project Overview).

3.3.2 Regulatory Setting

This section describes the federal, state, regional, and local plans, policies, and laws relevant to air quality for the Project.

Federal

Clean Air Act and National Ambient Air Quality Standards

The Clean Air Act (CAA) of 1970 is the comprehensive federal law that regulates air emissions from stationary and mobile sources. The CAA authorizes the USEPA to establish National Ambient Air Quality Standards to protect public health and public welfare and to regulate emissions of hazardous air pollutants. Current National Ambient Air Quality Standards are listed in **Table 3.3-2**.

The USEPA has classified air basins (or portions thereof) as being in "attainment," "non-attainment," or "unclassified" for each criteria air pollutant based on if the National Ambient Air Quality Standards have been achieved. If an area is designated unclassified, it is because inadequate air quality data was available as a basis for a non-attainment or attainment designation. **Table 3.3-3** lists the attainment status of the NCCAB for the criteria air pollutants. The NCCAB is in attainment or unclassified for all criteria air pollutants.

The CAA was amended in 1990 to better address hazardous air pollutants (Title III). Title III offers a comprehensive plan for achieving significant reductions in emissions of hazardous air pollutants from major sources. It includes a list of 189 toxic air pollutants of which emissions must be reduced. The USEPA maintains and updates a list of source categories including (1) major sources emitting 10 tons per year of any one, or 25 tons per year of any combination, of those pollutants, and (2) area sources (smaller sources, such as dry cleaners). As required by Title III, the USEPA developed Maximum Achievable Control Technology standards. Maximum Achievable Control Technology standards use the hazardous air pollutant emissions of the best-performing industry sources to set the "Maximum Achievable Control Technology floor," which becomes the minimum standard that an industry must at least meet to comply with the CAA.

State

California Clean Air Act and California Ambient Air Quality Standards

As a part of the California Environmental Protection Agency, CARB is responsible for the coordination and administration of both federal and state air pollution control programs in

California. The federal CAA allows states to adopt AAQS and other regulations provided that they are at least as stringent as federal standards. The California CAA became effective in 1989 and requires all areas of the state to attain the state AAQS at the earliest practicable date. To that end, California has adopted ambient standards, California Ambient Air Quality Standards, that are equal to or stricter than the federal standards for six criteria air pollutants. The California Ambient Air Quality Standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations and are provided in **Table 3.3-2**. Similar to the federal CAA, areas have been designated as attainment, non-attainment, or unclassified with respect to the California Ambient Air Quality Standards. The NCCAB is currently in state non-attainment status for respirable particulate matter (PM_{10}).

Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles

In September 2000, CARB approved the Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles (CARB 2000). The plan outlines a comprehensive and ambitious program that includes the development of numerous control measures aimed at substantially reducing emissions from new and existing on-road vehicles (e.g., heavy-duty trucks and buses), off-road equipment (e.g., graders, tractors, forklifts, sweepers, and boats), portable equipment (e.g., pumps), and stationary engines (e.g., stand-by power generators). CARB has adopted several regulations that reduce diesel emissions from in-use vehicles and engines throughout California. In some cases, the particulate matter reduction strategies also reduce smog-forming emissions, such as NOx. As an ongoing process, CARB reviews air contaminants and identifies those that are classified as toxic air contaminants. CARB also continues to establish new programs and regulations for the control of toxic air contaminants, including diesel particulate matter, as appropriate.

Air Quality and Land Use Handbook

In 2005, CARB's Community Health Program made available the Air Quality and Land Use Handbook: A Community Health Perspective to serve as a general reference guide for evaluating and reducing air pollution impacts associated with new projects that go through the land use decision-making process (CARB 2005). The recommendations in the handbook are voluntary and do not constitute a requirement or mandate for either land use agencies or local air districts.

Regional

The MBARD regulates air quality in the NCCAB and is responsible for attainment planning related to criteria air pollutants and for district rule development and enforcement. It also reviews air quality analyses prepared for CEQA assessments and published the MBARD Guidelines (last revised February 2008) for use in the evaluation of air quality impacts (MBARD 2008). The purpose of the MBARD Guidelines is to assist in the review and evaluation of air quality impacts from projects that are subject to CEQA. The MBARD Guidelines are an advisory document intended to provide lead agencies, consultants, and Project proponents with uniform procedures for assessing potential air quality impacts and preparing the air quality section of environmental documents. The MBARD Guidelines are also intended to help these entities anticipate areas of concern from the MBARD in its role as a lead, commenting, and/or responsible agency for air quality.

During construction, an impact would occur if a project would cause a violation of PM_{10} AAQS at nearby or upwind of sensitive receptors by emitting more than 82 pounds (lbs)/day of PM_{10}. Ozone

impacts during construction would potentially occur if a project uses equipment that is not "typical construction equipment." Typical construction equipment includes but is not limited to dump trucks, scrapers, bulldozers, compactors, and front-end loaders. Construction projects using typical construction equipment are accommodated in the emission inventories of federally and state-required air plans and would not have a significant impact.

During operation, a project is considered to have a significant impact if it would:

- Generate direct (area source or stationary) plus indirect (operational or mobile) emissions of either ROG or NO_x that exceed 137 lbs/day
- Generate on-site emissions of PM_{10} exceeding 82 lbs/day
- Generate direct emissions of CO exceeding 550 lbs/day
- Generate direct emissions of sulfur oxides (SO_X) exceeding 150 lbs/day

The MBARD Guidelines state that the 82 lbs/day threshold for construction emissions of PM_{10} is the threshold for both individual and cumulative impacts on local air quality. Projects that are inconsistent with the Air Quality Management Plan (AQMP), described below, would result in a significant cumulative impact related to ozone emissions. A project is consistent with the AQMP if it is consistent with the growth assumptions in the AQMP and is, therefore, accommodated in the emissions inventories.

For impacts related to CO, the MBARD Guidelines indicate that any of the following traffic effects should be assumed to generate a significant CO impact unless CO dispersion modeling demonstrates otherwise:

- Intersections or road segments that operate at level of service (LOS) D or better that would operate at LOS E or F with the project's traffic
- Intersections or road segments that operate at LOS E or F where the volume-to-capacity ratio would increase 0.05 or more with the project's traffic
- Intersections that operate at LOS E or F where delay would increase by 10 seconds or more with the project's traffic
- Unsignalized intersections that operate at LOS E or F where the reserve capacity would decrease by 50 or more with a project's traffic (this criterion is based on the turning movement with the worst reserve capacity)
- Project would generate substantial heavy-duty truck traffic or generate substantial traffic along urban street canyons or near a major stationary source of CO

In accordance with the California CAA, the MBARD has developed an AQMP (MBARD 2017). The focus of the plan is achieving the 8-hour ozone standard in the region. The plan includes an updated air quality trends analysis; emissions inventory that includes the latest information on stationary, area, and mobile emission sources; and mobile source programs.

Local

Santa Cruz County General Plan/Local Coastal Program

Protection of air quality is incorporated into several elements of the County of Santa Cruz's (County) General Plan/Local Coastal Program (LCP). Built Environment Element strategy BE-3.1c requires buffer zones between new industrial land uses and sensitive receptors in accordance with CARB siting recommendations, and Policy BE-5.1g requires new coastal-dependent industry to implement all applicable MBARD regulations. Objective AM-1.1 of the Access and Mobility Element is to reduce

emissions through reducing vehicle miles traveled and increasing clean vehicle usage. Additionally, the Public Safety Element includes requirements that new emission sources mitigate emissions such that the facility would not contribute to non-attainment of AAQS or substantially deteriorate conditions.

Santa Cruz County Code

Chapter 16.92 of the County Code, Environmental Principles and Policies to Guide County Government, includes a policy to ensure that future development does not create unacceptable levels of air pollution.

3.3.3 Methodology and Significance Thresholds

Methodology

The analysis of air quality impacts follows the guidance and methodologies recommended in the MBARD Guidelines and in Appendix G of the CEQA Guidelines.

The construction and net increase operation criteria air pollutant emissions for the Project are estimated using the California Emissions Estimator Model (CalEEMod), Version 2022.1.1.28.

Construction assumptions are provided by the Project design engineer. These assumptions include anticipated construction equipment, schedule, and earth movement, which are summarized in Section 2.6, Project Construction. Additionally, planned construction best management practices are included in Section 2.6.5. These include limiting vehicle speeds on unpaved roads to a maximum of 25 miles per hour and watering exposed dirt surfaces in active construction areas twice daily.

Operational emissions assume default assumptions for the CalEEMod manufacturing land use, except where Project-specific information is available. The manufacturing land use was determined to be the most representative of Project operation because it is intended to represent land uses where the primary activity is the conversion of raw materials into finished products, and generally also has office functions at the site. A gasoline service station is conservatively assumed for up to four pump stations at the optional equipment parking and storage facility. No new natural gas use would occur as a result of Project implementation. New materials handling and heating, ventilation, and air conditioning systems would include electric-powered equipment. Net increase in vehicle trips is based on data from the transportation analysis (**Appendix L**), and the Project vehicle fleet was modified to reflect the proportion of new trips attributable to truck trips. A net increase of 24 trucks per day (48 daily truck trips) is anticipated for the transfer of materials from Buena Vista Landfill to the ReGen Monterey Landfill. Ten additional personal vehicles trips are also assumed. Operation assumes intermittent use of a new forklift and loader at each new transfer station, and use of a new loader, excavator, and water truck at the organics diversion facility (ODF). The assumption of a net increase in equipment is conservative because similar off-road equipment currently operates on the site that would no longer operate following landfill closure.

ODF Option 2 is conservatively assumed to represent ODF operation emissions because of the new composting component, to provide a conservative analysis if ODF Option 1 or ODF Option 2 is approved and implemented.

Operational modeling does not specifically include the implementation of the landfill closure plan, internal access road improvements, scale house upgrades, or optional recycling center upgrades because these components would be passive or substantially similar to existing conditions following construction.

Additionally, modeling conservatively assumes that internal access road improvements to pave roads would not be implemented, and approximately one mile of each new vehicle trip would be on an unpaved road. This conservative assumption is assumed to also cover fugitive dust from compost preprocessing at either ODF option. Dust suppression water would be applied regularly during ODF operation, as outlined in Section 2.4, Project Components.

Organics composting at ODF Option 2, if selected, would have the potential to generate VOC and ammonia (NH_3) emissions from the composting process. San Joaquin Valley Air Pollution Control District conducted a review of composting facilities to establish compost emissions factors (SJVAPCD 2010). In a summary of the most relevant data, facilities with mass-bed aerated static pile (MASP) system and biofilters, similar to the Project, were calculated to have emissions factor of approximately 0.2 lbs/VOC per ton of material throughput. The entire ODF Option 2 MASP system would have a volumetric capacity of around 50,000 cubic yards and could process an estimated 160,000 tons per year. The average annual capacity of 160,000 tons is used to calculate average daily VOC emissions from ODF Option 2 composting. MBARD does not have an adopted quantitative threshold for NH_3 emissions. Some NH_3 emissions may be converted to $PM_{2.5}$ or NOx; however, due the variety of factors that may influence these reactions, it would be overly conservative to apply the $PM_{2.5}$ or NOx threshold to NH_3 emissions and this pollutant is addressed qualitatively.

Modeling also conservatively assumes installation of fuel pumps at the optional equipment storage and parking area component. Fuel pumps, if installed, would result in some VOC emissions from spillage and other typical activities that result in the release of vapors. The emissions factor for gasoline or diesel pumps depends on the level of vapor control installed at the pump or on equipment (CARB 2022b; SCAQMD 2022). Fuel pumps, if installed, would comply with all applicable MBARD regulations related to gasoline and diesel dispensing facilities. Future fuel consumption is estimated based on existing fuel use at Buena Vista Landfill and for activities similar to proposed uses at Ben Lomond transfer station. A vapor recovery system similar to the Phase II Enhanced Vapor Recovery system installed at Ben Lomond transfer station is assumed for gasoline pumps. Due to the variety of equipment that may be fueled for landfill operation, individual pieces of equipment may be exempt from on-board refueling vapor recovery requirements. Therefore, worst-case emissions with no vapor recovery systems is assumed for equipment. Detailed assumptions for fuel consumption are provided in **Appendix F**.

CO hotspots are qualitatively evaluated based on the traffic data provided for the Project in **Appendix L**. To determine if the Project would conflict with or obstruct implementation of the 2012–2015 AQMP, the Project is compared to AQMP strategies and growth assumptions for the County of Santa Cruz in accordance with the MBARD Guidelines.

Significance Thresholds

The introduction in Chapter 3, Environmental Impact Analysis, states that the significance thresholds used in this analysis are based on Appendix G of the CEQA Guidelines, which provides a sample Initial Study checklist that includes a number of factual inquiries related to the subject of air quality and the other environmental topics. For air quality, CEQA Guidelines Appendix G states that “where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon” in making significance determinations. Thus, the County uses the MBARD Guidelines.

For the purposes of this Environmental Impact Report, a significant impact would occur if implementation of the Project would result in any of the following conditions:

A. Conflict with or obstruct implementation of the adopted MBARD AQMP.

B. Result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is non-attainment under an applicable federal or state ambient air quality standard.

C. Expose sensitive receptors to substantial pollutant concentrations.

D. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

3.3.4 Project Impact Analysis

For each impact, the discussion is separated into Project construction, Project operation, and Project components as needed to describe the potential impact. The overall conclusion or significance determination is presented at the end of the discussion, as well as in parentheses at the end of the numbered impact statement.

As described in Chapter 2, Project Description, the Project components include:

1. Transfer Stations (Transfer Station A and Transfer Station B)
2. Organics Diversion Facility (ODF Option 1 and ODF Option 2)
3. Landfill Closure and Revegetation
4. Optional Improvements: a) Internal Access Road Improvements, b) Scale House Upgrades, c) Recycling Center Upgrades, d) Equipment Parking and Storage Area
5. General Plan/Local Coastal Program Land Use Designation and Zoning Map Amendments

Threshold A: Conflict with or obstruct implementation of the adopted MBARD AQMP.

Impact AIR-1 THE PROJECT WOULD NOT CONFLICT WITH OR OBSTRUCT IMPLEMENTATION OF THE ADOPTED MBARD AQMP. (LESS THAN SIGNIFICANT IMPACT)

According to the MBARD Guidelines, a project would conflict with or obstruct implementation of the AQMP for the NCCAB if it is inconsistent with the growth assumptions included in the AQMP in terms of population, employment, or regional growth in vehicle miles traveled (MBARD 2008). The growth assumptions inform estimated future emissions, particularly from vehicle use.

The Project does not contain new residential or commercial components and, therefore, would not increase the residential population or employment in the area. The Project results in changes to operation from redevelopment activities at the existing Buena Vista Landfill, including the five Project components listed above, to meet solid waste disposal needs from current use and from anticipated countywide population growth, as the landfill reaches capacity.

Construction of the Project would generate temporary employment opportunities, which could be filled by the existing workforce in the city, county, or immediately surrounding areas, such as the San Francisco Bay Area and Monterey Bay Area. No direct growth inducement is expected to result from Project implementation.

The AQMP outlines strategies for reducing vehicle-related emissions of ozone precursors. The 2012–2015 AQMP mobile source programs include a focus on direct emissions reduction. That is, the AQMP introduces programs that target consumer vehicle choices, including incentives for purchase

or lease of electric vehicles, funding for electric vehicle infrastructure, and voluntary accelerated vehicle retirement programs for older vehicles. These programs focus on the choices of individual consumers. Implementation of the Project (operation of the Project) is not related to consumer vehicle choice, and the Project would have no impact on implementation of these AQMP mobile source programs. However, implementation of the optional equipment parking and storage area would support electrification of the waste vehicle fleet through installation of electric vehicle charging stations for transfer station vehicles. It is anticipated that County's diesel trucks will be replaced by alternative fuel vehicles over time.

In summary, the Project, including the primary components and optional improvements described above, as well as the associated General Plan/LCP land use designation and zoning map amendments, would be consistent with AQMP growth assumptions and emissions reduction goals. Therefore, the Project would not conflict with or obstruct implementation of the adopted MBARD AQMP. The impact would be **Less than Significant**. No mitigation is required.

Threshold B:	Result in a cumulatively considerable net increase of any criteria air pollutant for which the Project region is non-attainment under an applicable federal or state ambient air quality standard.

Impact AIR-2 THE PROJECT WOULD NOT RESULT IN A CUMULATIVELY CONSIDERABLE NET INCREASE OF ANY CRITERIA AIR POLLUTANT FOR WHICH THE REGION IS DESIGNATED NON-ATTAINMENT. (LESS THAN SIGNIFICANT IMPACT)

Construction and operation of each component are addressed separately below. However, because construction of components would overlap, and components would operate simultaneously within the landfill boundary, cumulative emissions from all components are also evaluated. The construction and operation scenarios that include all Project components are included under the discussion of the transfer stations, and referenced to under the remaining components.

Transfer Stations (Transfer Station A and Transfer Station B)

Construction and operational impacts of the transfer stations are addressed separately below.

Construction

The NCCAB is in non-attainment of the state PM_{10} standard. Regarding construction impacts, the MBARD Guidelines state that the 82 lbs/day threshold for construction emissions of PM_{10} is the threshold for both individual and cumulative impacts on local air quality since the background concentration reflects the collective contribution of PM_{10} from nearby sources.

Construction of the transfer stations would result in the temporary generation of air pollutants from operation of heavy construction equipment and generation of fugitive dust in the construction area and emissions from worker vehicle trips and hauling of import and export materials. Maximum daily emissions levels associated with construction of Transfer Station A are shown in **Table 3.3-5**, and emissions from Transfer Station B are shown in **Table 3.3-6**. The MBARD has only adopted a quantitative threshold for PM_{10} emissions during construction; however, emissions from the other criteria air pollutants are also provided for informational purposes. **Table 3.3-7** summarizes maximum daily emissions for each year for all Project components, based on the anticipated schedule outlined in Section 2.6.

Table 3.3-5. Estimated Construction Daily Maximum Air Pollutant Emissions (lbs/day) – Transfer Station A

Construction Phase	VOC	NOx	CO	SO_x	PM_{10}	$PM_{2.5}$
Site Preparation	3	28	29	<1	11	5
Grading	2	28	24	<1	41	6
Building Construction	1	10	14	<1	3	1
Paving	1	6	10	<1	3	1
Architectural Coating	33	1	1	<1	<1	<1
Maximum Daily Emissions	**33**	**28**	**29**	**<1**	**41**	**6**
MBARD Threshold	—	—	—	—	82	—
Significant Impact?	—	—	—	—	No	—

Source: CAPCOA 2022 (CalEEMod Version 2022.1.1.29).

Notes: Emission quantities are rounded to the nearest whole number. Exact values are provided in **Appendix F**, Air Quality and GHG Modeling Assumptions.

CO = carbon monoxide; MBARD = Monterey Bay Air Resources District; NO_x = oxides of nitrogen; $PM_{2.5}$ = particulate matter 2.5 microns or less in size; PM_{10} = particulate matter 10 microns or less in size; SO_x = sulfur oxides; VOC = volatile organic compound

Table 3.3-6. Estimated Construction Daily Maximum Air Pollutant Emissions (lbs/day) – Transfer Station B

Construction Phase	VOC	NOx	CO	SO_x	PM_{10}	$PM_{2.5}$
Demolition	2	19	19	<1	7	1
Site Preparation	<1	<1	1	<1	5	1
Grading	2	15	19	<1	14	3
Building Construction	1	9	13	<1	6	1
Paving	1	6	10	<1	6	1
Architectural Coating	29	1	1	<1	1	<1
Maximum Daily Emissions	**29**	**19**	**19**	**<1**	**14**	**3**
MBARD Threshold	—	—	—	—	82	—
Significant Impact?	—	—	—	—	No	—

Source: CAPCOA 2022 (CalEEMod Version 2022.1.1.29).

Notes: Emission quantities are rounded to the nearest whole number. Exact values are provided in **Appendix F**.

CO = carbon monoxide; MBARD = Monterey Bay Air Resources District; NO_x = oxides of nitrogen; $PM_{2.5}$ = particulate matter 2.5 microns or less in size; PM_{10} = particulate matter 10 microns or less in size; SO_x = sulfur oxides; VOC = volatile organic compound

Table 3.3-7. Simultaneous Construction Daily Maximum Air Pollutant Emissions (lbs/day) – All Project Components

Construction Year	VOC	NOx	CO	SO_x	PM_{10}	$PM_{2.5}$
2027	45	69	73	<1	59	13
2028	3	33	32	<1	41	6
2029	32	57	60	<1	56	11
2030	1	7	11	<1	10	1
Maximum Daily Emissions	**45**	**69**	**79**	**<1**	**59**	**13**
MBARD Threshold	—	—	—	—	82	—
Significant Impact?	—	—	—	—	No	—

Source: CAPCOA 2022 (CalEEMod Version 2022.1.1.29).

Notes: Emission quantities are rounded to the nearest whole number. Exact values are provided in **Appendix F**.

CO = carbon monoxide; MBARD = Monterey Bay Air Resources District; NO_x = oxides of nitrogen; $PM_{2.5}$ = particulate matter 2.5 microns or less in size; PM_{10} = particulate matter 10 microns or less in size; SO_x = sulfur oxides; VOC = volatile organic compound

As shown in **Table 3.3-5** and **Table 3.3-6**, construction of the transfer stations is estimated to generate a maximum of 41 lbs/day of PM_{10} during construction, which is below the MBARD threshold of 82 lbs/day. Additionally, as shown in **Table 3.3-7**, simultaneous construction of Project components would result in maximum estimated emissions of 59 lbs/day of PM_{10} and would not exceed the MBARD threshold. This estimate is conservative because it assumes the most intensive construction activity required for each component would occur simultaneously.

The MBARD does not identify quantitative thresholds for other criteria air pollutants during construction. Construction projects using typical construction equipment, such as dump trucks, scrapers, bulldozers, compactors, and front-end loaders that temporarily emit precursors of ozone (i.e., VOC or NO_x), are accommodated in the emission inventories of state- and federally required air plans and would not have a significant impact on the attainment and maintenance of ozone AAQS. However, a project that would use non-typical equipment would have the potential to result in a significant impact related to emissions of VOCs or NO_x. The Project would employ typical construction equipment, and it would not require any non-typical construction equipment or techniques that have not been accounted for in the NCCAB emissions inventories.

Construction of the transfer stations would result in a **Less than Significant** impact related to maximum daily criteria air pollutant emissions during construction, including during simultaneous construction with other Project components. Because the emissions would be below the applicable health-based significance thresholds, no adverse health effects would occur. Because construction of the transfer stations, in combination with other Project components, would be below the PM_{10} threshold and would not require any construction practices that would be atypical, the transfer stations would not result in cumulatively considerable impact during construction.

Operation

Total operational emissions from Project operation are summarized in **Table 3.3-8**. As shown in **Table 3.3-8**, Project operation would not exceed the MBARD thresholds for any criteria air pollutant. Emissions are conservative and assume implementation of optional components, including composting at ODF Option 2 and the equipment parking and storage area. Emissions from the transfer stations, in combination with other Project components, would be **Less than Significant.**

Table 3.3-8. Estimated Operation Daily Maximum Air Pollutant Emissions (lbs/day) – All Project Components

Emissions Source	VOC	NOx	CO	SO_x	PM_{10}	$PM_{2.5}$
Mobile	<1	<1	<1	<1	<1	<1
Area	2	<1	3	<1	<1	<1
Energy	<1	<1	<1	<1	<1	<1
Off-road Equipment	1	4	9	<1	<1	<1
MASP Operation[a]	88	—	—	—	—	—
Vapors from Optional Fuel Station	<1	—	—	—	—	—
Maximum Daily Emissions	**92**	**4**	**12**	**<1**	**1**	**<1**
MBARD Threshold	137	137	550	150	82	—
Significant Impact?	No	No	No	No	No	No

Source: CAPCOA 2022 (CalEEMod Version 2022.1.1.29). Refer to **Appendix F.**

Notes:

[a] Average daily emissions assumes emissions factor of 0.2 lbs-VOC/ton and maximum capacity of 160,000 tons per year.

Emission quantities are rounded to the nearest whole number. Exact values are provided in **Appendix F**.

CO = carbon monoxide; MBARD = Monterey Bay Air Resources District; NO_x = oxides of nitrogen; $PM_{2.5}$ = particulate matter 2.5 microns or less in size; PM_{10} = particulate matter 10 microns or less in size; MASP = mass-bed aerated static pile; SO_x = sulfur oxides; VOC = volatile organic compound

Organics Diversion Facility (ODF Option 1 and ODF Option 2)

Construction and operational impacts of the ODF are addressed separately below.

Construction

Construction of ODF Option 1 or ODF Option 2 would result in the temporary generation of air pollutants from operation of heavy construction equipment and generation of fugitive dust in the construction area and emissions from worker vehicle trips and hauling of import and export materials. ODF Option 2 would require additional material movement and construction compared to ODF Option 1; therefore, emissions are quantified for ODF Option 2 to represent a worst-case scenario.

Maximum daily emissions levels associated with construction of the ODF are shown in **Table 3.3-9**. The MBARD has only adopted a quantitative threshold for PM_{10} emissions during construction; however, emissions from the other criteria air pollutants are also provided for informational purposes. **Table 3.3-9** summarizes maximum daily emissions for each year for all Project components, assuming worst-case emission from ODF Option 2.

Table 3.3-9. Estimated Construction Daily Maximum Air Pollutant Emissions (lbs/day) – Organics Diversion Facility

Construction Phase	VOC	NOx	CO	SO_x	PM_{10}	$PM_{2.5}$
Site Preparation	3	28	29	<1	11	5
Grading	2	16	19	<1	10	3
Building Construction	1	10	13	<1	3	1
Paving	2	7	11	<1	3	1
Architectural Coating	10	1	1	<1	<1	<1
Maximum Daily Emissions	**3**	**28**	**29**	**<1**	**11**	**5**
MBARD Threshold	—	—	—	—	82	—
Significant Impact?	—	—	—	—	No	—

Source: CAPCOA 2022 (CalEEMod Version 2022.1.1.29).

Notes: Emission quantities are rounded to the nearest whole number. Exact values are provided in **Appendix F**.

CO = carbon monoxide; MBARD = Monterey Bay Air Resources District; NO_x = oxides of nitrogen; $PM_{2.5}$ = particulate matter 2.5 microns or less in size; PM_{10} = particulate matter 10 microns or less in size; SO_x = sulfur oxides; VOC = volatile organic compound

As shown in **Table 3.3-9**, construction of the ODF is estimated to generate a maximum of 11 lbs/day of PM_{10} during construction, which is below the MBARD threshold of 82 lbs/day. Additionally, as shown in **Table 3.3-7**, simultaneous construction of Project components would result in maximum estimated emissions of 59 lbs/day of PM_{10} and would not exceed the MBARD threshold. The MBARD does not identify quantitative thresholds for other criteria air pollutants during construction. Construction projects using typical construction equipment, such as dump trucks, scrapers, bulldozers, compactors, and front-end loaders that temporarily emit precursors of ozone (i.e., VOC or NO_x), are accommodated in the emission inventories of state- and federally required air plans and would not have a significant impact on the attainment and maintenance of ozone AAQS. However, a project that would use non-typical equipment would have the potential to result in a significant impact related to emissions of VOCs or NO_x. The Project would employ typical construction equipment, and it would not require any non-typical construction equipment or techniques that have not been accounted for in the NCCAB emissions inventories.

Construction of the ODF would result in a **Less than Significant** impact related to maximum daily criteria air pollutant emissions during construction, including during simultaneous construction with other Project components. Because the emissions would be below the applicable health-based significance thresholds, no adverse health effects would occur. Because construction of the ODF, in combination with other Project components, would be below the PM_{10} threshold and would not require any construction practices that would be atypical, the ODF would not result in cumulatively considerable impact during construction.

Operation

Total operational emissions from Project operation are summarized in **Table 3.3-8**. As shown in **Table 3.3-8**, Project operation would not exceed any MBARD threshold, including with implementation of ODF Option 2. If ODF Option 1 is selected, VOC emissions would be reduced compared to calculated emissions in **Table 3.3-8** because new on-site composting would not occur. Impacts under either ODF Option 1 or 2 would be **Less than Significant**.

Landfill Closure and Revegetation

Construction and operational impacts of implementation of the landfill closure and revegetation plan are addressed separately below.

Construction

Implementation of the landfill closure and revegetation plan would result in the temporary generation of air pollutants from operation of heavy construction equipment and generation of fugitive dust in the construction area and emissions from worker vehicle trips and hauling of import materials. Maximum daily emissions levels associated with landfill closure and revegetation activities are shown in **Table 3.3-10**. The MBARD has only adopted a quantitative threshold for PM_{10} emissions during construction; however, emissions from the other criteria air pollutants are also provided for informational purposes. **Table 3.3-7** summarizes maximum daily emissions for each year for all Project components.

Table 3.3-10. Estimated Construction Daily Maximum Air Pollutant Emissions (lbs/day) – Landfill Closure and Revegetation

Construction Phase	VOC	NOx	CO	SO_x	PM_{10}	$PM_{2.5}$
Site Preparation	3	28	29	<1	16	8
Grading	3	33	32	<1	41	6
Paving	1	7	11	<1	10	1
Maximum Daily Emissions	**3**	**33**	**32**	**<1**	**41**	**8**
MBARD Threshold	—	—	—	—	82	—
Significant Impact?	—	—	—	—	No	—

Source: CAPCOA 2022 (CalEEMod Version 2022.1.1.29).

Notes: Emission quantities are rounded to the nearest whole number. Exact values are provided in **Appendix F**.

CO = carbon monoxide; MBARD = Monterey Bay Air Resources District; NO_x = oxides of nitrogen; $PM_{2.5}$ = particulate matter 2.5 microns or less in size; PM_{10} = particulate matter 10 microns or less in size; SO_x = sulfur oxides; VOC = volatile organic compound

As shown in **Table 3.3-10**, landfill closure and revegetation is estimated to generate a maximum of 41 lbs/day of PM_{10} during construction, which is below the MBARD threshold of 82 lbs/day. Additionally, as shown in **Table 3.3-7**, simultaneous construction of Project components would result in maximum estimated emissions of 59 lbs/day of PM_{10} and would not exceed the MBARD threshold. Regarding other pollutants, the Project would employ typical construction equipment, and it would not require any non-typical construction equipment or techniques that have not been accounted for in the NCCAB emissions inventories.

Landfill closure and vegetation would result in a **Less than Significant** impact related to maximum daily criteria air pollutant emissions during construction, including during simultaneous construction with other Project components. Because the emissions would be below the applicable health-based significance thresholds, no adverse health effects would occur. Because landfill closure and revegetation, in combination with other Project components, would be below the PM_{10} threshold and would not require any construction practices that would be atypical, the landfill closure would not result in cumulatively considerable impact during construction.

Operation

Following construction, the landfill closure and revegetation would be passive and would not generate criteria air pollutant emissions**.** Occasional maintenance may be required, similar to

existing conditions at the landfill. Therefore, operation of the landfill closure and revegetation plan would be **Less than Significant**.

Optional Improvements: a) Internal Access Road Improvements, b) Scale House Upgrades, c) Recycling Center Upgrades, d) Equipment Parking and Storage Area

Construction and operational impacts of the optional elements are addressed separately below.

Construction

Detailed construction information is not available for the internal access road improvements, scale house upgrades, or recycling center upgrades. However, the construction activities that would be required for these components would be similar compared to the other components. For example, roadway improvements are included in construction of Transfer Station A, and all other components addressed above include new paved areas. Installation of additional scales would not require earthwork, and the equipment fleet needed for installation would not exceed that assumed for more intense construction activities such as building construction and grading. Recycling center upgrades, such as expansion or relocation, would likely require construction activities similar to Transfer Station or ODF construction. As demonstrated above, these components would not result in unusual construction practices or PM_{10} emissions that would exceed the MBARD threshold. Timing of these optional components is unknown; however, due to the size of these components compared to the components addressed quantitatively above, it is unlikely that these components would generate emissions that would cause simultaneous construction to exceed the MBARD threshold for PM_{10}, particularly because the existing scale house and recycling center are located near the landfill entrance and entirely accessible by existing paved roads. Implementation of the internal access road improvements would reduce fugitive dust generation for any subsequent construction activities.

Construction details are available for the equipment parking and storage area. This component would result in the temporary generation of air pollutants from operation of heavy construction equipment and generation of fugitive dust in the construction area and emissions from worker vehicle trips and hauling of import and export materials. Maximum daily emissions levels associated with construction of the parking and storage area are shown in **Table 3.3-11**. The MBARD has only adopted a quantitative threshold for PM_{10} emissions during construction; however, emissions from the other criteria air pollutants are also provided for informational purposes. **Table 3.3-7** summarizes maximum daily emissions for each year for all Project components.

Table 3.3-11. Estimated Construction Daily Maximum Air Pollutant Emissions (lbs/day) – Equipment Parking and Storage Area

Construction Phase	VOC	NOx	CO	SO_x	PM_{10}	$PM_{2.5}$
Site Preparation	1	10	12	<1	4	2
Grading	1	13	15	<1	6	2
Building Construction	1	9	10	<1	2	<1
Paving	1	4	7	<1	2	<1
Architectural Coating	2	1	1	<1	<1	<1
Maximum Daily Emissions	**2**	**13**	**15**	**<1**	**6**	**2**
MBARD Threshold	—	—	—	—	82	—
Significant Impact?	—	—	—	—	No	—

Source: CAPCOA 2022 (CalEEMod Version 2022.1.1.29).

Notes: Emission quantities are rounded to the nearest whole number. Exact values are provided in **Appendix F**.

CO = carbon monoxide; MBARD = Monterey Bay Air Resources District; NO_x = oxides of nitrogen; PM_{10} = particulate matter 10 microns or less in size; $PM_{2.5}$ = particulate matter 2.5 microns or less in size; SO_x = sulfur oxides; VOC = volatile organic compound

As shown in **Table 3.3-11**, construction of the equipment parking and storage area is estimated to generate a maximum of 6 lbs/day of PM_{10} during construction, which is below the MBARD threshold. Additionally, as shown in **Table 3.3-7**, simultaneous construction of Project components would not exceed the MBARD threshold. The Project, including optional components, would employ typical construction equipment, and would not require any non-typical construction equipment or techniques that have not been accounted for in the NCCAB emissions inventories.

Construction of the optional elements would result in a **Less than Significant** impact related to maximum daily criteria air pollutant emissions during construction, including during simultaneous construction with other Project components. Because the emissions would be below the applicable health-based significance thresholds, no adverse health effects would occur. Because construction of the optional element, in combination with other Project components, would be below the PM_{10} threshold and would not require any construction practices that would be atypical, the optional elements would not result in cumulatively considerable impact during construction.

Operation

Operation of the internal access roads, scale house upgrade, recycling center upgrade, and equipment storage and parking area would replace or make improvements to existing facilities and would not result in an increase in criteria air pollutant emissions from vehicle trips or maintenance operations. New equipment, such as gas pumps and additional scales, would be electric-powered and would not result in new criteria air pollutant emissions from energy demand. However, gas pumps, if installed, would result in some VOC emissions from spillage and other typical activities that result in the release of gasoline vapors, as shown in **Table 3.3-8**. As shown in **Table 3.3-8**, the Project, including gasoline vapors, would not exceed any MBARD threshold for criteria air pollutants. Emissions attributable to the optional elements would be **Less than Significant.**

In summary, the Project, including the primary components and optional improvements described above, as well as the associated General Plan/LCP land use designation and zoning map amendments, would not result in a cumulatively considerable net increase of any criteria air pollutant for which the region is designated non-attainment. The impact would be **Less than Significant**. No mitigation is required.

Threshold C: Expose sensitive receptors to substantial pollutant concentrations.

Impact AIR-3 THE PROJECT WOULD NOT EXPOSE SENSITIVE RECEPTORS TO SUBSTANTIAL POLLUTANT CONCENTRATIONS. (LESS THAN SIGNIFICANT IMPACT)

The nearest sensitive receptors to the Project area are residences and living quarters located south of the Project area, including the Buena Vista Migrant Center (farmworker housing and childcare facility) and Tierra Alta affordable housing complex on Tierra Alta Drive, as well as the Rountree Medium (Jail) Facility on Rountree Lane, as shown on **Figure 2-1**. The Rountree Medium (Jail) Facility is considered a sensitive receptor because, although not a traditional residence, people are residing and sleeping there. The closest Project component to the Buena Vista Migrant Center (farmworker housing and childcare facility) and Tierra Alta housing complex would be the optional equipment parking and storage area, located just over 200 feet from housing. The closest Project component to the Rountree Medium (Jail) Facility would be Transfer Station B, located approximately 130 feet from the facility.

Impacts are addressed below for new sources of pollutants from individual Project components. However, since impacts related to CO hotspots are based on total Project trip generation, this impact is addressed cumulatively for all Project components. The CO hotspots analysis is provided below under transfer stations.

Transfer Stations (Transfer Station A and Transfer Station B)

The pollutant of primary concern during construction is diesel particulate matter. However, as shown in **Table 3.3-5**, construction-related emissions associated with transfer station construction, and shown in **Table 3.3-7** for simultaneous Project construction, would be in compliance with the PM_{10} threshold (<82 lbs/day). Emissions of PM_{10} would be well below the MBARD threshold during all construction activities, and simultaneous construction would be spread out across the landfill property.

Construction at Transfer Station B, the closest Project component to any sensitive receptor, would occur for a limited 12-month period, and PM_{10} emissions are estimated to be 14 lbs/day, which would be well below the MBARD threshold. The MBARD threshold for PM_{10} is established for regional compliance with the state and federal AAQS, which are intended to protect public health. Because the emissions for all Project components are below the applicable MBARD threshold, it would not contribute to regional long-term health impacts related to non-attainment of the AAQS.

The MBARD has not established thresholds for the remaining pollutants during construction. However, total combined Project emissions, shown in **Table 3.3-7**, would not exceed MBARD thresholds for ongoing emissions, provided in **Table 3.3-8**. Additionally, Project construction would occur throughout the landfill property over the approximately 4 total years of Project construction. The Project's short-term, temporary, and minimal construction emissions would not result in any regional non-attainment of any pollutant that could result in health impacts.

Operation of the transfer stations would not include any new stationary sources of toxic air contaminants. CARB recommends a 1,000 foot buffer between sensitive receptors and land uses generating more than 100 truck trips per day (CARB 2005). Trucks have the potential to expose sensitive receptors to diesel particulate matter from exhaust, a toxic air contaminant. The Project, including all components, would result in a net increase in truck trips of 48 trips per day and would not exceed this screening level. However, implementation of the transfer stations would result in a change in truck traffic patterns in the Project area. Both transfer stations would be located more than 1,000 feet from the Buena Vista Migrant Center (farmworker housing and childcare facility)

and Tierra Alta housing complex, and Transfer Station A would also be more than 1,000 feet from the Rountree Medium (Jail) Facility. However, Transfer Station B would be located approximately 130 feet from this facility and would serve larger franchise and commercial haul vehicles. However, Transfer Station B is not anticipated to serve more than 100 trucks per day. Additionally, as shown in **Table 3.3-8**, particulate matter emissions from Project operation are anticipated to be minimal. Therefore, operation of Transfer Station B would not result in significant exposure to diesel particulate matter.

Because the Project would result in minimal new vehicle trips, it would not contribute to any potential CO hotspot. The Project would result in a total of 28 new peak hours trips and would not result in a substantial increase in traffic at any intersection. As discussed under Impact AQ-2, Project operational emissions of all criteria air pollutants would be below MBARD thresholds.

Therefore, the Project would not significantly contribute to potential regional health impacts related to AAQS non-attainment. Operation of the Project would not expose sensitive receptors to substantial pollutant concentrations. This impact would be **Less than Significant**. Because this analysis addresses the impact of all Project components, impacts related to CO hotspots are not further discussed below for other Project components.

As discussed in Section 3.3.1, Existing Conditions, the criteria air pollutants also have the potential to result in health impacts, such as headaches or throat irritation, at the time of exposure. However, individual exposure levels and individual reactions to exposure to pollutant emissions from the Project cannot be feasibly determined. As previously described, the concentration of criteria air pollutants at any given time depends on a variety of factors, including ambient traffic levels and other emission sources, weather conditions that affect pollutant formation and dissipation, and time of day or year. Additionally, concentrations of ozone precursors in the Project area do not indicate levels of ozone exposure because ozone is not necessarily formed there, as NO_x and VOC may be carried away before forming ozone (USEPA 2024). As such, localized impacts from criteria air pollutants are not further discussed below for other Project components.

Organics Diversion Facility (ODF Option 1 and ODF Option 2)

Similar to transfer station construction, worst-case construction-related emissions associated with ODF construction (**Table 3.3-9**), as well as simultaneous Project construction (**Table 3.3-7**), would be in compliance with the PM_{10} threshold ($\leq$82 lbs/day). Emissions of PM_{10} would be well below the MBARD threshold during all construction activities, and simultaneous construction would be spread out across the landfill property. Construction of ODF Option 2 would occur for a limited 12-month period and PM_{10} emissions are estimated to be 11 lbs/day, well below the MBARD threshold. If selected, ODF Option 1 would require less intense earthwork and would result in fewer emissions. Because the emissions for all Project components are below the applicable MBARD threshold, it would not contribute to regional long-term health impacts related to non-attainment of the AAQS. As discussed above for transfer station construction, the Project's short-term, temporary, and minimal construction emissions would not result in any regional non-attainment of any pollutant that could result in health impacts.

Operation of ODF Option 1 would not include any new stationary sources of toxic air contaminants. As discussed above for transfer station operation, the Project, including all components, would result in a net increase in truck trips of 48 trips per day and would not exceed the CARB screening level of 100 new truck trips within 1,000 feet of any sensitive receptors. ODF Option 1 would be located more than 1,000 feet from sensitive receptors and currently serves truck traffic. However,

implementation of ODF Option 2 would result in a change in truck traffic patterns in the Project area. ODF Option 2 would be located more than 1,000 feet from the Buena Vista Migrant Center (farmworker housing and childcare facility) and Tierra Alta housing complex, but may include components within 1,000 feet of the Rountree Medium (Jail) Facility. However, ODF Option 2 is not anticipated to serve more than 100 trucks per day. Additionally, as shown in **Table 3.3-8**, particulate matter emissions from Project operation are anticipated to be minimal. Therefore, operation of the ODF would not result in significant exposure to diesel particulate matter.

Composting at ODF Option 2 would also result in generation of NH_3. NH_3 is identified as a potential health risk due to its potential to facilitate $PM_{2.5}$ formation. However, composting, if implemented, would include operation of an MASP system and a biofilter. The MASP maintains conditions for efficient composting to reduce generation of NH_3 emissions compared to naturally ventilated composting. Additionally, use of a biofilter typically controls at least 90 percent of NH_3 emissions that are produced (SJVAPCD 2010; Brown et al. 2020). Therefore, because the facility would implement industry best management practices to minimize NH_3 emissions, this impact would be **Less than Significant.**

Landfill Closure and Revegetation

Similar to Transfer Station and ODF construction, worst-case construction-related emissions associated with landfill closure and revegetation (**Table 3.3-10**), as well as simultaneous Project construction (**Table 3.3-7**), would be in compliance with the PM_{10} threshold ($\leq$82 lbs/day). Maximum PM_{10} emissions during landfill closure and revegetation are estimated to be 41 lbs/day, below the MBARD threshold. Because the emissions for all Project components are below the applicable MBARD threshold, it would not contribute to regional long-term health impacts related to non-attainment of the AAQS. As discussed above for transfer station construction, the Project's short-term, temporary, and minimal construction emissions would not result in any regional non-attainment of any pollutant that could result in health impacts.

Operation of the landfill closure and revegetation would be passive and would not generate toxic air contaminants from stationary or mobile sources. Ongoing gas monitoring would prevent exposure to leaked landfill gas. Therefore, operation of the landfill closure and revegetation plan would be **Less than Significant**.

Optional Improvements: a) Internal Access Road Improvements, b) Scale House Upgrade, c) Recycling Center Upgrades, d) Equipment Parking and Storage Area

Similar to Transfer Station and ODF construction, construction-related emissions associated with the optional improvements and simultaneous Project construction, would be in compliance with the PM_{10} threshold (<82 lbs/day). As discussed under Impact AIR-2 for Threshold B, construction details for the internal access road improvements, scale house upgrade, and recycling center upgrade are currently unknown, but would be expected to be similar or reduced compared to the quantified Project components. Maximum PM_{10} emissions from construction of the equipment parking and storage area are estimated to be 6 lbs/day, well below the MBARD threshold. Because the emissions for all Project components are below the applicable MBARD threshold, it would not contribute to regional long-term health impacts related to non-attainment of the AAQS. As discussed above for transfer station construction, the Project's short-term, temporary, and minimal construction emissions would not result in any regional non-attainment of any pollutant that could result in health impacts.

The internal access roads, scale house upgrade, recycling center upgrade, and equipment storage and parking area would replace or make improvements to existing facilities and would not result in any new stationary or mobile source toxic air contaminant emissions. Gas pumps, if installed at the equipment parking and storage area, would have the potential to result in toxic air contaminant exposure from gasoline products, specifically emissions of benzene. CARB recommends a 50 foot separation between typical gas dispensing facilities and sensitive receptors (CARB 2005). The number of potential gas pumps and annual fuel consumption is currently unknown; however, usage would be minimal compared to a typical retail gas station. The equipment parking and storage area would be located more than 50 feet from any sensitive receptor. Therefore, a significant health risk would not occur. This impact would be **Less than Significant.**

In summary, the Project, including the primary components and optional improvements described above, as well as the associated General Plan/LCP land use designation and zoning map amendments, would not expose sensitive receptors to substantial pollutant concentrations. The impact would be **Less than Significant**. No mitigation is required.

Threshold D:	Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

Impact AIR-4 THE PROJECT WOULD NOT RESULT IN OTHER EMISSIONS (SUCH AS THOSE LEADING TO ODORS) ADVERSELY AFFECTING A SUBSTANTIAL NUMBER OF PEOPLE. (LESS THAN SIGNIFICANT IMPACT)

During construction of all Project components, operation of heavy equipment has the potential to result in odors from diesel construction equipment exhaust. However, as shown in **Table 3.3-7**, emissions of sulfurous gases, the main source of odors from construction equipment, would be extremely limited during construction (MBARD 2008).

Operation of all Project components could involve the handling and processing of solid waste, which is a common source of odors. However, the landfill site is an existing source of solid waste odor. The proposed activities would be similar to existing activities, which includes movement and handling of solid waste. The solid waste would be directed to transfer stations for off-site disposal, organics diversion, recycling, or covered at the end of each day while the landfill is still accepting waste. The Project includes implementation of the landfill closure plan, which would cap solid waste in place once the active landfill reaches full capacity and closes.

Additionally, Project design includes odor control features for potential new sources of odor, such as ODF Option 2 if selected. Composting at ODF Option 2 would be a potential new odor source from emissions of VOCs and NH_3. As described in Section 2.4, the composting facility would include an MASP system and biofilter cover. The MASP system is intended to facilitate efficient and fast composting so that minimal odors would be generated, and the biofilter would prevent the release of odorous emissions. As previously described, use of a biofilter generally captures at least 90 percent of odorous emissions. Implementation of these best management practices would minimize the release of odorous compounds.

In summary, the Project including the primary components and optional improvements, as well as the associated General Plan/LCP land use designation and zoning map amendments, would not create objectionable odors affecting a substantial number of people. The impact would be **Less than Significant**. No mitigation is required.

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3.4 Biological Resources

This section evaluates potential impacts relating to biological resources within and near the Project area. This analysis is based on observations made during a series of field surveys between 2018 and 2025, and a review of available literature and data for known and potentially occurring biological resources. This section includes an analysis of sensitive habitats, including aquatic resources, and special-status plants and wildlife that may be impacted by the Buena Vista Landfill Redevelopment Project (Project). **Table 3.4-1** presents a summary of potential impacts on biological resources. The analysis was conducted by qualified biologists[1] with EcoSystems West (ESW), unless otherwise specified as biologists with Biosearch Environmental Consulting (Biosearch) (refer to Section 7.1, List of Preparers); and supporting documentation is included in **Appendix G.** All figures are presented at the end of Section 3.4.

Table 3.4-1. Summary of Project Impacts Related to Biological Resources

Impact	Significance before Mitigation	Mitigation	Significance after Mitigation
BIO-1. Project construction may result in impacts to Crotch's bumble bee, if present.	Potentially Significant	BIO-1a, BIO-1b, BIO-1c, BIO-1d, BIO-8d	Less than Significant
BIO-2. Project construction and operation would not result in impacts to roosting western monarch butterflies.	Less than Significant	None Required	Less than Significant
BIO-3. Project construction and operation may result in impacts to California red-legged frog.	Potentially Significant	BIO-1a, BIO-1b, BIO-3, BIO-8d	Less than Significant
BIO-4. Project construction and operation may result in impacts to northwestern pond turtle.	Potentially Significant	BIO-1a, BIO-1b, BIO-3, BIO-8d	Less than Significant
BIO-5. Project construction and operation may result in impacts to avian species, their habitats, and nesting activities.	Potentially Significant	BIO-1a, BIO-1b, BIO-5a, BIO-5b, BIO-8d	Less than Significant
BIO-6. Project construction and operation may result in impacts to bat species, their habitats, and roosting activities.	Potentially Significant	BIO-1a, BIO-1b, BIO-6, BIO-8d	Less than Significant
BIO-7. Project construction may result in impacts to San Francisco dusky-footed woodrat houses, individuals, or young.	Potentially Significant	BIO-1a, BIO-1b, BIO-7, BIO-8d	Less than Significant
BIO-8. Project construction and operation would result in impacts to coast live oak woodland.	Potentially Significant	BIO-8a, BIO-8b, BIO-8c, BIO-8d	Significant and Unavoidable

[1] A Qualified Biologist shall hold a bachelor's degree from an accredited university in a biological or natural resources related field and shall:

1. be knowledgeable and experienced in the biology and natural history of local fish and wildlife resources present at the Project site;
2. have experience identifying, capturing, handling, and relocating the fish and/or wildlife species;
3. be familiar with relevant survey protocols and recent scientific literature; and
4. be knowledgeable of state and federal laws regarding the protection of sensitive species.

A Qualified Biologist shall have a minimum of five years of academic training and professional experience in biological sciences and related resource management activities (CDFW 2026a).

The biologists who evaluated the Study Area have extensive experience with California Department of Fish and Wildlife (CDFW) and U.S. Fish and Wildlife Service (USFWS) standards and protocols, have been authorized on previous projects, and are trained and recognized experts on specific resources.

Table 3.4-1. Summary of Project Impacts Related to Biological Resources

Impact	Significance before Mitigation	Mitigation	Significance after Mitigation
BIO-9. Project construction would result in minimal impacts to riparian forest.	Potentially Significant	BIO-8a, BIO-8b, BIO-8c, BIO-8d BIO-9a, BIO-9b	Less than Significant
BIO-10. Project construction would result in impacts to other Environmentally Sensitive Habitat Areas.	Potentially Significant	BIO-8a, BIO-8b, BIO-8c, BIO-8d, BIO-9a, BIO-9b	Less than Significant
BIO-11. Project construction would result in minimal impacts to wetlands.	Potentially Significant	BIO-8a, BIO-8b, BIO-8c, BIO-8d	Less than Significant
BIO-12. Project construction would result in minimal impacts to riverine habitats.	Potentially Significant	BIO-8a, BIO-8b, BIO-8c, BIO-8d	Less than Significant
BIO-13. Project construction would result in impacts to wildlife movement.	Potentially Significant	BIO-1a, BIO-1b, BIO-3, BIO-8d, BIO-13	Less than Significant
BIO-14. Project construction would conflict with local policies or ordinances protecting biological resources**.**	Potentially Significant	BIO-8a, BIO-8b, BIO-8c, BIO-8d, BIO-14	Significant and Unavoidable

Note: Transfer Station A includes the realignment of Harkins Slough Road.

The impact, significance determination, and mitigation apply to the Project as a whole, considering all Project components, unless otherwise noted.

Beneficial Effects: The Project includes the following Environmental Enhancement and Habitat Restoration Features: Restoration of Harkins Slough Road Drainage, Culvert Modification with Small Wildlife Crossing at Main Entrance, Culvert Replacement under the Internal Roadway to the Old Landfill, Wildlife Movement Corridor between Gallighan Slough and Harkins Slough, and Wildlife Directional Features at Key Locations (described in Section 2.4 and shown on **Figure 2-4**).

3.4.1 Existing Conditions

Regional Setting

The Project area is the Buena Vista Landfill site, located between Buena Vista Drive and Harkins Slough Road in unincorporated southern Santa Cruz County, approximately 1.5 miles west of the City of Watsonville, west of Highway 1 within the California Coastal Zone (**Figure 1-3** and **Figure 2-1**).

The site lies within the lower Pajaro Valley, a coastal plain characterized by low topographic relief, bounded by low-lying hills in a network of agricultural and managed lands, and a mosaic of aquatic and upland habitat features. The Project area is situated within the greater Watsonville Slough system, adjacent to Harkins Slough and Gallighan Slough, both of which support regionally important wetland and riparian habitat. These features contribute to the Pajaro River watershed and ultimately drain into Monterey Bay.

The Project site is located within the USGS Watsonville West 7.5-minute topographic quadrangle. Surrounding land uses include public facilities such as the County's Rountree Medium (Jail) Facility, the Buena Vista Migrant Center (a publicly owned farmworker housing development and childcare center), and the Tierra Alta housing complex. The Old Landfill, a previously closed portion of the landfill, is located immediately southwest of the Current Active Landfill, support facilities, and the Gallighan Slough drainage. The Santa Cruz Branch Rail Line (SCBRL), owned by the Santa Cruz County Regional Transportation Commission, extends along the southwest border of the Old Landfill. The

City of Watsonville's landfill is located further southwest and is accessed from San Andreas Road. The City of Watsonville Landfill is used only by Watsonville's city-operated refuse collection trucks.

The Harkins Slough Unit of the Ellicott Slough National Wildlife Refuge, federally owned land managed by the U.S. Fish and Wildlife Service, lies east of the Study Area and protects important aquatic and upland habitat for the benefit of native plants and wildlife species.

Agricultural uses are located to the northwest, north, northeast, and southwest of the landfill site and include row crops, greenhouses, horse stables, and fallow lands.

Project Area Setting

The Biological Study Area consists of the Buena Vista Landfill site, including the Old Landfill, adjacent areas proposed for redevelopment activities, and an approximately 150-foot buffer to capture contiguous habitats, wildlife dispersal corridors, and areas of potential indirect impacts during project construction. In some areas, the Study Area was expanded beyond the buffer based on unique site-specific conditions, including proximity to sensitive biological resources, topographic and hydrologic connectivity, and areas with anticipated access or equipment use. In addition, aquatic features such as creeks and wetlands were surveyed up to 300 feet upstream and downstream of the Project Areas, where accessible. The Study Area is shown on **Figure 3.4-1**.

The Buena Vista Landfill site includes the Current Active Landfill (portions of modules 1 and 2 and modules 3, 4A, 4B, 5, and 6) which would be closed and capped as part of the Project, as well as the closed and capped Old Landfill and landfill expansion area (that includes portions of modules 1 and 2). The site also includes associated infrastructure, such as internal access roads; landfill gas, leachate, and condensate collection systems; stormwater management structures; and undeveloped land supporting natural and ruderal vegetation. Land cover within the Project area is characterized by a mix of semi-natural, disturbed, and developed areas, including grassland, scrub, woodland, wetland, riparian, and ruderal types interspersed with engineered infrastructure and landfill modules.

Several natural drainages and constructed channels are present along the margins of the site, including the Harkins Slough Road Drainage and the Buena Vista Drive Tributary, with Channelized Gallighan Slough flowing between the Current Active Landfill (and Current Cap Area) and the Old Landfill. These features ultimately connect to Gallighan Slough at the southern boundary of the Study Area. The drainages support riparian and emergent wetland vegetation and contribute to on-site habitat complexity and hydrologic connectivity. Portions of the site provide potential habitat and dispersal opportunities for native wildlife. Current land cover conditions reflect a legacy of landfill operations, maintenance activities, and passive revegetation in areas where ongoing management has achieved stable vegetative cover.

Literature Review

To obtain baseline knowledge of the biological resources within the Study Area, qualified biologists reviewed relevant studies and information sources prior to conducting their field surveys. Based on the literature review, the biologists compiled target lists of sensitive plants (**Appendix G1.1)** and sensitive wildlife species (**Appendix G2.1)** known or with potential to occur within or near the Study

Area.[2] Species narratives were prepared for species with potential to occur (**Appendix G1.2** and **G2.2**), and additional information was provided for species which were considered and subsequently eliminated from further consideration (**Appendix G2.3** and **Appendix G3.2** for sensitive wildlife).

The following relevant studies and information were reviewed:

- Federally listed, proposed, and candidate species, designated critical habitat from U.S. Fish and Wildlife Service (USFWS) (2026a, 2026b, 2026c) and published Federal Registers, including an official species list from Information for Planning and Consultation (IPaC) (**Appendix G3.1**)
- USFWS Birds of Conservation Concern (BCC) (USFWS 2021)
- State-listed endangered, threatened, and rare plants and animals (CDFW 2026b, 2026c)
- California Department of Fish and Wildlife (CDFW) Sensitive Natural Communities (CDFW 2026d)
- Environmentally Sensitive Habitat Areas (ESHA) as defined by the California Coastal Act of 1976 (Coastal Act) and County of Santa Cruz Local Coastal Program (LCP) (2024)
- CDFW Species of Special Concern (SSC) (Bolster 1998; Shuford and Gardali 2008; Thomson et al. 2016; CDFW 2026e)
- CDFW Fully Protected Animals (CDFW 2026f)
- CDFW Special Animals (CNDDB 2026a)
- CDFW's California Natural Diversity Database (CNDDB) and Biogeographic Information and Observation System (BIOS) records and maps of occurrences of sensitive species and sensitive natural communities for the U.S. Geological Survey 7.5-minute Watsonville West, Soquel, Laurel, Loma Prieta, Mount Madonna, Watsonville East, Prunedale, and Moss Landing quadrangles (CNDDB 2026b, 2026c)
- U.S. Army Corps of Engineers (USACE) Wetlands Delineation Manual (Environmental Laboratory 1987) and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region, Version 2.0 (USACE 2008)
- USFWS National Wetlands Inventory (USFWS 2025)
- Wetlands and "other waters" under Sections 404 and 401 of the Clean Water Act (CWA) (33 USC Section 1251 et seq. 1972 as amended 2018), the Porter-Cologne Water Quality Control Act (Porter-Cologne) (California Water Code, Division 7, Section 13000 et seq. 1969 as amended 2025), and the Coastal Act (California Public Resources Code [PRC], Section 30000)
- Soil Survey of Santa Cruz County (Bowman and Estrada 1980; NRCS Web Soil Survey 2024)
- U.S. Geological Survey of the Watsonville West Quadrangle (USGS 1980)
- California Native Plant Society's (CNPS) Inventory of Rare and Endangered Plants of California (Tibor 2001; CNPS 2026)
- Local and regional floras (Thomas 1961; Munz and Keck 1973; Hickman 1993; Baldwin et al. 2012; Neubauer 2013)
- The Xerces Society of Invertebrate Conservation (Xerces Society) (2026)

[2] Following CNDDB and other standard survey protocols, the biologists reviewed distribution information for sensitive species to determine which species would have the potential to occur in or near the alignments and which species could be eliminated from consideration, based on vegetation and habitat types in the alignments and surroundings, locations of known occurrences, dispersal distances (for wildlife), and professional knowledge of the region and local sensitive species.

- California Herps (Nafis 2026)
- eBird database (2026)
- Bat Conservation International (BCI 2026)
- Western Bat Working Group (WBWG 2017)
- County of Santa Cruz Code (Chapter 16.30, Riparian and Wetland Protection; Chapter 16.32, Sensitive Habitat Protection; and Chapter 16.34, Significant Tree Protection)
- County of Santa Cruz 2024 General Plan/LCP
- Consultation with Local Experts on specific biological resources
  - Biosearch Environmental Consulting (Biosearch) (2025 and 2026) and **Appendix G2.3**
  - Kittleson Environmental Consulting (KEC) (2023a, 2023b, and 2024)
  - Michael Westphal, Bureau of Land Management Ecologist (2018)

Field Surveys

Qualified biologists with EcoSystems West (unless otherwise specified as biologists with Biosearch [2026]) conducted field surveys of the Study Area as described below during spring and fall of 2018, spring/fall/winter of 2022, winter/spring/summer of 2023, summer of 2024, spring/summer of 2025, and spring/summer of 2026.

The purpose of field surveys was to:

- Characterize habitat types, including sensitive habitats;
- Conduct assessment of aquatic resources;
- Conduct a floristic-level rare plant survey for species listed in **Appendix G1.1** and **Appendix G3.1**;
- Assess the Study Area for common and sensitive wildlife species and their habitats, listed in **Appendix G2.1 and Appendix G3.1**; and
- Conduct a preliminary assessment of wildlife movement within the Study Area.

BOTANY

A Senior Plant Ecologist conducted an aquatic resources assessment and focused rare plant surveys of the Study Area on May 24, 2022; June 5 and July 29, 2025; and March 30 and June 25, 2026. The entire Study Area was thoroughly evaluated during field surveys. All vascular plant species in identifiable condition on the survey dates were identified to species or infraspecific taxon, regardless of their regulatory status. The identifications were facilitated using keys and descriptions in Thomas (1961); Munz and Keck (1973); Hickman (1993); and Baldwin et al. (2012). The timing of the assessment was adequate for identification of the special-status species listed in **Appendix G1.1** and **Appendix G3.1.**

All habitat types present in the Study Area were characterized and mapped, including wetlands and "other waters" (watercourses). Additionally, data was recorded on physiognomy, dominant and characteristic species, topographic position, slope, aspect, substrate conditions, hydrologic regime, and evident disturbance for each habitat type. Classification of the habitat types in the area was based on field observations and the generalized plant community classification schemes (Holland 1986); Sawyer et al. (2009); and CDFW (2026d). The final classification and characterization of the habitat types of the Study Area were based on field observations.

AQUATIC RESOURCES

The aquatic resources assessment was completed using protocols outlined in the U.S. Army Corps of Engineers (USACE) Wetlands Delineation Manual (Environmental Laboratory 1987) and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region, Version 2.0 (USACE 2008). The USACE defines three criteria to delineate wetlands: (1) hydrophytic vegetation,[3] (2) wetland hydrology, and (3) hydric soils. The delineation also evaluated the presence of potential jurisdictional "other waters," which include waterbodies that are not traditional navigable waters (TNWs), such as "rivers, streams (including intermittent/seasonal streams),... sloughs,..." (Environmental Laboratory 1987).

Because the Proposed Project occurs in the Coastal Zone, wetlands using the California Coastal Act's "one parameter" criteria were also identified and mapped in the field using resource-grade GPS technology. A formal aquatic resources delineation will be completed prior to preparing regulatory permit applications for the Project.

WILDLIFE

Wildlife biologists conducted site visits of the Study Area on June 3 and August 5, 2018; March 30 and November 10, 2022; February 22 (night), May 10 (night), June 5, June 6, and July 26, 2023; July 1, 2024 (day and night); July 30, 2025; and January 13, March 29 and 30, and May 15, 2026. Wildlife biologists with Biosearch (2026) conducted an amphibian site assessment on July 30, 2025, and June 29, 2026. The objective during these visits was to assess and identify potential habitat for the special-status species listed in **Appendix G2.1** and **Appendix G3.1** following standard survey techniques for each species.

Invertebrate Assessment

Biologists assessed native and non-native grassland and scrub habitats within the Study Area for potential habitat for Crotch's bumble bee. The assessment generally followed the CDFW Survey Considerations for CESA Candidate Bumble Bee Species (2023) and Considerations for Conserving Crotch's Bumble Bee (*Bombus crotchii*), Franklin's Bumble Bee (*Bombus franklini*), Western Bumble Bee (*Bombus occidentalis*), and Suckley's Cuckoo Bumble Bee (*Bombus suckleyi*) (CDFW 2026g) and included searches for foraging, nesting, and overwintering resources, available blooming plant species, and small mammal burrows. In addition, surveys for individual butterflies were conducted during the period when detection would be highest (April–June) on warm days with low wind.

[3] Plant species identified in the Study Area during floristic surveys and habitat characterization site visits were assigned a wetland indicator status according to the National Wetland Plant List Arid West Region for plant species that occur in wetlands (USACE 2023). This wetland classification system is based on the expected frequency of occurrence in wetlands. Plant species with an indicator status of OBL, FACW, and/or FAC are classified as hydrophytic vegetation according to methodology outlined in the USACE Manual and Arid West Regional Supplement.

Indicator Status	Symbol	Frequency
Obligate	OBL	greater than 99%
Facultative Wetland	FACW	67–99%
Facultative	FAC	34–66%
Facultative Upland	FACU	1–33%
Upland (Not Listed)	UPL/NL	less than 1%
No Indicator	NI	Undetermined

Biologists assessed the eucalyptus trees within the Study Area for potential western monarch butterfly (monarch) winter roost characteristics. To assess habitat suitability, they evaluated the area for the requisite biotic and abiotic factors, looking at the structure of the groves and focusing our efforts on trees that are protected from the wind and receive dappled sunlight. During fall and winter, trees and nearby nectar plants were examined for the presence of monarch butterflies. The biologists arrived early enough in the day (before the temperature reached above 55° F) to identify "clumps" of roosting butterflies in the tree foliage.

Amphibian and Reptile Assessment

Biologists with EcoSystems West and Biosearch (2026) conducted assessments (**Appendix G2.3**) of potential habitats (if present) for those amphibian and reptile species listed in **Appendix G2.1** and **Appendix G3.1.**

The biologists generally followed the methods outlined in agency protocols to conduct assessments for federally listed amphibians:

- Santa Cruz long-toed salamander (SCLTS) (*Ambystoma macrodactylum croceum*) (federal and state endangered and state fully protected) (USFWS and CDFW 2012);
- California tiger salamander (CTS) (*Ambystoma californiense*) (federal and state threatened) (USFWS and CDFW 2003); and
- California red-legged frog (CRLF) (*Rana draytonii*) (federal threatened and CDFW SSC) (USFWS 2005).

The Study Area was evaluated for suitable aquatic breeding habitat, aquatic non-breeding habitat (for CRLF), upland, dispersal, and movement habitat. Based on recommended protocols, the distance from known occurrence locations, and knowledge of the natural history of each species, the biologists determined the likelihood of amphibians to utilize or move through the Study Area from known locations nearby. Formal protocol-level surveys were not conducted as part of this effort.

The Study Area was evaluated for potential habitat for the federal proposed threatened and CDFW SSC northwestern pond turtle (NWPT) (*Actinemys marmorata*), and potential habitat for the CDFW SSC Santa Cruz black salamander (*Aneides niger*).

Avian Assessment

Wildlife biologists evaluated the Study Area for potential impacts to avian species resulting from the proposed Project, to determine which sensitive avian species listed in **Appendix G2.1** and **Appendix G3.1** could potentially nest within the habitats present in the Study Area and which species could be eliminated from consideration. Bird species with additional protections, including those listed below, were also considered (Regulatory Background below):

- Tricolored blackbird (*Agelaius tricolor*) (USFWS BCC, state threatened, and CDFW SSC), with nesting colonies tracked by CDFW and local scientists [4] and a survey protocol outlined in "Tricolored blackbird survey methods" (Airola et al. 2024)

[4] Breeding colonies, including on the Central California Coast, are protected and tracked by CDFW and local scientists (CDFW et al. 2017; Colibri Ecological Consulting, LLC 2022; Phillips 2020). The 2025 Tricolored blackbird statewide survey was conducted in April, and results are expected in fall 2025.

- Bald eagle (*Haliaeetus leucocephalus*) (state endangered and CDFW fully protected) and golden eagle (*Aquila chrysaetos*) (CDFW fully protected), with nest sites protected year-round by the Bald and Golden Eagle Protection Act of 1940 (16 USC 668–668d, 54 Stat. 250)
- Burrowing owl (*Athene cunicularia*) (USFWS BCC, state candidate endangered, and CDFW SSC), with wintering sites mapped, with or without a burrow in Santa Cruz County (CNDDB 2026a)
- White-tailed kite (*Elanus leucurus*) (fully protected), wintering and foraging activities are included in analysis

The biologists conducted avian surveys on June 5 and June 6, 2023, and July 1, 2024, to develop a list of common and sensitive bird species utilizing the Study Area. A comprehensive breeding bird survey was not performed because nest sites for most avian species are dynamic, and nest locations vary from year to year.

Mammal Assessment

Wildlife biologists evaluated the Study Area for the presence of bats and San Francisco dusky-footed woodrat. The biologists visually inspected the tree stands for potential bat roost features or evidence of bats (e.g., tree cavities, senescent limbs, peeling bark, or guano deposition) (H.T. Harvey & Associates 2021) and documented potential and occupied habitat for the San Francisco dusky-footed woodrat (*Neotoma fuscipes annectens*), including stick houses in trees, scrub, and the understory of scrub and woodland habitat.

Habitat Characterization

The majority of the Study Area and surrounding lands consist of developed and ruderal habitats including, but not limited to, the Current Active Landfill, the Rountree Medium (Jail) Facility, the Buena Vista Migrant Center (farmworker housing and childcare facility), and Tierra Alta Affordable Housing complex. In addition, active agricultural lands are present to the north and west of the Study Area. Aquatic habitats within, along the margins of, and near the Study Area constitute more naturalized habitats. Other exceptions to this disturbed landscape include the Harkins Slough Unit of the Wildlife Refuge that borders the Study Area to the east, and the Ellicott Slough Unit of the Wildlife Refuge, located approximately 1 mile northwest of the Study Area. Together, these areas provide important aquatic and upland habitats for native wildlife species, including sensitive herpetofauna.

Non-native ornamental trees (eucalyptus, coast redwoods, Monterey cypress, sweetgum, and bottlebrush) are found throughout the Study Area near developed areas, including by the Rountree Medium (Jail) Facility, the area proposed for the Equipment Parking and Storage Area, and along the perimeter of the Current Active Landfill bordering Buena Vista Drive and Harkins Slough Road. Non-native and ruderal grasslands are widespread within and along the margins of the existing Landfill, in upland portions of the Wildlife Refuge, and on a steep, vegetated hillslope in the southwest portion of the Study Area on the Old Landfill.

Additional native or naturalized habitats within the Study Area include coast live oak woodland, coastal scrub, riparian forests, and willow forest (non-riparian). Three tributaries (drainages) are present in the Study Area: 1) Harkins Slough Road Drainage, located along Harkins Slough Road between proposed Transfer Station A and the intersection with Buena Vista Drive; 2) Buena Vista Drive Tributary, located along Buena Vista Drive between the prior Landfill entrance and the confluence with Channelized Gallighan Slough (and associated riparian habitat); and 3) Channelized Gallighan Slough, which flows southeast to Gallighan Slough.

The Study Area also includes ephemeral to seasonal ditches and drainages; palustrine emergent wetlands, including freshwater emergent marsh associated with Gallighan Slough; and a seasonal wetland swale immediately west of the Old Landfill adjacent to the SCBRL.

Twelve habitat types, including non-native and native vegetation communities and land cover, occur within the Study Area, as listed in **Table 3.4-2** and depicted on **Figure 3.4-1** and **Figures 3.4-2a–e**.

Table 3.4-2. Habitat Types within the Study Area

Habitat Type[i]	Acreage within the Study Area
Coast Live Oak Woodland and Forest	**6.64**
Coastal Scrub	**0.78**
Riparian Forest and Scrub	
Mixed Broadleaf Riparian	**0.63**
Mixed Willow Riparian Forest and Scrub	**10.13**
Willow Forest (Non-Riparian)	**5.33**
Palustrine Emergent Marsh	
Seasonal Wetland Swale	**0.28**
Freshwater Emergent Marsh	**0.22**
Riverine	
Riverine (Aquatic)	**1.01**
Riverine (Culverted)	**0.06**
Mixed Evergreen Forest	0.31
Solitary Coast Live Oaks	0.04
Non-Native Forest	4.77
Non-Native Grassland	7.91
Ruderal	
Ruderal Grassland	55.89
Ruderal Mixed Herbs	7.05
Developed/Landscaped	58.73

Notes:

[i] Sensitive habitat types are indicated in bold.

Non-native grasslands, non-native forests, ruderal, and developed habitats are considered non-native, as they are typically associated with heavy, ongoing, or repeated human disturbance; and the majority of this vegetation is naturalized or has been introduced, oftentimes intentionally. The coast live oak woodland, coastal scrub, riverine, palustrine emergent wetland, and riparian habitats are generally considered native or naturalized as they do not persist solely as a result of human influence. Some degree of past disturbance may have affected these habitat types, so non-native species usually occur and may even be dominant within these areas. Some of these native habitat types are also considered sensitive habitats and are discussed in further detail below.

Table 3.4-2 includes the habitat types within the Study Area, with sensitive habitat types shown in bold. The potential impacts to habitat types are discussed in Section 3.4.4, Project Impact Analysis.

COAST LIVE OAK WOODLAND AND FOREST

In the Study Area, coast live oak woodland and forest closely corresponds to the *Quercus agrifolia* Alliance (71.060.00) and *Quercus agrifolia-Toxicodendron diversilobum* Association (71.060.13) of Sawyer et al. (2009) and CDFW (2026d), and to the Central California Coast phase of the coast live oak woodland and forest types described by Holland (1986). The overstory is comprised entirely of coast live oak (*Quercus agrifolia*), with a patchy to dense understory dominated by California blackberry (*Rubus ursinus*) and poison oak (*Toxicodendron diversilobum*). Other common understory associates include coyote brush (*Baccharis pilularis*), California coffeeberry (*Frangula californica*), stinging nettle (*Urtica dioica* ssp*. dioica*), cleavers (*Galium aparine*), Italian thistle (*Carduus pycnocephalus*), California manroot (*Marah fabacea*), miner's lettuce (*Claytonia perfoliata*), Harding grass (*Phalaris aquatica*), and poison hemlock (*Conium maculatum*).

Coast live oak woodland and forest in the Study Area is limited in its extent, occurring in several areas including north of Harkins Slough Road and on a moderately steep hillslope bordering Harkins Slough in the Wildlife Refuge. Other locations outside of the Project area but within the Study Area include the hillslope above the Old Landfill southwest of the SCBRL tracks, along Harkins Slough Road in the southeast corner of the Study Area, and a fragment situated west of the eucalyptus grove in the southeast corner of the Study Area. The most notable stand covers approximately 2.5 acres and is located within and east of the proposed Harkins Slough Road Realignment and Transfer Station A, adjacent to and within the Wildlife Refuge on the steep hillslope between Harkins Slough Road to the west and Harkins Slough to the east. In this area, especially within the Wildlife Refuge, the canopy is mostly closed and supports mature oaks with an understory of California blackberry, poison oak, and stinging nettle. Along Harkins Slough Road, the oaks are small- to medium-sized, and weedy non-native grassland lines the roadway shoulder.

A smaller 0.38-acre patch of coast live oak woodland is situated on the slope along Harkins Slough Road within the proposed Transfer Station A footprint. At this location, coast live oak woodland occurs in a habitat mosaic comprising developed, ruderal, and non-native grassland habitats. The overstory canopy of these areas is mostly closed to partly open and dominated by medium-sized, relatively immature coast live oak trees (< 40 years old). A review of historical aerial photographs indicates this woodland was either planted or developed naturally following the realignment of Harkins Slough Road that allowed for landfill expansion approved in 1985. There are no records (e.g., permits, monitoring reports, deed restrictions, etc.) to indicate this area was planted as mitigation for the landfill expansion, previous Harkins Slough Road Realignment, or any other formally permitted project. Although the oak woodland situated within the Project area is relatively young, it is contiguous with the dense, more mature coast live oak woodland that extends down the slope to Harkins Slough.

Numerous bird species are likely to use this habitat type for nesting, including foliage-nesting, cavity-nesting, and ground-nesting birds. Some avian species such as oak titmouse (*Baeolophus inornatus*), acorn woodpecker (*Melanerpes formicivorus*), and Nuttall's woodpecker (*Dryobates nuttallii*) are especially reliant on oak woodlands. Foliage and crevice roosting bats may also be present in the larger mature oaks on the adjacent Wildlife Refuge property. Striped skunk (*Mephitis mephitis*), raccoon (*Procyon lotor*), and opossum (*Didelphis virginiana*) may use this habitat type for denning, foraging, cover, and refuge. In addition, the San Francisco dusky-footed woodrat (*Neotoma fuscipes annectens*) frequently uses this habitat type, and woodrat houses were observed during biological surveys.

COASTAL SCRUB

Coastal scrub is a limited habitat type within the Study Area, typified by low- to moderate-sized woody shrubs, with mesophilic leaves and small-diameter flexible branches. These shrubs are often relatively short-lived with a shallow root structure and typically occur on hillslopes in shallow, well-drained soils. Due to marine influence, soils tend to be higher in concentration in salts than more inland areas. Coastal scrub may persist as a stable climax community in areas with cool, mesic microclimates and persistent fog; but often, as with the Study Area, the coastal scrub represents an intermediate seral state (transitional habitat) between pioneer grassland communities and oak woodlands and mixed evergreen forests. Growth habits of dominant shrubs range from shrubby to arboreal. Within the Study Area, this habitat type corresponds to a phase of northern coastal scrub habitat type (Holland 1986) and to the *Baccharis pilularis* Alliance (32.060.00; G5/S5) *of* Sawyer et al. (2009) and CDFW (2026d). Poison oak and California blackberry are sub-dominant in this assemblage.

The coastal scrub habitat type covers approximately 0.61 acres in two distinct locations within the Study Area. One occurrence is a relatively mature patch of coastal scrub dominated by coyote brush and poison oak on the embankment between the Old Landfill and the City of Watsonville Landfill upslope to the south. Other common associates include native California coffeeberry (*Frangula californica*), but most of the associated understory vegetation consists of weedy, opportunistic species including brome grasses (*Bromus spp*.), wild oats (*Avena barbata*), poison hemlock, stinging nettle, wild radish (*Raphanus sativus*), and field mustard (*Hirschfeldia incana*). Another occurrence is a disturbed, early successional assemblage of coastal scrub on a steep embankment bordering the north side of Buena Vista Drive near the active landfill entrance, intergrading with ruderal (mixed herbs) and willow riparian forest habitat. Coyote brush is dominant at this location with non-native grasses and poison hemlock also prevalent.

The coastal scrub provides habitat for a range of wildlife species, offering varied food sources, cover from predators, and shelter. The coastal scrub habitats are within proximity to the sloughs, riparian and woodland habitats, as well as open areas such as ruderal and non-native grasslands. Habitat mosaics and reliable water sources increase the habitat value of these coastal scrub habitats for wildlife.

Numerous bird species were observed utilizing the coastal scrub such as wrentit (*Chamaea fasciata*), various goldfinch species (*Spinus* sp.), California towhee (*Melozone crissalis*), Anna's hummingbird (*Calypte anna*), and other species listed in **Appendix G2.4.**

Coastal scrub is a preferred habitat for small mammals, such as brush rabbit (*Sylvilagus bachmani*), and skunks may use the coastal scrub for cover. Pacific gopher snake (*Pituophis catenifer catenifer*) and Coast Range fence lizard (*Sceloporus occidentalis bocourtii*) were also observed in this habitat.

RIPARIAN FOREST (MIXED BROADLEAVED AND MIXED WILLOW)

Along the border of Channelized Gallighan Slough (bisecting the southwest portion of the Study Area) and along the Buena Vista Drive Tributary, riparian vegetation largely corresponds to the Central Coast arroyo willow riparian forest habitat type (Holland 1986), although Holland does not recognize this type north of Monterey County, and the *Salix lasiolepis* Alliance (61.201.00) and Association (61.201.01) and *Salix lucida* var. *lasiandra* [=*S. lucida*] Alliance of Sawyer et al. (2009) and CDFW (2026d). Arborescent, tree-sized arroyo willow (*Salix lasiolepis*) and Pacific willow (*Salix lasiandra*) dominate this riparian forest habitat type. Red willow (*Salix laevigata*) is also present, but relatively uncommon. In one area along Channelized Gallighan Slough (immediately south of Buena Vista Drive), willows, dogwood (*Cornus sericea* spp*. sericea*), black cottonwood (*Populus trichocarpa*), coast live oak, and blue elderberry (*Sambucus mexicana*) are common associates of the distinct mixed

broadleaved riparian forest type. This area closely corresponds to the description of the *Populus trichocarpa* Alliance (61.120.00) and *Populus trichocarpa-Salix* spp. Association (61.120.06) of Sawyer et al. (2009) and CDFW (2026d). The arborescent to arboreal canopy is typically dense and often impenetrable, although openings of various sizes occur locally and support patches of herbaceous vegetation. The native, woody vine forms of California blackberry and poison oak are prevalent in the understory where prolonged soil saturation and/or inundation is less persistent.

The riparian vegetation supports a suite of wildlife species, including insects, amphibians, birds, and mammals. Sierran chorus frog is known to occur in these habitats, as well as non-native American bullfrog (*Lithobates catesbeianus*). Migratory and resident bird species including song sparrow, Wilson's warbler (*Cardellina pusilla*), western flycatcher (*Empidonax difficilis*), and spotted towhee (*Pipilo maculatus*) utilize the riparian habitat adjacent to the sloughs and within the Project area (**Appendix G2.4**). Riparian habitats provide a dense multi-tiered canopy with diverse foraging, roosting, sheltering, and/or nesting habitat for birds and are important stopover sites for migratory bird species. Riparian vegetation provides cover from predators and insulating properties that shelter wildlife species from the sun and prevailing weather patterns. The San Francisco dusky-footed woodrat regularly builds its houses within riparian areas, and foliage-roosting bat species may roost in these habitats and hunt over the adjacent aquatic habitats.

The riparian vegetation also buffers the adjacent aquatic habitat contributing shade, food, and sources of nutrients to the sloughs and aquatic wildlife species. Structurally, downed trees and willow mats create microhabitats that are important for birds, amphibians, and aquatic insects.

WILLOW FOREST (NON-RIPARIAN)

The steep slope between the Old Landfill and the City of Watsonville Landfill supports non-riparian willow forest that is not associated with lentic or lotic waterbodies or contemporary wetland hydrology. This vegetation is neither considered riparian habitat, as the willows are not directly influenced by the hydrology of a watercourse or waterbody, nor does it provide other riparian functions and values including streambank stabilization, sediment filtration, creek shading, or aquatic dependent wildlife habitat. Rather, the slope appears to receive intermittent groundwater seepage and runoff during the dry summer months from irrigated agricultural fields situated on the terrace upslope and adjacent to the City of Watsonville Landfill. This groundwater seepage and surface runoff allows for the establishment and persistence of phreatophytic willow species that utilize tap roots to access groundwater at depths greater than 12 inches below the ground surface. Within the Study Area, this forested habitat type intergrades with coast live oak woodland and coastal scrub and supports a relatively undeveloped understory similar in composition to the adjacent habitats dominated primarily by poison oak, California blackberry, and stinging nettle. Arroyo willow is dominant, but red willow and Pacific willow are also common. Within the Study Area, areas dominated by willows are considered one- or two-parameter Coastal Act wetlands where they lack hydric soils and/or contemporary wetland hydrology.

Non-riparian willow forests provide important habitat for a variety of wildlife species. The dense canopy and understory support avian species such as the bushtit (*Psaltriparus minimus*), dark-eyed junco (*Junco hyemalis*), lesser goldfinch (*Spinus psaltria*), and orange-crowned warbler (*Leiothlypis celata*), which utilize the vegetation for nesting, cover, and abundant year-round food sources. Mammalian species such as the San Francisco dusky-footed woodrat and eastern gray squirrel (*Sciurus carolinensis*) may inhabit these woodlands, relying on the willow trees for food resources, nesting material, and shelter. The vertical complexity provided by willow and other forest types

within the Study Area is especially valuable in a region otherwise dominated by urban/agricultural development and low-lying grasslands.

PALUSTRINE EMERGENT WETLAND (SEASONAL WETLAND DITCH AND FRESHWATER EMERGENT MARSH)

Wetlands are those areas that are transitional between aquatic and terrestrial systems, where surface water is at a depth and duration sufficient to promote the development of hydric soils and a preponderance of hydrophytic wetland vegetation.[5] Within the Study Area, palustrine[6] emergent[7] wetland types include seasonal wetland ditch and emergent freshwater marsh.

Seasonal wetlands are characterized by shallow depressional topography with inundation and/or saturation only occurring during the rainy season. These features are typically dominated by annual and perennial grasses and forbs, many of which may occur in both wetland and upland habitats (i.e., facultative [FAC][8] species). Moreover, seasonal wetlands are "problematic" in that they typically support hydrophytes and wetland hydrology during the growing season but often support upland species and may lack direct hydrologic indicators (i.e., inundation, saturation) during drier parts of the year.

One seasonal wetland swale totaling 0.28 acres was identified within the greater Study Area. This feature is a linear drainage/swale along the southern perimeter of the Old Landfill immediately downslope of the SCBRL tracks. This feature was presumably designed as a drainage ditch for the rail line to convey stormwater into Gallighan Slough south of the Study Area; but it is now mostly filled with sandy/gravelly sediments and supports dense, mature hydrophytic vegetation common to seasonal wetlands and transitional freshwater marsh.

The northwest (upgradient terminal) portion of the seasonal wetland swale is drier and shallower, and dominant plants include Italian ryegrass (*Festuca perennis*; FAC), creeping wildrye (*Elymus triticoides*; FAC), curly dock (*Rumex crispus*; FAC), rabbitsfoot grass (*Polypogon monspeliensis*; facultative wetland [FACW]), poison hemlock (FACW), bird's foot trefoil (*Lotus corniculatus*; FAC), prickly ox tongue (*Helminthotheca echioides*; FAC), and stinging nettle (FAC).

Farther southeast, the swale is deeper and wider, supporting wetland hydrology that persists as surface ponding for several months or more and dominated by a mix of emergent hydrophytes including: willows (*Salix lasiolepis, S. laevigata*; FACW), common rush (*Juncus patens*; FACW), Pacific rush (*Juncus effusus* ssp. *pacificus*; FACW), iris-leaved rush (*Juncus xiphioides*; FACW), dotted smartweed (*Persicaria punctata*; OBL), broadleaved and narrowleaved cattails (*Typha latifolia, T. angustifolia*; OBL), pennyroyal (*Mentha pulegium*; OBL), and small-fruited bulrush (*Scirpus microcarpus*; OBL).

Freshwater emergent marsh totaling 0.22 acres occurs in two small, distinct locations within the Study Area including a small 0.02-acre feature immediately south of the main landfill entrance, bordering Buena Vista Drive Tributary. This feature was dominated by willows and cattails, with watercress (*Nasturtium officinale*; OBL), water parsley (*Oenanthe sarmentosa*; OBL), cutleaf waterparsnip (*Berula erecta*; OBL), and goldenrod (*Euthamia occidentalis*; FACW) also common

[5] Hydrophytic plants (also called hydrophytes) are plants that grow in or on water or in soil that is saturated with water for most or all of the growing season.

[6] Palustrine refers to non-tidal freshwater wetlands not influenced by the ocean.

[7] Emergent means that most of the vegetation consists of herbaceous plants rooted in the soil but extending above the water surface.

[8] A facultative [FAC] plant species is a plant that is equally likely to be found in wetlands and upland habitats.

along the margin of Buena Vista Drive Tributary extending laterally to the southwest. Freshwater marsh (0.20 acres) is also associated with the outlet of Channelized Gallighan Slough into the bottomland mixed willow riparian forest of upper Gallighan Slough. The emergent marsh vegetation observed at this location occurs in braided alluvial soil/sediments beneath a dense willow canopy overstory, and within a concrete spring-box containing dotted smartweed, small-fruited bulrush, stinging nettle, broadleaved cattail, California blackberry (FAC), velvet grass (*Holcus lanatus*; FAC), and duckweed (*Lemna minor*; OBL).

During the rainy season, the seasonal wetlands and freshwater marsh habitats may provide hydration points, refuge, or breeding habitat for amphibian species such as Sierran chorus frog (*Pseudacris sierra*) and CRLF. Freshwater marsh habitat within the Study Area provides both foraging and nesting habitat for numerous bird species such as song sparrow, common yellowthroat (*Geothlypis trichas*), red-winged blackbird (*Agelaius phoeniceus*), and Anna's hummingbird (**Appendix G2.4**).

AQUATIC/RIVERINE

Riverine (aquatic and culverted) habitat is composed of natural and anthropogenic open bodies of flowing water (i.e., lotic systems). Riverine habitat is largely defined as unvegetated portions of these waterways, which intergrade with riparian forest and palustrine emergent wetlands (described above) and support a dense overstory of broadleaved evergreen trees and/or emergent wetland vegetation. Within the Study Area, riverine features include an unnamed seasonal to perennial drainage bordering the landfill to the north along Harkins Slough Road (Harkins Slough Road Drainage), and an unnamed perennial tributary to Gallighan Slough bordering Buena Vista Drive (Buena Vista Drive Tributary) (**Figure 3.4-1 and Figure 3.4-2a, b, and d**). Additionally, the Study Area supports a channelized segment of Gallighan Slough (Channelized Gallighan Slough) in a broad arroyo bisecting the active landfill to the northeast and the Old Landfill to the southwest (**Figure 3.4-1 and Figure 3.4-2c and d**). The Study Area also supports several ephemeral to seasonal drainage features that ultimately convey stormwater into Gallighan Slough and the larger Watsonville Slough system (**Figure 3.4-1 and Figure 3.4-2b and d**).

The Harkins Slough Road Drainage originates north of the Study Area on a terrace supporting a commercial flower nursery and is mostly contained in belowground pipes and culverts before daylighting in a narrow linear incised drainage bordering the north side of Harkins Slough Road. This feature flows westward to the confluence (via a culvert under Buena Vista Drive) with the Buena Vista Drive Tributary. The Buena Vista Drive Tributary that flows along Buena Vista Drive originates in terraced and sloped agricultural fields north and northwest of the Study Area and flows generally southward until its confluence with the Channelized Gallighan Slough described above. These flashy drainages and tributaries carry elevated flow volumes immediately following storm events and continue to flow during summer months in part due to irrigation runoff (tailwater) from adjacent agricultural fields.

Channelized Gallighan Slough is a narrow, perennial stream positioned within a relatively broad arroyo bisecting the Active Landfill to the north and the Old Landfill to the south, with a culvert beneath the internal roadway between the Active Landfill and Old Landfill. On the upstream side of the culvert, the stream is lined with dense mixed broadleaved riparian forest. On the downstream side of the culvert, the stream is lined with dense mixed willow riparian forest on the north side; and on the south there is an unpaved maintenance road that restricts the formation of a riparian corridor. Invasive weeds including poison hemlock, veldt grass, and wild radish are present on both embankments downstream of the culvert, with ruderal vegetation continuing above the top of bank

on the south side. As Channelized Gallighan Slough enters the main body of Gallighan Slough, agricultural sediments have accumulated in an alluvial plain that supports a dense mixed willow riparian forest and freshwater emergent marsh.

As noted above, several ephemeral to seasonal tributaries were identified within the Study Area. A linear ditch (Irrigation Ditch) extends from the toe of the slope proposed for Transfer Station A to the confluence with the Harkins Slough Road Drainage. Within the Irrigation Ditch, flow occurs only during and immediately following precipitation, or at times when there is tailwater from the agricultural operations to the north. Proposed Transfer Station A skirts the edge of this ditch.

In the southernmost portion of the Study Area, a deeply incised ephemeral to seasonal drainage enters Gallighan Slough from the steep hillslope below the Santa Cruz Branch Rail Line railroad tracks along the margin of the Old Landfill. This drainage would not be impacted by the proposed Project.

Together with the riparian habitat and open spaces that border them, aquatic features offer important habitat values to wildlife species, providing water, food sources, shade, and cover. Aquatic habitats in the area moderate the Mediterranean climate of the region, allowing wildlife to adjust to seasonal and climatic fluctuations. Aquatic habitats support amphibian species such as freshwater sculpins (*Cottus* sp.) and Sierran chorus frog.

MIXED EVERGREEN FOREST

Mixed evergreen forest habitat within the Study Area is a "semi-natural" forest type that does not conform to vegetation alliances described by Sawyer et al. (2009) and represents an urbanized phase of the mixed evergreen forest type of Holland (1986). Mixed evergreen forest occupies a small and fragmented extent of the Study Area, limited to a 0.29-acre stand at the intersection of Buena Vista Drive and Harkins Slough Road. This habitat type is dominated by an overstory of mature trees and arboreal shrubs including coast redwood, coast live oak, Pacific willow (*Salix lasiandra* ssp. *lasiandra*), black cottonwood (*Populus trichocarpa*), coffeeberry, and coyote brush. Although comprised primarily of native species, these areas appear to be semi-ornamental or remnant naturalized areas that are now isolated and highly fragmented from similar forested habitat. In particular, coast redwoods are not common in this area and unlikely to have established naturally at this location. Furthermore, the source of hydrology that facilitated willow establishment may not appear contemporary.

The small patch of mixed evergreen forest in the Study Area provides roosting, foraging, and nesting habitat for birds (refer to the Other Nesting Avian Species section below and **Appendix G2.4**), and may support a range of common mammal species such as skunk (*Mephitis mephitis*), raccoon (*Procyon lotor*), and western gray squirrel (*Sciurus griseus*). This habitat type may also provide upland or refuge habitat for amphibians such as Sierran treefrog or CRLF.

SOLITARY TREES (COAST LIVE OAK)

Solitary, isolated coast live oak trees are located on or near the northern boundary of the County property north of the Landfill. A total of five (5) coast live oak trees were identified in the Study Area. These trees are healthy but disjunct from intact forest and woodland communities within and adjacent to the site. These trees are not associated with sensitive habitats and are of insufficient size to be considered "Significant Trees" under the County of Santa Cruz Significant Tree Ordinance (SCCC Chapter 16.34).

Individual trees within the Study Area provide habitat for a variety of native birds, small mammals, and insects.

NON-NATIVE FOREST

Non-native forest in the Study Area comprises an assortment of planted blue gum eucalyptus (*Eucalyptus globulus*), red ironbark (*Eucalyptus sideroxylon*), Monterey cypress (*Hesperocyparis macrocarpa*), Monterey pine (*Pinus radiata*), and other opportunistic, non-native tree species. This forest type corresponds to *Eucalyptus* spp.*-Ailanthus altissima-Robinia pseudoacacia* Woodland Alliance (79.100.00) and *Hesperocyparis macrocarpa-Pinus radiata* Woodland Semi-Natural Alliance (79.400.00) of Sawyer et al. (2009) and CDFW (2026d). Eucalyptus species are able to rapidly grow from seed or re-sprout following disturbance (cutting, fire, etc.) to an existing tree. Understory vegetation is often sparse due to litter accumulation and allelopathic[9] effects of oils found in eucalyptus leaf and root exudates. Blue gum eucalyptus trees are an exotic species and rated as "moderately invasive" by the California Invasive Plant Council (Cal-IPC 2026). Red ironbark is also common in the Study Area, mostly occurring as individual trees or small groves and hedgerows bordering the landfill. This species is less common than blue gum in Santa Cruz County and is not classified as invasive by the Cal-IPC. Additional individual trees and stands of non-native forest comprising Monterey cypress, Monterey pine, sweetgum (*Liquidambar styraciflua*), and crimson bottlebrush (*Callistemon citrinus*) are situated along Harkins Slough Road and Buena Vista Drive bordering the northern, western, and eastern perimeter of the existing landfill and as small, ornamental stands on various adjacent parcels including the proposed Equipment Parking and Storage Area site.

The non-native forest habitat type includes a contiguous grove of blue gum eucalyptus near the southernmost perimeter of the Study Area, bordering the Buena Vista Migrant Center and wastewater treatment ponds. This mature, even-aged stand supports an understory of ruderal grassland with dense leaf and bark litter.

This grove does not provide autumnal and winter roosting habitat for the western monarch butterfly, because it is more than 2 miles from the Pacific Ocean which is beyond the typical inland extent of groves supporting overwintering monarchs in Santa Cruz County. In addition, the approximately 2-acre grove is a monospecific stand of eucalyptus trees of the same age that, because of how densely planted they are, have grown tall and thin, lack many mid-tier branches, and restrict sunlight penetration into the center of the stand. These characteristics would likely limit use of the grove by roosting monarchs. The grove also lacks nectar plants such as English ivy.

All the eucalyptus and other non-native trees within the Study Area provide foraging, roosting, and nesting habitat for birds such as Anna's hummingbird, house finch, and chestnut-backed chickadee (*Poecile rufescens*).

NON-NATIVE GRASSLAND

Within the Study Area, the non-native grassland habitat type corresponds to the *Avena* spp.*-Bromus* spp. (42.027.00; GNA/SNA) and *Phalaris aquatica-Phalaris arundinacea* (42.051.00) Semi-Natural Herbaceous Alliance of Sawyer et al. (2009) and CDFW (2026d) and to a phase of the non-native grassland type described by Holland (1986). Some non-native grasslands, including grassland within

[9] Allelopathic refers to a biological phenomenon where one plant releases chemicals that inhibit or influence the growth, survival, or reproduction of other nearby plants.

the Wildlife Refuge, are also undergoing colonization by coyote brush, a native woody shrub; and other non-native grasslands are invaded by poison hemlock and monospecific Harding grass stands. Non-native grasslands may represent an early successional stage following cessation of ongoing management (e.g., grazing, mowing, etc.) and, other than colonizing coyote brush, are comprised almost entirely of invasive and/or non-native grasses and forbs. In one approximately 0.04-acre area immediately east of the proposed Transfer Station A site, the non-native grassland supports purple needlegrass (*Stipa pulchra*), a native coastal terrace prairie indicator species. While purple needlegrass is co-dominant with non-native grasses and herbs at this location, the small patch size, isolated landscape position, and lack of other associated native vegetation preclude its inclusion as native coastal prairie grassland habitat.

Non-native grassland occurs in several areas within the Study Area, largely beyond the Project limits, on neighboring private properties to the west and north, and to the east on the hillslope above Harkins Slough in the Wildlife Refuge. Non-native grasslands comprise primarily weedy, non-native grasses and forbs of Eurasian origin. Dominant species observed within the non-native grassland habitat type include wild oats (*Avena barbata*), Harding grass, soft chess (*Bromus hordeaceus*), ripgut brome (*Bromus diandrus*), rattail sixweeks grass (*Festuca myuros*), Italian ryegrass (*Festuca perennis*), common barley (*Hordeum murinum ssp. leporinum*), black mustard (*Brassica nigra*), field mustard, wild radish, English plantain (*Plantago lanceolata*), sheep sorrel (*Rumex acetosella*), poison hemlock, and small aggregations of coyote brush. A large percentage of plant species identified within this habitat type are listed as invasive weeds with "moderate to high ecological impacts" by the California Invasive Plant Council (Cal-IPC 2026) including poison hemlock, fennel (*Foeniculum vulgare*), jubata grass (*Cortaderia jubata*), wild oats, thistles, wild radish, and mustards.

It is important to note that in more mesic coastal sites, non-native grassland often contains a higher percentage of perennial species than more interior, drier locations. In particular, invasive Harding grass and reed fescue (*Festuca arundinacea*) are locally abundant, in some instances forming dense monospecific stands. Harding grass is especially prevalent in the grasslands of the Wildlife Refuge immediately east of the proposed Transfer Station A site.

Many bird species utilize contiguous non-native grassland to forage and hunt for invertebrates, seeds, and/or small mammals. Some species utilize grassland habitats for nesting, such as grasshopper sparrow (*Ammodramus savannarum*), killdeer (*Charadrius vociferus*), and song sparrow (*Melospiza melodia*). Numerous small mammal burrows were present within the grassland habitat. Botta's pocket gopher (*Thomomys bottae*), California ground squirrel (*Otospermophilus beecheyi*), and California meadow vole (*Microtus californicus*) commonly occur in non-native grassland, along with lizards such as Coast Range fence lizard. These species in turn provide prey for garter snakes (*Thamnophis* sp.), Pacific gopher snake, and raptors, along with bobcat (*Lynx rufus*) and coyote (*Canis latrans*). Mammal burrows are also utilized by amphibian and reptile species for refuge. The scat of black-tailed deer (*Odocoileus hemionus*) was observed within the non-native grassland. The scattered coyote brush provides structural diversity as well as additional food sources, refuge, and nesting habitat. Brush rabbits and ground squirrels are likely to utilize the coyote brush for cover. The edge habitats,[10] or ecotones, between non-native grassland and adjacent coastal scrub, oak woodland, riparian, and slough habitats, are particularly productive and provide a range of foraging, refuge, and nesting opportunities for wildlife species.

[10] Edge habitats occur when two or more habitat types abut one another. Edge habitats provide an abundance and variety of food sources because they have diverse plant species and microhabitat variability, including cover, shelter, and shade, as well as sun exposure for warmth and air flow for circulation.

RUDERAL (GRASSLAND AND MIXED HERBACEOUS)

Ruderal habitats are not described in the vegetation classification systems by Holland (1986), Sawyer et al. (2009), or CDFW (2026d) but contain elements of the non-native grassland and coastal scrub habitat types. Within the Study Area, ruderal communities consist of highly disturbed, weedy areas immediately adjacent to roads and other developed or disturbed areas. Ruderal grassland occurs on the nearly level terraces to very steep hillslopes throughout the majority of the Study Area in areas previously supporting or adjacent to active and recently closed landfill activities. These areas currently undergo repeated, ongoing disturbance including grading, mowing, and other landscape manipulation and likely would transition to woody habitat types if undisturbed. In contrast to non-native grassland (described above), many of these areas were artificially formed above buried refuse and were not grassland communities prior to disturbance. The vegetation assemblage of ruderal grassland is dominated by aggressive, opportunistic species including wild oats, brome grasses, Harding grass, poison hemlock, bindweed (*Convolvulus arvensis*), Bermuda grass (*Cynodon dactylon*), and reed fescue. Other areas dominated by ruderal mixed herbs are situated primarily along the margins of existing roads, buildings, and equipment storage areas and comprise thickets of non-native Himalayan blackberry (*Rubus armeniacus*), wild radish, cutleaf plantain (*Plantago coronopus*), purple sandspurry (*Spergularia rubra*), burclover (*Medicago polymorpha*), dog fennel (*Anthemis cotula*), Jersey cudweed (*Pseudognaphalium luteoalbum*), narrowleaf clover (*Trifolium angustifolium*), and filaree (*Erodium botrys*).

In some instances, ruderal habitat in the Study Area may ultimately transition to grassland or coastal scrub habitats where ongoing disturbance regimes are permanently removed. However, due to the proximity to roads, agricultural activities, and other ongoing disturbances, ruderal areas tend to persist over time, and succession to other natural communities is limited to nonexistent.

Opportunistic wildlife species, such as those listed above under Developed/Landscaped (American crow, western gull, barn swallow, house finch, skunk, opossum, raccoon, squirrels), are likely to utilize highly disturbed ruderal habitats.

DEVELOPED/LANDSCAPED

Developed and landscaped areas in the Study Area include paved roadways (Buena Vista Drive, Harkins Slough Road, and internal landfill roads), compacted dirt or gravel access roads, buildings, fencing, and other infrastructure for the existing Buena Vista Landfill. Several buildings including the former office for Hope Services (proposed Equipment Parking and Storage Area location) were removed in 2024; however, concrete slab foundations and paved driveways remain. Developed areas within the Study Area total approximately 57.9 acres.

Developed habitats support opportunistic bird species such as American crow (*Corvus brachyrhynchos*), western gull (*Larus occidentalis*), barn swallow (*Hirundo rustica*), and house finch (*Haemorhous mexicanus*), as well as common mammal species such as skunk, opossum, raccoon, and squirrels.

Floristic Inventory

The biologists recorded a total of 124 species of vascular plants within the Study Area. A complete list of vascular plants encountered during the site visits is presented in **Appendix G1.3.** Fifty-five (44 percent) of these plant species are native, while the remaining 69 (56 percent) of these plant species are non-native or naturalized to the Study Area. Of these non-native species, 32 (26 percent)

are classified as invasive by the California Invasive Plant Council (Cal-IPC 2026), indicating extensive historical and contemporary disturbance to the Study Area.

Special-Status Plant Species

No special-status plant species were observed from 2022 through 2026 within the Study Area during focused, phenologically timed rare plant surveys, and no sensitive plant species are expected to occur within the Study Area or Project area; therefore, no additional surveys or further consideration of sensitive plant species are recommended.

Santa Cruz tarplant (*Holocarpha macradenia*; federal threatened [FT]/state endangered [SE]/California Rare Plant Rank [CRPR] 1B.1) and robust spineflower (*Chorizanthe robusta var. robusta*; FE/CRPR 1B.1) were considered to have "moderate" potential for occurrence due to the observed biotic (e.g., habitat types, dominant plant species) and abiotic (e.g., soils, precipitation, elevation) conditions of the Study Area and based on extant occurrences in relative proximity. To ensure surveys for these target rare plants were performed during the blooming period, nearby reference sites for both species were visited to confirm suitable phenology for identification. These species were not identified during field surveys and are not expected to occur due to the confirmed absence of suitable habitat during floristic surveys of the Study Area. Additional information about these species is included in **Appendix G1.2**.

Sensitive Wildlife Species

A total of 23 sensitive wildlife species are present or may occur within or near the Study Area for the Project (**Appendix G2.1** and **Appendix G2.2**). During the field surveys, 13 sensitive wildlife species were observed within or near the Study Area. An additional nine species are known to occur within the area, and/or potential habitat is present within the Study Area. These species are listed below and discussed in greater detail in Section 3.4.4, Project Impact Analysis, below. Species narratives for sensitive wildlife species known or with potential to occur are included in **Appendix G2.2**. Information regarding species that were considered and subsequently eliminated from consideration is included in **Appendix G2.3** and **Appendix G3.2**.

The following species were observed during field surveys:

- Monarch butterfly (*Danaus plexippus*)
- California red-legged frog (*Rana draytonii*)
- Northwestern pond turtle (*Actinemys marmorata*)
- Allen's hummingbird (*Selasphorus sasin*)
- Bald eagle (*Haliaeetus leucocephalus*)
- California gull (*Larus californicus*)
- California thrasher (*Toxostoma redivivum*)
- Lawrence's goldfinch (*Spinus lawrencei*)
- Nuttall's woodpecker (*Picoides nuttallii*)
- Oak titmouse (*Baeolophus inornatus*)
- Western gull (*Larus occidentalis*)

- Wrentit (*Chamaea fasciata*)
- San Francisco dusky-footed woodrat (*Neotoma fuscipes annectens*)

Individual western monarch butterflies (*Danaus plexippus*) were observed during field surveys; however, suitable autumnal or winter roost habitat is not present within the Study Area, as discussed further in Section 3.4.4.

The following species have been observed in or near the Study Area (eBird 2026) or suitable habitat is present within or near the Study Area:

- Bullock's oriole (*Icterus bullockii*)
- Crotch's bumble bee (*Bombus crotchii*)
- Golden eagle (*Aquila chrysaetos*)
- Grasshopper sparrow (*Ammodramus savannarum*)
- Olive-sided flycatcher (*Contopus cooperi*)
- Western burrowing owl (*Athene cunicularia*)
- White-tailed kite (*Elanus leucurus*)
- Yellow warbler (*Setophaga petechia*)
- Long-legged myotis (*Myotis volans*)
- Western red bat (*Lasiurus blossevillii*)

Potential impacts to these species are analyzed in Section 3.4.4 below.

Wildlife Movement

Providing functional habitat connectivity between natural areas is essential to sustaining healthy wildlife populations, allowing for the continued dispersal of native plant and animal species, and thus, wildlife movement is considered in the California Environmental Quality Act (CEQA) analysis.

Corridors for wildlife movement (also called dispersal corridors, wildlife corridors, or landscape linkages) are features whose primary function is to connect at least two isolated habitat areas (Bond 2003). A basic description of the functions of corridors is as follows:

> Corridors provide avenues along which (1) wide ranging animals can travel, migrate, and meet mates... (2) plants can propagate... (3) genetic interchange can occur... (4) populations can respond to environmental change... [and] (5) locally extirpated populations can be replaced from other areas (Beier and Loe 1992).

In the interface between open spaces and developed areas, corridors can provide links between different types of habitat areas, including (but not limited to) core habitat areas, supportive natural landscapes or habitat patches, and linear habitats.

CORE HABITATS

Core habitat areas are undeveloped areas or open spaces that support the viability of rare plant or animal populations or consist of exemplary natural communities. Core habitat areas in the vicinity of

the Study Area are located northeast of the developed and agricultural footprint of the City of Watsonville in the Santa Cruz Mountains and south of the Study Area including the Elkhorn Slough Reserve, Kirby Park, Elkhorn Slough State Marine Reserve, and Moss Landing Wildlife Area (SCCW 2014; Spencer et al. 2010).

HABITAT PATCHES

Supportive natural landscapes or habitat patches provide plants and wildlife with the minimum resources necessary for breeding, and for wildlife, foraging, refuge and shelter opportunities. Habitat patches may serve as stepping stones to connect native species with other habitat patches or core habitat. Habitat patches may lack the scale (size), richness, and structural complexity that core habitats possess. The Ellicott Slough Unit and Harkins Slough Unit of the Ellicott Slough National Wildlife Refuge would be considered habitat patches in the vicinity of the Study Area. Harkins Slough, Gallighan Slough, the sloughs to the north and east, and the undeveloped portion of the adjacent property (APN 05201111, 1203 Buena Vista Drive) north of the landfill would also be considered habitat patches. The oak woodland within the area proposed for the Harkins Slough Road Realignment and on the adjacent Wildlife Refuge, as well as the oak woodland patch within the area proposed for Transfer Station A, provide stepping stones between the Wildlife Refuge, the undeveloped portion of the adjacent property to the north, and the riparian corridor of the Buena Vista Drive Tributary. Coyote scat and black-tailed deer scat were observed on the area proposed for Transfer Station A.

LINEAR HABITATS

Creeks, drainages, and associated riparian habitats are considered linear habitats. Linear habitats in agricultural or developed landscapes provide habitat for native plants, canopy cover, opportunities for foraging, refuge from predators, as well as the opportunity to disperse (Beier and Loe 1992). The Harkins Slough Road Drainage, Buena Vista Drive Tributary, Channelized Gallighan Slough, and the Old Landfill Drainage would all be considered linear habitats within the Study Area. In addition, the SCBRL right-of-way, while not a riparian corridor, also serves as a linear habitat within the Study Area.

WILDLIFE MOVEMENT WITHIN THE STUDY AREA AND LARGER REGIONAL CONTEXT

Connectivity between habitat patches and linear habitats is essential to sustaining healthy wildlife populations and allowing for the continued dispersal of native plant and wildlife species amidst increasing fragmentation of natural landscapes. The habitat patches and linear habitats within and near the Study Area provide opportunities for plant dispersal and wildlife movement. While these areas are fragmented by busy roads, agricultural fields, and development (all of which are considered partially permeable to impermeable barriers to movement), retaining and enhancing existing lineages is important to preserving wildlife corridor functions.

Despite the disturbed and fragmented nature of the Study Area, the biologists observed the following native wildlife species during the site visits: western monarch butterfly (and numerous other insects), Coast Range fence lizard, gopher snake, numerous common and sensitive avian species (**Appendix G2.4**), bats, brush rabbit, San Francisco dusky-footed woodrat, Sierran chorus frog, CRLF, sculpin, three-spine stickleback, and scat from coyote and black-tailed deer. Additionally, a number of other wildlife species (such as fox, raccoon, bobcat, opossum, and skunk) are likely to occur within the Study Area.

3.4.2 Regulatory Setting

Federal, state, regional, and local regulations have been enacted to provide for the protection and management of sensitive biological resources and aquatic resources. Those pertinent to the Project are summarized below.

Federal

Federal Endangered Species Act

The provisions of the federal Endangered Species Act (ESA) of 1973 (Title 16 U.S. Code, Section 1531 et seq., as amended) protect federally listed endangered and threatened species and their habitats from unlawful "take."[11] The term "endangered species" means any species which is in danger of extinction throughout all or a significant portion of its range. The term "threatened species" means any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range. Activities that may result in "take" are regulated by the U.S. Fish and Wildlife Service (USFWS)[12] for federally listed species. Listed species are taxa for which proposed and final rules have been published in the Federal Register (USFWS 2026a, 2026b).

Proposed species include those species that USFWS has determined are in danger of extinction throughout all or a significant portion of its range (proposed endangered) or are likely to become endangered within the foreseeable future throughout all or a significant portion of its range (proposed threatened) and the USFWS has proposed a draft rule for listing. Proposed species are not protected by the "take" prohibitions of Section 9 of the ESA until the rule to list is finalized. Under Section 7(a)(4) of the ESA, federal agencies must confer with the USFWS if their action will jeopardize the continued existence of a proposed species.

Candidate species are plants and animals for which the USFWS has sufficient information on their biological status and threats to propose them as endangered or threatened under the ESA, but for which development of a proposed listing regulation is precluded by other higher priority listing activities. Candidate species are not afforded any legal protection under the federal ESA but typically receive special attention from federal and state agencies during the environmental review process (USFWS 2026c).

The federal ESA or its implementing regulations do not prohibit take of listed plant species. However, federal agencies cannot undertake activities that would jeopardize the continued existence of a threatened or endangered plant. In addition, the removal of threatened or endangered plants may be a violation of the federal ESA under certain circumstances, if the action is not in compliance with state law.

For projects with federal involvement (i.e., funded, authorized, or carried out by a federal agency), permits for "take" may be obtained through coordination and interagency consultation with the USFWS pursuant to Section 7. Designated "critical habitat" for plants or animals, determined and

[11] The federal ESA (Section 3[18]) defines "take" to mean to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. "Harass" is defined by USFWS as an intentional or negligent action that creates the likelihood of injury to listed species by annoying it to such an extent as to significantly disrupt normal behavioral patterns which include, but are not limited to, breeding, feeding, or sheltering. On July 14, 2026, "harm" was rescinded from 50 CFR 17.3 (USFWS 2026d); however, two lawsuits have been filed challenging the rule: Ctr. for Biological Diversity v. Burgum, Case No. 2:26-cv-02474 and Envtl. Prot. Info. Ctr. v. Nat'l Marine Fisheries Serv., Case No. 3:26-cv-07176.

[12] Activities that may result in "take" are also regulated by National Oceanic and Atmospheric Administration (NOAA) National Marine Fisheries Service (Fisheries) for some anadromous and marine species.

published in the Federal Register as a formal rule, also receives protection under Section 7 of the ESA. For actions with no federal nexus, consultation with USFWS takes place under Section 10(a)(1)(B) of the federal ESA.

Migratory Bird Treaty Act

All migratory birds and their nests are federally protected under the Migratory Bird Treaty Act of 1918 (MBTA) (Title 16 U.S. Code, Sections 703–712 as amended; 50 CFR Section 21; and 50 CFR Section 13) and by California Fish and Game Code (CFGC) provisions that support the act. The MBTA makes it unlawful to "take" any native migratory bird, including raptors listed in 50 CFR Section 10, including their nests, eggs, or products.

Birds of Conservation Concern

The USFWS BCC list (USFWS 2021) was developed to fulfill the mandate of the 1988 amendment to the Fish and Wildlife Conservation Act [Public Law 100–653 (102 Statute 3825)] to protect migratory nongame birds that, without additional conservation action, are likely to become candidates for listing under the ESA. The overall goal is to identify those bird taxa (beyond those already designated as federally threatened or endangered) that represent the highest conservation priorities of the USFWS to stimulate coordinated, collaborative, and proactive conservation actions. Factors considered include population size, breeding and non-breeding distribution, threats, population trends, and relative density (USFWS 2021). These species typically meet the criteria of the CEQA Guidelines and are considered during environmental review.

Bald and Golden Eagle Protection Act

The Bald and Golden Eagle Protection Act of 1940 (16 USC 668–668d, 54 Stat. 250) as amended provides for the protection of bald and golden eagles by prohibiting the take, possession, and commerce of such birds, their eggs, and/or their nests except under certain specified conditions. In addition to immediate impacts, this definition also covers impacts that result from human-induced alterations initiated around a previously used nest site during a time when eagles are not present —if, upon the eagle's return, such alterations agitate or bother an eagle to a degree that interferes with or interrupts normal breeding, feeding, or sheltering habits, and causes injury, death, or nest abandonment.

Executive Order 13112 – Invasive Species

Executive Order 13112 (64 FR 6183, 1999) enlists federal agencies to prevent the introduction of invasive species, provide for their control, and minimize the economic, ecological, and human health impacts that invasive species cause. In addition, federal agencies are required, when feasible, to restore native species and ecosystems and promote public awareness about invasive species.

Wetlands and "Other Waters" of the U.S.

Wetlands are defined by the USACE as those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas (USEPA, 40 CFR 230.3, and CE 33 CFR 328.3).

The USACE uses three criteria to delineate wetlands, including the presence of: (1) hydrophytic vegetation, (2) wetland hydrology, and (3) hydric soils. According to the USACE Manual, evidence of at least one positive wetland indicator from each parameter must be found to make a positive determination.

Areas that are inundated for sufficient duration and depth to exclude growth of hydrophytic vegetation (such as lakes and ponds, or convey water, such as streams) are considered "other waters." Along the Central California Coast, these other waters can include perennial and intermittent streams, as well as lakes and rivers. Other waters are identified by the presence of an ordinary high-water mark,[13] a defined river or stream bed or bank, or by the absence of emergent vegetation in ponds or lakes.

Wetlands and "other waters" of the U.S., including streams, ponds and lakes, are regulated by the USACE and the Regional Board under Sections 404 and 401 of the CWA, as follows.

FEDERAL CLEAN WATER ACT (SECTION 404)

Under Section 404 of the CWA, the USACE is responsible for regulating the discharge of fill material into waters of the U.S. The term "waters" includes wetlands and other waters that meet specific criteria as defined in the Code of Federal Regulations (CFR) (40 CFR 120.2, and 33 CFR 328.3). In general, a permit must be obtained before fill can be placed in wetlands or other waters of the U.S. (33 U.S.C. Section 1344 and 33 CFR Part 323). The type of permit depends on the amount of acreage and the purpose of the proposed fill, subject to the discretion of the USACE.

FEDERAL CLEAN WATER ACT (SECTION 401)

Section 401 of the CWA assigns overall responsibility for water quality protection to the State Water Resources Control Board and directs the nine statewide Regional Boards to develop and enforce water quality standards within their boundaries. A 401 Water Quality Certification (WQC) is required from the Regional Board whenever improvements are made within Jurisdictional Waters of the U.S.

EXECUTIVE ORDER 11990

Executive Order 11990 (42 FR 26961, 3 CFR, 1977 Comp., p. 121) mandates that federal or federally assisted projects and programs minimize the destruction, loss, or degradation of wetlands and avoid new construction in wetlands, taking into account public health and safety, maintenance of natural systems, and other public interests.

State

California Environmental Quality Act

The CEQA Guidelines direct lead agencies to consider impacts of the proposed Project on individual animals, communities, populations, range, and habitat of species that meet the CEQA criteria. As part of this process, Appendix G of the CEQA Guidelines provides an environmental checklist to help identify whether a project may have a significant effect on biological resources. Based on provisions of CEQA Guidelines (14 CCR Section 15065), plants and animals with the protected status (as

[13] An ordinary high-water mark is "that line on the shore established by the fluctuations of water and indicated by physical characteristics such as [a] clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas." (33 CFR 328.3[c][7]).

defined in Section 15380) may be addressed in CEQA documents on proposed development projects: endangered or threatened species listed under the federal ESA, federal proposed and candidate species, and species listed by the State of California as endangered, threatened, or rare under the California Endangered Species Act (CESA) or California Native Plant Protection Act (NPPA).

In addition, under Section 15380(d) of the CEQA Guidelines, a species not included on any list recognized by the state "shall nevertheless be considered rare or endangered if the species can be shown to meet the criteria" for listing. USFWS, CDFW, and other non-governmental organizations maintain independent lists of species with designated conservation status that meet the CEQA Guidelines criteria for consideration. Based on provisions of Section 15380(d) of the CEQA Guidelines, lead agencies, in making a determination of impact significance, typically treat non-listed plant and animal species as equivalent to listed species if the non-listed species satisfy the minimum biological criteria for listing. In assigning "impact significance" to populations of non-listed species, analysts generally consider factors such as population-level effects, proportion of the taxon's range affected by a project, regional effects, and impacts to habitat features. CDFW recommends considering these species during analysis of proposed project impacts to protect declining populations, and to avoid the need to list them as threatened or endangered in the future.

The CEQA Guidelines also direct project proponents to assess and mitigate impacts to sensitive natural communities identified by USFWS, CDFW, or in local or regional plans, policies, or regulations, including wetlands.

In addition, the CEQA Guidelines include consideration of substantial interference with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or the use of native wildlife nursery sites.

Finally, CEQA requires that local policies or ordinances protecting biological resources, Habitat Conservation Plans, Natural Community Conservation Plans, or other approved local, regional, or state Habitat Conservation Plan be considered during environmental review.

California Endangered Species Act

The California Endangered Species Act (CESA) protects native plant and animal species (and their habitats) "in danger of, or threatened with, extinction because their habitats are threatened with destruction, adverse modification, or severe curtailment, or because of overexploitation, disease, predation, or other factors" (CFGC Sections 2050–2089.25). The CESA prohibits the "take"[14] of state-listed endangered, threatened, and candidate species. The CDFW maintains lists of endangered, threatened, and rare plants (CDFW 2026b) and endangered and threatened animals (CDFW 2026c), as designated by the California Fish and Game Commission and under the California NPPA (1977). The Habitat Conservation Planning Branch of CDFW administers the state's rare species program. In addition to recognizing three levels of endangerment, CDFW can afford interim protection to candidate species while the California Fish and Game Commission reviews them whereby candidate species receive the same protections as listed species. Habitat degradation or modification is not expressly included in the definition of "take" under the CFGC, but CDFW has interpreted "take" to include the "killing of a member of a species which is the proximate result of habitat modification."

[14] The CESA defines "take" as hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill (CFGC Section 86).

California Native Plant Protection Act

The California NPPA (CFGC Sections 1900–1913, amended 2023) was enacted in 1977 and allows the California Fish and Game Commission to designate plants as rare or endangered. The NPPA limits the circumstances in which endangered or rare native plants may be taken. Project permitting and approval requires compliance with NPPA.

California Native Plant Society Inventory

The CNPS prepares and regularly updates an Inventory of Rare and Endangered Vascular Plants of California. In general, CDFW qualifies for legal protection under CEQA those plant species with a CRPR of List 1A (Plants Presumed Extinct in California), List 1B (Plants Rare, Threatened, or Endangered in California and Elsewhere), or List 2 (Plants Rare, Threatened, or Endangered in California, But More Common Elsewhere) of the CNPS Inventory (CNPS 2026). Species on CNPS List 3 (Plants About Which We Need More Information – A Review List) or List 4 (Plants of Limited Distribution—A Watch List) are considered to be of lower sensitivity and generally do not fall under specific federal or state regulatory authority. Specific mitigation considerations are not generally required for species in these two categories.

Species of Special Concern

The CDFW maintains a list of animal SSC, most of which are species whose breeding populations in California may face complete destruction or extirpation (Bolster 1998; Shuford and Gardali 2008; Thomson et al. 2016; CDFW 2026e; CNDDB 2026a). Although these species have no legal status under the CESA, CDFW recommends considering these species during analysis of proposed project impacts to protect declining populations, and to avoid the need to list them as threatened or endangered in the future. These species may "be considered Rare or Endangered [under CEQA] if the species can be shown to meet the criteria."

California Fish and Game Code and California Code of Regulations

The CFGC protects the active nests and eggs of birds from take, possession, or needless destruction (CFGC Section 3503); and it prohibits the take, possession, or destruction of birds of prey (orders Falconiformes and Strigiformes) and their eggs and nests (Section 3503.5). Additionally, the CFGC (Section 86; 2000; 2002; 2014; 3000–3012; 4150) and several sections under Title 14 of California Code of Regulations (CCR) protect non-listed bat species and their roosting habitat, including individual roosts and maternity colonies. Section 86 of CFGC generally defines "take" as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." Other CFGC sections prohibit the willful take, capture, confinement, possession, or destruction of particular wildlife species, including bats and other nongame mammals. The CCR Title 14 provisions prohibit the take of nongame birds and mammals (14 CCR Section 472).

Fully Protected Species

The CFGC contains lists of vertebrate species designated as "fully protected" (CFGC Section 3511 [birds], 4700 [mammals], 5050 [reptiles and amphibians], and 5515 [fish]). This classification was the state's initial effort in the 1960s to identify and provide protection for those animals that were rare or faced possible extinction. Fully protected species generally may not be taken or possessed at any time, and no licenses or permits may be issued for their take except pursuant to an approved Natural Community Conservation Plan (NCCP) or for relocation of bird species, the protection of

livestock, or the collection of those species necessary for scientific research. Impacts on these species are also considered under CEQA.

Western Bat Working Group Lists

The WBWG maintains a region-by-region matrix of the status of bat species throughout their western North American range. Bats that are designated as "High Priority" by the WBWG are "imperiled or are at high risk of imperilment" based on available information on distribution, status, ecology, and known threats (WBWG 2017). Bats may also be designated as medium- or low-priority. High Priority bat species qualify for legal protection under Section 15380(d) of the CEQA Guidelines.

Sensitive Habitats

Sensitive habitats include CDFW Sensitive Natural Communities (CDFW 2026d) (rank of S1–S3), riparian corridors[15], wetlands, and habitats for species that are protected under the federal ESA, CESA, NPPA, or other rare species (CNDDB 2026a). Sensitive habitats may also include areas of high biological diversity, areas providing important wildlife habitat, and vegetation types that are rare or unique to the region. CEQA also considers impacts to natural communities identified as sensitive in local and regional plans, regulations, and ordinances (refer to **Local Regulations** below).

Wetlands and Waters of the State

PORTER-COLOGNE WATER QUALITY CONTROL ACT

The Porter-Cologne Water Quality Control Act (California Water Code, Division 7, Section 13000 et seq.) assigns overall responsibility for water quality protection to the State Water Resources Control Board (SWRCB) and directs nine statewide Regional Boards to develop and enforce water quality standards within their boundaries. Under California state law, "Waters of the State" pertains to "any surface water or groundwater, including saline waters, within the boundaries of the state." As a result, water quality laws and permitting authority apply to both surface and groundwater. The Regional Board assumes state jurisdiction of federal USACE wetlands and other waters, but also isolated wetlands that meet either all three parameters (hydrophytic vegetation, wetland hydrology, and hydric soils) or two parameters (hydrology and soils), and of riparian corridors, whether vegetated or unvegetated.

CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE LAKE AND STREAMBED ALTERATION AGREEMENT

Jurisdictional authority by CDFW over relatively permanent bodies of standing or flowing water is established under CFGC Sections 1600–1617, which pertains to activities that would disrupt the natural flow or alter the channel, bed, or bank of any lake, river, or stream. The CFGC stipulates that "an entity shall not substantially divert or obstruct the natural flow of, or substantially change... the bed, channel, or bank of, any river, stream, or lake" without notifying CDFW, incorporating necessary mitigation to protect fish and wildlife resources, and obtaining a Lake and Streambed Alteration

[15] USFWS defines riparian areas as "plant communities contiguous to and affected by surface and subsurface hydrologic features of perennial or intermittent lotic and lentic water bodies (rivers, streams, lakes, or drainage ways). Riparian areas have one or both of the following characteristics: 1) distinctively different vegetative species than adjacent areas, and 2) species similar to adjacent areas but exhibiting more vigorous or robust growth forms. Riparian areas are usually transitional between wetland and upland" (USFWS 2009). Refer also to Riparian Habitats under the Local Regulations section.

Agreement if required by CDFW. Any work which takes place below the break in bank or within the adjacent riparian canopy of a stream would fall under the jurisdictional authority of CDFW.

CDFW has the opportunity to review projects and issue project conditions under CEQA and is also responsible for commenting on projects requiring USACE permits under the Fish and Wildlife Coordination Act of 1958. Federal lead agencies may also elect to notify CDFW according to CFGC Section 1602 and comply with the conditions and recommendations issued under this mechanism.

CALIFORNIA WETLANDS CONSERVATION POLICY

Executive Order W-59-93 established the State of California's "no-net-loss" policy for wetlands, providing comprehensive direction for the coordination of statewide activities for the preservation and protection of wetland habitats.

WETLANDS RESOURCES POLICY

The Wetlands Resources Policy of CDFW states that the California Fish and Game Commission will strongly discourage development in or conversion of wetlands, unless, at a minimum, project mitigation ensures that there will be no net loss of either wetland habitat values or acreage.

California Coastal Act

Under the Coastal Zone Management Act (16 USC Sections 1451–1468) and California Coastal Act (PRC Sections 30000–30900), the California Coastal Commission (CCC) is entrusted to review proposed development in the Coastal Zone, with the goal of protecting and enhancing the coastal environment while allowing utilization and public access for coastal-dependent uses. Under the California Coastal Act, environmentally sensitive areas [16] and wetlands are given special protection, with a different set of rules for each.

Protections for ESHA are as follows:

> "Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on those resources shall be allowed within those areas. Development in areas adjacent to [ESHA]…shall be sited and designed to prevent impacts which would significantly degrade those areas and shall be compatible with the continuance of those habitat... areas." (PRC Section 30240).

Protections for Coastal Act wetlands[17] include restricting impacts to a limited list of seven authorized uses, but only where "there is no feasible less environmentally damaging alternative, and where feasible mitigation measures have been provided to minimize adverse environmental effects" (PRC Section 30233).

In Bolsa Chica Land Trust v. Superior Court (1999) 71 Cal.App.4th 493, 514–515, the California Court of Appeal held that, where an area in the Coastal Zone is both a wetland and an ESHA, the Coastal Act provision governing wetlands (Section 30233) controls, and the provision governing ESHA (Section 30240) does not also apply.

[16] Under the California Coastal Act, "Environmentally sensitive area" means "any area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and which could be easily disturbed or degraded by human activities and developments." (PRC Section 30107.5).

[17] Coastal Act wetlands are defined as areas meeting at least one wetland parameter.

The County of Santa Cruz has an approved LCP for implementing the Coastal Act's mandate to protect ESHA and wetlands within the Coastal Zone, described below under Local Regulations. The Project would require a coastal development permit from Santa Cruz County because the Project is located within the County's LCP jurisdiction. Accordingly, the standard of review for the Project would be the Santa Cruz County LCP. Nonetheless, all efforts shall be made to conform to the specific requirements in the Coastal Act, as LCPs are to be read consistent with the Act.

Local

Santa Cruz County General Plan/Local Coastal Program

The 2024 combined Santa Cruz County General Plan/LCP guides and regulates land use and development in the unincorporated Santa Cruz County, including the Coastal Zone. The General Plan/LCP identifies guiding principles which include the preservation of open space and natural resources. Further, the General Plan includes guidelines from the State Office of Planning and Research, that include protecting "environmental... resources,... natural lands, open space, and unique landscapes" (Santa Cruz County 2024).

Chapter 5, Goal ARC-3, of the General Plan identifies goals, objectives, policies, and implementation strategies to protect biological resources.

ARC-3.1 addresses the maintenance of biological diversity through open space acquisition, identification and protection of plant habitat, wildlife corridors and habitats, habitat for protected species, regulation of land uses in sensitive habitats, and mitigation for Project-related impacts. This objective includes policies for:

- **Sensitive Habitat Designation (ARC-3.1.1),** which calls for the designation of sensitive habitats through existing data or newly identified areas that meet the criteria;
- **Sensitive Habitat Definition (ARC-3.1.2),** which lists County sensitive habitats, including (but not limited to) habitat for locally unique biotic species/communities, essential habitat and adjacent areas for sensitive species, rookeries, nesting and roosting areas, and aquatic features and riparian corridors;
- **Environmentally Sensitive Habitat Areas (ARC-3.1.3),** which requires the evaluation of sites proposed for development within the Coastal Zone for the presence of ESHA, within the categories of habitat areas described in ARC-3.1.2(d) through (j) and other categories that meet the Coastal Act Section 30107.5 definition of ESHA. Areas confirmed to be ESHA may only be developed for uses dependent on such resources in these habitats within the Coastal Zone, unless the other uses are 1) consistent with sensitive habitat protection policies and serve a specific purpose beneficial to the public; 2) determined through environmental review that any adverse impacts on the resources will be completely mitigated and there is no feasible less-damaging alternative; and 3) legally necessary to allow a reasonable economic use of the land, and there is no feasible less-damaging alternative;
- **Sensitive Habitat Protection (ARC-3.1.4)**, through implementation of Chapters 16.32, Sensitive Habitat Protection (refer below); 16.30, Riparian Corridor and Wetlands Protection (refer below); and 13.20, Coastal Zone Regulations;
- **Land Division and Density Requirements in Sensitive Habitats (ARC-3.1.5),** which limits land divisions in sensitive habitats to those that are compatible with protection of the resources;

- **Development within Sensitive Habitats (ARC-3.1.6),** which protects sensitive habitats against significant disruption in habitat values and any proposed development within or adjacent to these areas must maintain or enhance the functional capacity of the habitat; and
- **Site Design and Use Regulations (ARC-3.1.7),** which protects sensitive habitats against any significant disruption or degradation of habitat values in accordance with the Sensitive Habitat Protection Ordinance (refer below) and the Coastal Act (refer above).

ARC-3.2 outlines requirements for the restoration of sensitive habitats. ARC-3.3 identifies the preservation, protection, and restoration of riparian corridors and wetlands to protect the functions and values of these features and includes ARC-3.3.1, which designates and defines riparian corridors and wetlands, ARC-3.3.2 Riparian Corridor and Wetland Protection ordinance (refer below), as well as several policies detailing the protections. ARC-3.4 targets the preservation and restoration of aquatic and marine habitats.

ARC-4 of the General Plan identifies goals, objectives, policies, and implementation strategies to protect and manage surface water and groundwater. ARC-4.1 prohibits activities that could adversely impact sensitive habitats of the Monterey Bay National Marine Sanctuary, including the discharge of wastes, plastics, litter, and hazardous materials. The main sources of concern are urban runoff and wastewater discharges, toxic agricultural drainage water, and their potential to impact water quality, as well as the protection of sensitive marine habitats. ARC-4.2 outlines goals for watershed protection, targeting the least disturbed watersheds and those that provide surface water supplies. ARC-4.3 protects and restores flow volumes in streams for multiple beneficial uses. ARC-4.4 identifies the protection and enhancement of water quality in streams, coastal lagoons, and marshes through the establishment of best management practices for adjacent land uses. ARC-4.5 targets groundwater protection through regulation and management in groundwater recharge areas.

Santa Cruz County Sensitive Habitat Protection Ordinance

The County of Santa Cruz Sensitive Habitat Protection Ordinance (SCCC Chapter 16.32) is intended to "minimize the disturbance of biotic communities which are rare or especially valuable because of their special nature or role in an ecosystem, and which could be easily disturbed or degraded by human activity" (SCCC Section 16.32.010).

Sensitive habitats under the Santa Cruz County Code relevant to the Project include areas that provide habitat for locally unique biotic species/communities, such as oak woodlands and, in the Coastal Zone, native grassland; areas which provide habitat for rare, endangered, or threatened species, or other rare species considered under CEQA; areas adjacent to essential habitats for these species; wetlands, rivers, and riparian corridors; and areas defined by the LCP as ESHA under the Coastal Act.

Development activities in or adjacent to sensitive habitat areas are required to conform to permitted uses identified in the ordinance and, for activities within the Coastal Zone, the LCP. As noted above under ARC-3.1.3, only resource-dependent uses shall be allowed within ESHA, unless the other uses are: (1) Consistent with sensitive habitat protection policies and serve a specific purpose beneficial to the public; (2) Determined through environmental review that any adverse impacts on the resource will be completely mitigated and there is no feasible less-damaging alternative; and (3) Legally necessary to allow a reasonable economic use of the land, and there is no feasible less-damaging alternative.

The rules and regulations for evaluating the impacts of development activities on sensitive habitats within the County, determining limitations to these activities to protect sensitive habitats, and

identifying conditions of approval through the environmental review process are also outlined in the Sensitive Habitat Protection Ordinance, including in Scope (SCCC Section 16.32.020), Approval required (SCCC Section 16.32.060), Assessments and reports required (SCCC Section 16.32.070), Report preparation and review (SCCC Section 16.32.080), and Approval conditions (SCCC Section 16.32.090).

Exceptions (SCCC Section 16.32.100) to the provisions of Approval conditions may be made by the Decision-Making Body[18] if the following findings can be made:

(1) That adequate measures will be taken to ensure consistency with the purpose of this chapter to minimize the disturbance of sensitive habitats; and

(2) One of the following situations exists:

(a) The exception is necessary for restoration of a sensitive habitat; or

(b) It can be demonstrated by biotic assessment, biotic report, or other technical information that the exception is necessary to protect public health, safety, or welfare.

Under the Sensitive Habitat Protection Ordinance, development within any sensitive habitat area must be conditioned to mitigate significant environmental impacts. In addition, the Sensitive Habitat Protection Ordinance calls for protection of sensitive habitats "undisturbed by the proposed development activity" or on an adjacent parcel through measures such as conservation easements. Additionally, restoration "commensurate with the scale of the proposed development" is required for degradation of sensitive habitats caused by the Project (SCCC Section 16.32.090[B]).

Santa Cruz County Riparian Corridor and Wetlands Protection Ordinance

The County of Santa Cruz Riparian Corridor and Wetlands Protection Ordinance (SCCC Chapter 16.30) requires projects to "minimize and to eliminate any development activities in the riparian corridor, preserve, protect, and restore riparian corridors" and "implement the policies of the General Plan and Local Coastal Program Land Use Plan." In the Coastal Zone, the ordinance limits development activities in riparian corridors, which include wetlands, intermittent and perennial streams, and associated riparian vegetation, and provides buffer/setback requirements as follows:

- Wetlands, plus a 100-foot buffer from the outer extent of the feature;
- Intermittent Streams, plus a 30-foot buffer from the mean rainy season (bankfull) flowline;
- Perennial Streams, plus a 50-foot buffer from the mean rainy season (bankfull) flowline; and
- Riparian Corridors, plus a 50-foot buffer from the dripline of riparian vegetation or 20 feet beyond the dripline of other woody vegetation.

In addition, a 10-foot setback from the edge of the buffer is required for all structures.

[18] Decision-Making Body means the Zoning Administrator, Planning Commission, or Board of Supervisors, whichever body is considering the development permit, when biotic review is concurrent with review of a development permit. When a biotic permit is required, the Decision-Making Body shall be the Planning Director.

Within the Coastal Zone, development activities within riparian corridors and associated buffers are prohibited, and approved impacts are limited to a list of seven permitted uses[19] identified in the California Coastal Act (PRC Section 30233) or an exception is required. Because the LCP implements the Coastal Act, an exception to these prohibitions may be made under the LCP if the Decision-Making Body makes the findings identified above under the Sensitive Habitat Protection Ordinance (Section 16.32.100). In addition, Riparian Exception Findings (SCCC Section 16.30.060) must be met, and a Riparian Exception must be approved. The County may authorize a Riparian Exception on a case-by-case basis, pending an approved application stating the applicant's proposed activities, best management practices (BMPs), and measures for mitigating impacts to the riparian corridor and/or wetland buffer.

The following findings must be made:

1. That there are special circumstances or conditions affecting the property.
2. That the exception is necessary for the proper design and function of some permitted or existing activity on the property.
3. That the granting of the exception will not be detrimental to the public welfare or injurious to other property downstream or in the area in which the Project is located.
4. **That the granting of the exception, in the Coastal Zone, will not reduce or adversely impact the riparian corridor, and there is no feasible less environmentally damaging alternative.**
5. **That the granting of the exception is in accordance with the purpose of this chapter, and with the objectives of the General Plan and elements thereof, and the LCP Land Use Plan.**

The required findings identified in bold above refer specifically to projects in the Coastal Zone and, as identified in Santa Cruz County General Plan/LCP ARC-3.3.3, require no net loss of riparian corridors and wetlands, and encourage restoration and a net increase of riparian corridors and wetlands.

Santa Cruz County Significant Trees Protection Ordinance

The County's Significant Trees Protection Ordinance (SCCC Chapter 16.34) preserves significant trees and forest communities to protect the County's scenic beauty, property values, and tourist industry to promote the public health, safety, and general welfare of the County while also recognizing individual private property rights. The Project area is located within the Coastal Zone of Santa Cruz County; therefore, the Significant Trees Protection Ordinance would apply to this Project.

The Study Area is located outside of the County Urban and Rural Services Lines. Per the ordinance, the following trees would be classified as significant trees:

> (B) Outside the urban services line or rural services line, where visible from a scenic road, any beach, or within a designated scenic resource area, any tree which is equal to or greater

[19] Under PRC Section 30233, impacts to aquatic features, including wetlands are limited to: (1) New or expanded port, energy, and coastal-dependent industrial facilities, including commercial fishing facilities. (2) Maintaining existing, or restoring previously dredged, depths in existing navigational channels, turning basins, vessel berthing and mooring areas, and boat launching ramps. (3) In open coastal waters, other than wetlands, including streams, estuaries, and lakes, new or expanded boating facilities and the placement of structural pilings for public recreational piers that provide public access and recreational opportunities. (4) Incidental public service purposes, including, but not limited to, burying cables and pipes or inspection of piers and maintenance of existing intake and outfall lines. (5) Mineral extraction, including sand for restoring beaches, except in environmentally sensitive areas. (6) Restoration purposes. (7) Nature study, aquaculture, or similar resource-dependent activities.

> than 40 inches [diameter at breast height] (DBH) (approximately 10 feet in circumference); any sprout clump of five or more stems, each of which is greater than 20 inches DBH (approximately 5 feet in circumference); or, any group consisting of 10 or more trees on one parcel, each greater than 20 inches DBH (approximately 5 feet in circumference).

In addition, the following applies to the Project:

> (C) Any tree located in a sensitive habitat as defined in Chapter 16.32 SCCC.

No stipulations are made for native versus non-native and/or ornamental trees. Exceptions are made for trees that are diseased or deemed hazardous to public safety; or pursuant to a Timber Harvest Plan or Fire Protection Plan submitted to and approved by the California Department of Forestry. Removal of significant trees would require a permit issued by the County of Santa Cruz Community Development and Infrastructure Department, Planning Division, and would likely require mitigation including, but not limited to, planting of replacement trees at a ratio and species composition determined by the Planning Division.

Santa Cruz County Tree Removal Policy

The Tree Removal Policy limits tree removal within road rights-of-way and requires replacement of removed trees to preserve the natural beauty of Santa Cruz County. Removal of trees by County forces or agents is limited to the following reasons:

- Trees which are dead, seriously diseased, badly out of balance, or otherwise in the process of falling and are threatening the motoring public or pedestrians.
- Trees which, in the opinion of the Highway Patrol, are a traffic hazard due to the obstruction of sight distance or of regulatory traffic control devices.
- Trees which must be removed for the purpose of a road improvement project in the interests of traffic safety, or as otherwise authorized by the Board of Supervisors.

The policy requires that "the person or agency responsible for the removal of any tree or trees shall plant a tree of suitable species in the immediate vicinity of the removed tree or at a location deemed more suitable as determined by the Department of Public Works." Trees under 12 inches in diameter, measured one foot from the base, shall be replaced with trees of one-gallon size. Those over 12 inches in diameter shall be replaced with five-gallon trees.

3.4.3 Methodology and Significance Thresholds

Methodology

This section describes the potential environmental impacts of the Project relevant to biological resources. The impact analysis is based on an assessment of baseline conditions for the Project area. The methodology for identifying the existing biological resources within and adjacent to the Project area is described above in Section 3.4.1, Existing Conditions.

Significance Thresholds

The introduction in Chapter 3, Environmental Impact Analysis, states that the significance thresholds used in this analysis are based on Appendix G of the CEQA Guidelines, which provides a sample Initial Study checklist that includes a number of factual inquiries related to the subject of biological

resources and other environmental topics. Thus, the letters and thresholds presented below correspond with the questions in the Appendix G Initial Study checklist.

For purposes of this EIR, a significant impact would occur if implementation of the Project would result in any of the following conditions:

A. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS

B. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the CDFW or USFWS

C. Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means

D. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites

E. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance

F. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan

Regarding Threshold F, there is no applicable adopted Habitat Conservation Plan, NCCP, or other approved local, regional, or state Habitat Conservation Plan. Therefore, there would be no impact, and this topic is not addressed further in this EIR.

3.4.4 Project Impact Analysis

For each impact, the discussion provides an overview that indicates which project components may result in the impact, the potential occurrence for the specific resource being analyzed, and if the potential impact is from Project construction and/or operation. The overall conclusion or significance determination is presented at the end of the discussion, as well as in parentheses at the end of the numbered impact statement.

As described in Chapter 2, Project Description, the Project components include:

1. Transfer Stations (Transfer Station A and Transfer Station B)
2. Organics Diversion Facility (ODF Option 1 and ODF Option 2)
3. Landfill Closure and Revegetation
4. Optional Improvements: a) Internal Access Road Improvements, b) Scale House Upgrades, c) Recycling Center Upgrades, d) Equipment Parking and Storage Area
5. General Plan/Local Coastal Program Land Use Designation and Zoning Map Amendments

Threshold A:	Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.

Special-Status Plants and Sensitive Wildlife Species

Botany

No special-status plant species were identified within the Study Area. No impacts to special-status plant species are anticipated to result from the proposed Project. Impacts to non-native/ruderal grasslands, coast live oak woodland, riparian forests, and wetlands within the Study Area are not expected to impact special-status plant species. Additional information on potential special-status plant species is presented in **Appendix G1.1** and **Appendix G1.2**. A list of all vascular plant species observed during floristic surveys of the Study Area is provided in **Appendix G1.3**.

Wildlife

Table 3.4-3 lists sensitive wildlife species that are present or have potential to occur within the Study Area. Potential impacts to these species and their habitats are discussed in the sections below.

Birds of prey, other common bird species, and bat species are also likely to utilize the Study Area for breeding and roosting, respectively, and these activities are protected by federal and/or state laws. An overview of these species and potential Project-related impacts is described below. Additional information on sensitive wildlife species is presented in **Appendix G2.1**–**Appendix G2.4**. Avoidance, minimization, and mitigation measures are identified below for the protection of these species and/or their habitat. These measures would reduce Project-related impacts to less than significant.

Table 3.4-3. Sensitive Wildlife Species with Potential to Occur Within or Near the Study Area

Crotch's bumble bee	Western monarch butterfly
California red-legged frog	Northwestern pond turtle
Allen's hummingbird	Bald eagle
California gull	California thrasher
Golden eagle	Grasshopper sparrow
Lawrence's goldfinch	Nuttall's woodpecker
Oak titmouse	Olive-sided flycatcher
Western burrowing owl	Western gull
White-tailed kite	Wrentit
Yellow warbler	Nesting birds
San Francisco dusky-footed woodrat	Long-legged myotis
Western red bat	Roosting bats

Impact BIO-1 PROJECT CONSTRUCTION MAY RESULT IN IMPACTS TO CROTCH'S BUMBLE BEE, IF PRESENT. (LESS THAN SIGNIFICANT IMPACT WITH MITIGATION)

Overview

The proposed Project may have an adverse impact on Crotch's bumble bee and active nests, if present, through destruction of active nests and displacement of foraging habitat. Crotch's bumble

bee is a candidate for listing as endangered under CESA and has a NatureServe (2026) rarity rank of S2 (state imperiled). Candidates for listing under CESA receive the same protections as listed species.

Project components that may result in this impact include Transfer Station A, Final Landfill Closure, Internal Access Road Improvements, and Equipment Parking and Storage Area.

Occurrence Potential

The Crotch's bumble bee was not observed during field surveys of the Study Area; however, focused surveys for this species were not conducted. The non-native grassland, ruderal grassland, and coastal scrub habitats within the Study Area provide suitable potential habitat for this species, although nesting habitat (small mammal burrows or thatch), nectar, and pollen sources are limited, especially in ruderal grassland areas where soil depth is shallow on top of the capped landfill, thereby limiting thatch and blooming plant species.

Santa Cruz County is considered to be within the current occupied range of Crotch's bumble bee. This species is presently understudied due to its recent candidacy for listing under CESA; therefore, it is expected to occur in additional locations throughout the County. One recent record (2025) documents an occurrence in the Pleasure Point community of unincorporated Santa Cruz County, approximately 9 miles northwest of the Project area (Xerces Society et al. 2026). Additionally, historical records document the species at Watsonville Airport (1994), approximately 1.5 miles northeast of the Project area, and at Sunset State Beach (1995), approximately 2 miles southwest of the Project area (CNDDB 2026b, 2026c).

CONSTRUCTION

Approximately 0.23 acres of non-native grassland and up to 23.85 acres of ruderal grassland would be impacted by the proposed Project. Non-native grassland within the Project area is limited to the following two areas.

In the northeast corner of the Project area, there is a small 0.17-acre grassland patch near the proposed location of Transfer Station A. This grassland provides suitable habitat for Crotch's bumble bee, in that it supports native perennial bunch grasses (i.e., purple needlegrass) that provide thatch for nesting, numerous small mammal burrows (also for nesting habitat), and a suite of flowering plants that provide nectar and pollen sources. Nevertheless, this patch of grassland is small in extent and isolated from other suitable habitat for Crotch's bumble bee.

In the southeast corner of the Project area, there is an additional 0.03 acres of non-native grassland in the proposed location of the Equipment Parking and Storage Area. This area is contiguous with non-native grassland outside of the Project area (within the Study Area) and ruderal grassland within the Project area and, therefore, provides habitat for this species.

Nesting and foraging habitat are present within the Project area but are limited in extent and quality.

Large portions of the existing ruderal grassland (on the Old Landfill and on the capped portions of the active landfill) would largely remain as is. The Project would impact ruderal grassland in areas to be capped during closure and along internal roads, if optional improvements to these features occur. Additional impacts to ruderal grassland would occur in the area proposed for the Equipment Parking and Storage Area and in the proposed location of Transfer Station A. This latter location also provides suitable habitat for the bumble bee, as the soil depth is sufficient to produce thatch and flowering plants, and numerous small mammal burrows are present. No impacts to coastal scrub would occur as a result of the Project.

As currently designed, the capped Landfill would provide only marginal habitat for this species, post-closure, due to the shallow soil depth of the cap, which is unlikely to produce thatch (for nesting) or abundant blooming plant species (for nectar and pollen forage). In addition, small mammal burrows on top of the Landfill cap would be discouraged and managed; therefore, nesting habitat would be further limited.

In the unlikely event that Crotch's bumble bees are detected during pre-construction surveys, consultation with CDFW would be initiated, and additional protective measures may be required. If impacts cannot be avoided, an Incidental Take Permit would be required.

In summary, there could be potential impacts to individual Crotch's bumble bees, active nests, and habitat from clearing, grubbing, and grading the areas proposed for Transfer Station A and the Equipment Parking and Storage Area; capping and closing the active landfill; and improving internal roads. These impacts would be reduced by conducting environmental awareness training and pre-construction surveys, implementing construction buffers, and restoring habitat. Due to the marginal habitat within the Project area and undetermined presence of this species, these potential impacts are considered **Less than Significant with Mitigation** (Mitigation Measures BIO-1a, BIO-1b, BIO-1c, BIO-1d, BIO-8d), as identified in the measures below.

Mitigation Measure BIO-1a: Conduct Environmental Training Prior to Construction

The County or their construction contractor will be responsible for hiring a qualified USFWS/CDFW-approved biologist (agency-approved biologist[20]) to conduct an environmental training session for all construction personnel regarding the sensitive wildlife species that have potential to occur in or near the project area. This mitigation measure applies to all project components.

The environmental training will cover the following topics:

- Description, identification, and photograph of sensitive species (Crotch's bumble bee, California red-legged frog, northwestern pond turtle, sensitive bird species and other nesting birds, San Francisco dusky-footed woodrat, sensitive bats and other roosting bats);
- Natural history information;
- Protective measures and best management practices to be implemented to protect sensitive wildlife species and their habitat; and
- The importance of avoiding impacts to sensitive species and the procedures to follow if individuals are encountered, alive or dead, including contacting the USFWS/CDFW-approved biologist.

Printed hand-outs summarizing key project permit conditions and sensitive biological resources (with photographs) will be provided. All construction personnel will receive the training prior to beginning work. Any new crew members that join after work has been initiated will also receive the training prior to beginning work. A sign-in sheet will document completion of the training.

[20] Agency-Approved Biologist = A minimum of 30 days prior to Project initiation, biologists contracted to provide biological monitoring services for the Project are typically required to submit in writing or by email their qualifications for approval to U.S. Fish and Wildlife Service (USFWS) and/or the California Department of Fish and Wildlife (CDFW), as applicable. Required qualifications will vary depending on the species. These agency-approved biologists will conduct any required species-specific surveys, provide worker's environmental awareness training, and handle and relocate wildlife in accordance with permit conditions and agency requirements.

Mitigation Measure BIO-1b: Schedule Construction to Avoid Impacts to Sensitive Biological Resources

Whenever feasible, the County or their contractor will schedule construction to avoid impacts to sensitive biological resources including sensitive habitats, aquatic and riparian habitats, and sensitive wildlife species. The following table lists the preferred construction windows to avoid and minimize impacts to biological resources, as well as a brief overview of required best management practices to implement during construction activities.

Table 3.4-4. Recommended Construction Timing to Avoid/Minimize Impacts to Sensitive Biological Resources

Biological Resource	Relevant Habitat Type	Preferred Period of Avoidance	Preferred Construction Window	Resource/Life Events/Functions/ Values to be Protected	Required Best Management Practices
Aquatic/adjacent riparian	-	Rainy season, approximately October 15–April 15[1]	April 16–October 14	Water quality, vegetation, stable banks and slopes	Silt fencing Dewatering, diversion/bypass, If needed Confine Project footprint
Oak woodland	-	Rainy season, approximately October 15–April 15	April 16–October 14	Trees and dripline of canopy, stable slopes, soils, and understory	Silt fencing Confine Project footprint
Crotch's bumble bee	Non-Native/Ruderal Grassland	-	-	Individual bees, nest sites, foraging habitat	Pre-construction survey during the April–August period preceding construction
California red-legged frog	Buena Vista Drive Tributary Harkins Slough Road Drainage Channelized Gallighan Slough Old Landfill Wetland/Drainage Adjacent Riparian Adjacent Uplands	Rainy season, approximately October 15–April 15	April 16–October 14	Individual frogs, aquatic and upland habitat quality, movement and dispersal	Pre-construction survey Biological monitoring
Northwestern pond turtle	Channelized Gallighan Slough Adjacent Uplands	N/A	N/A	Individual turtles, movement/basking in aquatic habitat, nesting in adjacent upland habitat (May–July)	Pre-construction survey Biological monitoring
Bird species	All	February 1–August 31	September 1–January 31	Adults, nests, eggs, and young, nesting activities	Breeding bird surveys February 1–August 31
Bat species	Trees, Buildings, Culverts	November 1– February 15 and May 1–August 31	September 1–October 31	Individual bats, roosting, especially maternity roosts and winter hibernacula	Pre-construction Acoustic/emergence survey All times
San Francisco dusky-footed woodrat	Oak Woodland Riparian	October 1–July 31	August 1–September 30	Individual woodrats, woodrat houses, especially during breeding and rearing	Pre-construction survey All times
Tree/vegetation removal	All	October 15–August 31	September 1–October 14	All	-

Notes:

[1] While this time period aligns with the typical rainy season in coastal Santa Cruz County, agencies such as the Regional Board use other rainy season time periods (October 1–May 31) that may further restrict Program implementation or require filing a Request for an Early Start or Extended Work Period, if aquatic features requiring agency permits are present.

Mitigation Measure BIO-1c: Conduct Pre-construction Surveys and Implement Buffers for Crotch's Bumble Bee

For project construction activities to be initiated in non-native or ruderal grassland habitats during the peak active colony period (April–June), the County or their construction contractor will be responsible for hiring an agency-approved biologist to conduct a pre-construction survey for nesting and foraging bumble bees to avoid take of individuals or destruction of nests. Surveys will be conducted during the peak of the active colony period immediately preceding the project start date.

- Surveys will occur prior to beginning construction activities and will include all work, staging, and access areas and a buffer radius of 100 feet within suitable grassland habitat.
- Surveys will occur when temperatures are at or above 60 degrees Fahrenheit and at or below 90 degrees Fahrenheit on sunny or partially sunny days when wind speeds are below 8 miles per hour. Surveys will begin no earlier than 2 hours after sunrise and no later than 3 hours before sunset.
- Crotch's bumble bee nests will be given a buffer of 50 feet in which no project activities will occur. The agency-approved biologist will develop a plan with CDFW to prevent the take of the nest or any individual within the project area, or an Incidental Take Permit will be required.

Mitigation Measure BIO-1d: Restore and Promote Crotch's Bumble Bee Habitat

Where feasible, the County will promote suitable habitat for Crotch's bumble bee through restoration activities, such as planting of native thatched grasses, native nectar and pollen-producing plants, and placement of downed logs. The restoration activities can be incorporated into temporary impact areas and the planned wildlife movement corridor to be located across the southern portion of the closed landfill (as shown on **Figures 2-4** and **5-13**, Environmental Enhancement and Restoration Features).

Mitigation Measure BIO-8d: Prepare and Implement a Habitat Mitigation Plan for Permanent Impacts to Sensitive Habitats, Including Aquatic Features, for Proposed Project

Refer to the description of Mitigation Measure BIO-8d for Impact BIO-8 below.

Impact BIO-2 PROJECT CONSTRUCTION AND OPERATION WOULD NOT RESULT IN IMPACTS TO ROOSTING MONARCH BUTTERFLIES. (LESS THAN SIGNIFICANT IMPACT)

Overview

While individual monarch butterflies were observed, the proposed Project is unlikely to have an adverse impact on this species or its autumnal or winter roost habitat. The monarch is proposed for listing as threatened under the federal ESA (USFWS 2024). The proposed Project is not within proposed designated habitat for the monarch butterfly (USFWS 2024).

Occurrence Potential

The biologists observed several individual western monarch butterflies during the November 2022 and 2025 site visits, flying within the Study Area; however, no autumnal or winter roosting butterflies were observed within the eucalyptus stands in or near the Study Area. The stand of eucalyptus trees located in the southeast corner of the Study Area (proposed for the Equipment Parking and Storage Area) does not provide potential autumnal or winter roost habitat. The grove is

located over 2.0 miles from the ocean (greater than the typical distance of within 1.5 miles). Additionally, the approximately 2-acre grove is a monospecific stand of eucalyptus trees of the same age that, because of how densely planted they are, have grown tall and thin, lack many mid-tier branches, and restrict sunlight penetration into the center of the stand. These characteristics limit use of the grove by roosting monarchs. The grove lacks nectar plants such as English ivy. Nearby grassland and coyote brush scrub support some nectary vegetation.

The closest known monarch winter roost site is Manresa State Beach (Xerces 2026), approximately 2.2 miles west of the Study Area.

Therefore, no impacts to autumnal or winter roost habitat are anticipated. The impact would be **Less than Significant**. No mitigation is required.

Impact BIO-3 PROJECT CONSTRUCTION AND OPERATION MAY RESULT IN IMPACTS TO CALIFORNIA RED-LEGGED FROG. (LESS THAN SIGNIFICANT IMPACT WITH MITIGATION)

Overview

The proposed Project may result in adverse impacts to the CRLF through construction-related harassment, injury, mortality, or temporary habitat destruction. The CRLF is listed as threatened under the federal ESA (USFWS 1996) and is a California SSC (Thomson et al. 2016; CDFW 2026e). The Project area falls within designated critical habitat for CRLF (USFWS 2010).

Project components that may result in this impact include all Project components except ODF Option 1, Scale House Upgrades, and Recycling Center Upgrades.

Occurrence Potential

CRLFs may occur within and near the Study Area (**Table 3.4-5**, **Table 3.4-6**, and **Figure 3.4-3**) and may move through the Project area between aquatic features and/or take refuge in upland habitats.

In July 2023, biologists observed an individual CRLF in Channelized Gallighan Slough within the Study Area, south of the main entrance to the landfill. Several additional occurrence records are from nearby locations, including two road-killed CRLF observed in 2014, one on Buena Vista Drive near the main landfill entrance and one on San Andreas Road approximately 1 mile west of the Study Area (Westphal 2018). Additionally, a CRLF was observed by EcoSystems West and KEC (2023b) between 2021 and 2024 in a drop structure along the SCBRL, approximately 0.6 miles west of the main landfill entrance.

The closest known breeding habitat for CRLF is approximately 0.5 miles northwest of the Study Area in a small pond (Whiskey Hill Road Pond), located on private property off Whiskey Hill Road (Biosearch 2025). Adult CRLF may move through the Project area between aquatic features, and juveniles may disperse into the Project area from this breeding pond.

Table 3.4-5. California Red-Legged Frog Occurrence Records near the Project Area

Date	Feature	Distance/Location from Project Area	Notes	References
July 2023	Channelized Gallighan Slough	Within Study Area	ESW biologists observed an individual in Channelized Gallighan Slough during unrelated surveys in 2023; bullfrogs present.	
Fall 2014	Buena Vista Drive	Within Study Area	Road-killed adult after rain event in 2014.	Westphal 2018
2021–2024	SCBRL Drop Structure	0.6 mile west	ESW biologists and KEC observed an individual frog in drop structure over multiple years during unrelated surveys.	KEC 2023b
Fall 2014	San Andreas Road	1.1 miles west	Road-killed adult after rain event.	Westphal 2018

Table 3.4-6. Known and Potential California Red-Legged Frog Aquatic Breeding Habitat near the Project Area

Date	Feature	Distance/Location from Project Area	Known/Potential	Notes	References
N/A	Channelized Gallighan Slough	Within Study Area	Potential	Bullfrogs present.	
N/A	Gallighan Slough	Within Study Area	Potential	Bullfrogs present.	
2025	Whiskey Hill Road Pond	0.6 miles northwest	Known	Pond on Private Property off Whiskey Hill Road.	Biosearch 2025
2006	West Struve Slough	1 mile east	Known (historical)	Bullfrogs present; proposed for enhancement.	CNDDB 2026b, 2026c
2025	Buena Vista Pond	1.1 miles northwest	Known	Pond on Ellicott Slough Ecological Preserve.	Biosearch 2025
2025	Ellicott Pond	1.5 miles northwest	Known	Pond on Ellicott Slough Ecological Preserve.	Biosearch 2025

Buena Vista Pond, located within the Ellicott Slough Unit of the Wildlife Refuge, also supports breeding and lies just over 1 mile northwest of the Study Area. Additional breeding locations include West Struve Slough, approximately 1 mile east of the Study Area, which is a historical breeding site proposed for enhancement, and Ellicott Pond, located approximately 1.5 miles northwest of the Study Area within the Ellicott Slough Unit of the Wildlife Refuge.

The Study Area contains potential breeding habitat for CRLF, although degraded by the presence of non-native bullfrogs (*Lithobates catesbeianus*). The Study Area also provides aquatic non-breeding, movement, dispersal, and upland (refuge) habitats.

Channelized Gallighan Slough, where the individual frog was observed, and Gallighan Slough provide marginal potential breeding habitat (degraded by bullfrogs), and these features, along with their associated riparian habitat, provide aquatic non-breeding, movement, and dispersal habitat.

The Buena Vista Drive Tributary and associated riparian provide marginal aquatic non-breeding, refuge, and movement habitat for CRLF. Because of the high groundwater table and dry-season agricultural runoff, the area remains wet or moist year-round. This drainage does not provide suitable aquatic breeding habitat due to channel aggradation (deposition of sediments) and a lack of ponded water of sufficient depth and hydroperiod to support successful metamorphosis. (On the central coast, CRLF generally require ponded water into late summer/early fall for successful metamorphosis). The drainage provides marginal habitat for CRLF because of its position as a narrow linear strip between the Buena Vista Landfill, active agricultural fields, and Buena Vista Drive, a heavily trafficked road with vehicles traveling at high speeds.

Within the Study Area, non-native grassland, and in some locations, ruderal grassland habitats contain small mammal burrows for refuge. Woodland habitats, with understory vegetation and leaf litter, provide other refuge opportunities for CRLF. This potential upland habitat is fragmented by the Current Active Landfill and internal roads, as well as agricultural fields, and roadways; nevertheless, CRLF may utilize this habitat for movement between and dispersal from aquatic habitat features.

Outside of the Study Area, additional features provide potential aquatic breeding habitat for CRLF. These include two perennial ponds located just north of the Study Area on private property, and Harkins Slough located immediately east of the Study Area; however, Harkins Slough supports both non-native (bullfrogs and centrarchid fish) and native (avian species) CRLF predators (e.g., herons).

Construction

Project construction activities (including the Environmental Enhancement and Habitat Restoration Features described below) would include vegetation removal, grubbing, grading, trenching, concrete pouring, introduction of materials, and other activities that result in ground disturbance and could impact CRLF, if present. These activities could result in "take" of CRLF, if present, including harassment (flushing CRLF from the work area), injury, or mortality. Equipment, automobiles, materials, or debris could crush or bury CRLF. Noise, vibrations, and increased human presence could cause CRLF to move from the work area (expending energy reserves and making them vulnerable to predation). Materials or chemicals could enter CRLF habitat through accidental spills, fueling or maintenance of equipment. The Project would temporarily degrade habitat conditions through removal of native vegetation that provides cover and refuge and influences microhabitat conditions and may result in establishment of non-native invasive species following construction. The Project may temporarily degrade water quality within and downstream of the Project area through the introduction of sediments and other materials.

Culvert Modification and Replacement. The Culvert Modification with Small Wildlife Crossing at Main Entrance, along with the Culvert Replacement under the Internal Roadway to the Old Landfill (described

in Chapter 2 under Environmental Enhancement and Restoration Features and shown on **Figure 2-4**), would occur within CRLF aquatic non-breeding habitat of the Buena Vista Drive Tributary and the marginal potential breeding habitat of Channelized Gallighan Slough. Dewatering and installation of a diversion or bypass, excavation, grading, and installation of the replacement culvert could impact CRLF. These activities could result in harassment, injury, or mortality of CRLF, if present, during construction.

Two other drainage improvements would occur separately from the Landfill Redevelopment: 1) stabilizing the Buena Vista Drive Tributary along the Landfill frontage to reduce channel incision and remove agricultural sediment, and 2) replacing the culvert and adding a wildlife crossing under Buena Vista Drive from the outlet from the step-down pools across from the main Landfill entrance to increase capacity and allow CRLF to safely cross Buena Vista Drive. The entrance locations referenced are shown on **Figure 1-3**.

In conjunction with these other improvements, upsizing the culvert under the road to the Old Landfill would ultimately improve ecological and hydrologic conditions in Channelized Gallighan Slough as well as in Buena Vista Drive Tributary by maintaining sediment transport competence and reducing aggradation of the stream channels, thereby extending the return interval for maintenance and reducing frequent flood conditions near the current Landfill main entrance. Specifically, reducing sediment deposition in the channels would maintain a more stable bed, bank, and ordinary high-water mark while improving overall ecological conditions of the streams by supporting open-water riverine conditions and an associated diverse riparian habitat. The upsized culvert or bridge would restore functional riverine habitat and reduce or eliminate the conversion to instream freshwater marsh features which have established on the agricultural sediments.

The instream freshwater marsh that has developed within the Buena Vista Drive Tributary is associated with the following negative ecological effects:

- Shorter hydroperiod;
- Lack of running water, pools, or riffles;
- Poor water quality (e.g., turbidity, less dissolved oxygen);
- Loss of temperature gradients (that support species diversity);
- Absent or degraded habitat for invertebrates (which are the basis of the food chain for fish and amphibians); and
- Diminished hydrologic capacity of the stream, exacerbating flood risk.

The larger capacity culvert or bridge would reduce or eliminate this conversion of habitat from riverine to instream freshwater marsh. Extensive freshwater marsh habitat would remain at the confluence with Gallighan Slough and in off-channel locations along the streams, resulting in aquatic habitat heterogeneity.

The culvert modification would accommodate small wildlife passage, including CRLF, under most hydrologic conditions. In addition, Wildlife Directional Features at Key Locations (directional fencing), which is part of the proposed Project (described in Chapter 2 under Environmental Enhancement and Restoration Features), would direct CRLF and other wildlife to the wildlife crossing under Buena Vista Drive. A stable riverine channel with perennial or near perennial flows, mature riparian vegetation, and wildlife crossings to reduce vehicle strikes would provide improved habitat conditions for CRLF in the drainages.

Restoration of Harkins Slough Road Drainage. The Project also includes Restoration of the Harkins Slough Road Drainage located along the north boundary of the Project area (described in Chapter 2

under Environmental Enhancement and Restoration Features and shown on **Figure 2-4**). No CRLF have been observed in this feature during multiple survey efforts. The drainage provides marginal aquatic non-breeding, dispersal, movement, and refuge habitat. If present, CRLF may be impacted by restoration activities. Overall, this activity would improve habitat for CRLF by creating a stable riverine channel with perennial flows and mature riparian vegetation.

Restoration of South Drainage (ODF Option 2). If ODF Option 2 is selected (instead of ODF Option 1), a new drainage ditch would be installed on the south side of the Old Landfill to accommodate increased stormwater runoff from the newly paved area. As described in Chapter 2 (under Additional Information for ODF Options 1 and 2), the new drainage ditch would be installed parallel to the existing seasonal wetland and include an outlet structure at the downgradient end to tie into the existing wetland. In addition, to increase stormwater capacity and restore native wetland vegetation and wildlife habitat, the seasonal wetland would be recontoured to channel elevations that existed prior to the 2022–2023 storm season, agricultural sediments would be removed, and native wetland vegetation would be replanted along the margins of the channel (**Figure 2-4**).

The existing seasonal wetland provides potential aquatic non-breeding, dispersal, movement, and refuge habitat for CRLF. Although no CRLF were observed during surveys, an individual CRLF has been observed along the SCBRL approximately 0.45 miles west of the wetland. Thus, CRLF may occur within this wetland and, if present, may be impacted by stormwater surface runoff infrastructure construction and restoration of the seasonal wetland. Overall, restoration of the Old Landfill Wetland and Drainage would improve potential CRLF habitat.

Transfer Stations, Final Landfill Closure, Optional Internal Access Road Improvements, and Equipment Parking and Storage Area. Construction of Transfer Station A (including the realignment of Harkins Slough Road), Transfer Station B, internal access road improvements, the Equipment Parking and Storage Area, and Final Landfill Closure activities may result in harassment, injury, or mortality of CRLF, if present in these upland habitats.

Construction-related impacts to CRLF and its habitat would be avoided or minimized through protective measures such as construction worker training, pre-construction surveys, seasonal constraints on work within the drainage and associated riparian, and biological monitoring during ground disturbance activities. Therefore, the impact would be **Less than Significant with Mitigation** (BIO-1a, BIO-1b, BIO-3, BIO-8d).

It is anticipated that USFWS will issue a Biological Opinion (BO) and Incidental Take Permit that will allow for handling and relocating of CRLF. To avoid unlawful “take” of CRLF, during Project permitting under Section 404 of the CWA, it is anticipated that the Corps will initiate formal consultation with USFWS. The biotic assessment that was prepared for the Project (ESW 2025) will be provided to USFWS at that time. It is anticipated that USFWS will generate a BO for the Project under Section 7 of the ESA; or utilize the programmatic BO between the Corps and USFWS, if the Project meets the criteria for this permitting mechanism. The BO will describe protective measures and conditions for the Project and likely include the conditions for a USFWS-approved biologist to handle and relocate CRLF that move into the work areas. With the approval of USFWS, the agency-approved biologist will identify relocation sites for CRLF. The BO will also address Project operation and associated potential impacts.

Operation

Operation of the transfer stations and associated vehicle and truck traffic may result in mortality of CRLF, if present in operational areas and on roads. Operations would be restricted to daytime use, thus reducing the likelihood of take of CRLF, since CRLF are more likely to move at night. The establishment

of the wildlife movement corridor, wildlife crossing, and directional fencing proposed as Project components would further reduce operational impacts (refer to Environmental Enhancement and Habitat Restoration Features described in Section 2.4). Therefore, operational impacts would be **Less than Significant**.

In summary, Project construction and operation may result in impacts to CRLF. Specifically, construction activities such as vegetation removal, grading, and culvert replacement could result in harassment, injury, mortality, or temporary habitat disturbance to CRLF within designated critical habitat. As stated above, the impacts would be avoided or minimized through protective measures such as construction worker training, pre-construction surveys, seasonal constraints on work within the drainage and associated riparian, and biological monitoring during ground disturbance activities and with Environmental Enhancement and Habitat Restoration Features for potential operational impact. Therefore, the impact would be **Less than Significant with Mitigation** (BIO-1a, BIO-1b, BIO-3, BIO-8d).

Mitigation Measure BIO-1a: Conduct Environmental Training prior to Construction

Refer to the description of Mitigation Measure BIO-1a for Impact BIO-1 above.

Mitigation Measure BIO-1b: Schedule Construction to Avoid Impacts to Sensitive Biological Resources

Refer to the description of Mitigation Measure BIO-1b for Impact BIO-1 above.

Mitigation Measure BIO-3: Implement Protective Measures and Biological Monitoring for California Red-Legged Frog and Northwestern Pond Turtle

During project construction activities, the County or their construction contractor, in coordination with an agency-approved biologist, will employ the following protective measures and biological monitoring for sensitive wildlife species, the California red-legged frog (CRLF) and northwestern pond turtle (NWPT):

- Prior to initiation of construction activities, an agency-approved biologist will identify and/or clearly mark in the field all areas to be avoided and/or protected. No construction activities will be conducted within these areas.
- Prior to initiation of construction activities, an agency-approved biologist with experience in the identification of all life stages of CRLF (egg masses, tadpoles, juveniles, and adults) and NWPT (nests, juveniles, adults) will perform a pre-construction survey. The survey will occur no more than 48 hours before construction activities start.
- An agency-approved biologist will be present during all work within aquatic features, adjacent riparian habitat, and initial activities involving vegetation removal, clearing, grubbing, trenching, or earth movement (in all habitat types). If the biologist detects any life stage of CRLF or NWPT in the project area during construction, work will cease immediately; and with the authorization of USFWS via the Biological Opinion, the biologist will capture and relocate the animal to a previously identified agency-approved relocation habitat.
- Construction activities in or near known or potential habitat or designated critical habitat will take place during the dry season between May 1 and October 15 (refer to **Mitigation Measures BIO-1a** and **BIO-1b**) or until the first rain of the season, especially vegetation removal, soil disturbance, and work in or near aquatic features. Avoid working at night or during rain events when special-status amphibians and mammals are generally more active. Consult weather forecasts from the National Weather Service at least 72 hours prior to performing work.

- The agency-approved biologist will check under all equipment for wildlife before use. If any special-status wildlife is observed under equipment or within the work area, the approved biologist will be permitted to handle and relocate it.
- The agency-approved biologist will permanently remove any individuals of exotic species (such as bullfrogs, crayfish, and centrarchid fishes) from the project area to the maximum extent possible. The biologist will be responsible for ensuring his or her activities are in compliance with the California Fish and Game Code.
- To ensure that diseases are not conveyed between work sites, the agency-approved biologist(s) will adhere to Recommended Equipment Decontamination Procedures outlined in Appendix B of the Revised Guidance on Site Assessments and Field Surveys for the California Red-Legged Frog (USFWS 2005).[21]
- At the end of each workday, excavations shall be secured with a cover, or a ramp installed to prevent wildlife entrapment.
- All trenches, pipes, culverts or similar structures shall be inspected for animals prior to burying, capping, moving, or filling.
- To minimize vehicle strikes of CRLF and NWPT, restrict parking to daytime hours, if feasible.

Mitigation Measure BIO-8d: Prepare and Implement a Habitat Mitigation Plan for Permanent Impacts to Sensitive Habitats, Including Aquatic Features, for Proposed Project

Refer to the description of Mitigation Measure BIO-8d for Impact BIO-8 below.

Impact BIO-4 PROJECT CONSTRUCTION AND OPERATION MAY RESULT IN IMPACTS TO NORTHWESTERN POND TURTLE. (LESS THAN SIGNIFICANT IMPACT WITH MITIGATION)

Overview

The proposed Project may result in impacts to NWPT, if present in the Project area. The NWPT is proposed for listing as threatened under the federal ESA (USFWS 2023) and is a CDFW SSC (CDFW 2026e; Thomson et al. 2016).

Project components that may result in this impact include Final Landfill Closure, the Environmental Enhancement and Habitat Restoration and Enhancement Features in Channelized Gallighan Slough, and the optional Internal Access Road Improvements, and Equipment Parking and Storage Area.

Occurrence Potential

The NWPT is known to occur near the Study Area (**Figure 3.4-3**). During 2024 field surveys, the biologists observed two NWPT in the wastewater treatment ponds for the adjacent Buena Vista Migrant Center (farmworker housing and childcare facility), located approximately 400 feet southwest of the southeast corner of the Study Area (near the area proposed for the Equipment Parking and Storage Area). In addition, seven turtles were observed in Gallighan Slough approximately 0.25 miles from the Old Landfill, 0.25 miles downstream of Channelized Gallighan Slough within the Study Area, and 0.3 miles from the southeastern corner of the Study Area (KEC 2024). Abundant suitable aquatic, upland,

[21] U.S. Fish and Wildlife Service (USFWS). 2005. Revised Guidance on Site Assessments and Field Surveys for the California Red-legged Frog. Prepared August 2005. https://www.fws.gov/sites/default/files/documents/guidance-on-site-assessments-and-field-surveys-for-california-red-legged-frog.pdf.

movement, and nesting habitat is present near these known occurrence locations, although bullfrogs and red-eared sliders (*Trachemys scripta elegans*) degrade habitat.

Within the Study Area, Channelized Gallighan Slough provides marginal potential aquatic habitat. The drainage is narrow, incised, and lacks basking habitat; however, it is possible that NWPT could occur within the drainage due to the proximity to known occurrences immediately downstream. Mixed willow riparian and ruderal grasslands near Channelized Gallighan Slough provide potential nesting habitat; however, higher quality nesting habitat is available within 150 feet of the wastewater treatment ponds outlet to Gallighan Slough, very near to where the turtles were observed. Nevertheless, the Project area is within seasonal movement, migration, and dispersal distances, so there is potential for NWPT occurrence.

Construction

Project construction activities may result in impacts to NWPT, if present in the Project area.

Construction activities including vegetation removal, grubbing, grading, trenching, concrete pouring, equipment and vehicle access and operation, introduction of materials, and other activities that result in ground disturbance could impact NWPT. These activities could result in injury or mortality of NWPT. Equipment, automobiles, materials, or debris could crush or bury individuals. Materials or chemicals could enter NWPT habitat through accidental spills, fueling or maintenance of equipment. The Project may temporarily degrade water quality within and downstream of the Project area through the introduction of sediments and other materials.

These impacts would be avoided or minimized through protective measures such as pre-construction surveys, seasonal constraints on work within the drainage and associated riparian, and biological monitoring during ground disturbance activities. During construction, erosion and sediment control measures would be installed and maintained to reduce sediment and chemical-laden runoff introductions. Therefore, the impact would be **Less than Significant with Mitigation**.

Operation

Project operation would result in increased traffic, including large trucks using internal roadways to access Transfer Station B and the Equipment Parking and Storage Area, which could result in increased mortality of NWPT if present within the Project area. These impacts would be avoided or minimized by directional fencing, which is one of the proposed Environmental Enhancement and Restoration Features, as described in Chapter 2. Therefore, the impact would be **Less than Significant**.

In summary, the Project could result in construction and operation impacts to NWPT, if present. Specifically, construction activities such as vegetation removal, grading, and work within or adjacent to aquatic features could result in injury, mortality, or temporary habitat disturbance to NWPT, if present. Additionally, increased vehicle traffic during operation could increase the potential for NWPT mortality. However, these impacts would be avoided or reduced to a less than significant level by implementing the following NWPT protective measures. Therefore, the impact would be **Less than Significant with Mitigation** (Mitigation Measures BIO-1a, BIO-1b, BIO-3, BIO-8d).

Mitigation Measure BIO-1a: Conduct Environmental Training prior to Construction

Refer to the descriptions of Mitigation Measure BIO-1a for Impact BIO-1 above.

Mitigation Measure BIO-1b: Schedule Construction to Avoid Impacts to Sensitive Biological Resources

Refer to the descriptions of Mitigation Measure BIO-1b for Impact BIO-1 above.

Mitigation Measure BIO-3: Implement Protective Measures and Biological Monitoring for California Red-Legged Frog and Northwestern Pond Turtle

Refer to the description of Mitigation Measure BIO-3 for Impact BIO-3 above.

Mitigation Measure BIO-8d: Prepare and Implement a Habitat Mitigation Plan for Permanent Impacts to Sensitive Habitats, Including Aquatic Features, for Proposed Project

Refer to the description of Mitigation Measure BIO-8d for Impact BIO-8 below.

Impact BIO-5 PROJECT CONSTRUCTION AND OPERATION MAY RESULT IN IMPACTS TO AVIAN SPECIES, THEIR HABITATS, AND NESTING ACTIVITIES. (LESS THAN SIGNIFICANT IMPACT WITH MITIGATION)

Overview

The proposed Project would reduce foraging, roosting, and nesting habitat for avian species; and may result in disturbance or disruption of nesting activities.

All individual birds of prey (i.e., hawks and owls), other native birds, and their occupied nests are protected by the federal MBTA. Any disturbance that causes direct injury, death, nest abandonment, or forced fledging of migratory birds is restricted under the MBTA. Any removal of active nests during the breeding season or any disturbance that results in the abandonment of nestlings is considered a "take" of the species under federal law.

In addition, the CFGC protects the active nests and eggs of birds from take, possession, or needless destruction (CFGC Section 3503), and prohibits the take, possession, or destruction of birds of prey (orders Falconiformes and Strigiformes) and their eggs and nests (CFGC Section 3503.5).

Sensitive bird species receive additional protections, primarily for nesting activities, with some species (such as fully protected species) receiving additional protection for wintering and foraging activities. Suitable potential nesting habitat for sensitive bird species, raptors, and other common avian species is present within the Study Area.

Project components that may result in this impact include all Project components except ODF Option 1.

Occurrence Potential

Allen's hummingbird (*Selasphorus sasin*). The Allen's hummingbird is a USFWS BCC. Allen's hummingbirds were observed in the eucalyptus trees along Harkins Slough Road at the north end of the Project area and in the oak woodland and willow forest along the SCBRL south of the Old Landfill. The Allen's hummingbird may utilize a wide variety of vegetated areas within the Study Area, especially the riparian habitat along Buena Vista Drive and Channelized Gallighan Slough.

Bald eagle (*Haliaeetus leucocephalus*). The bald eagle is listed as endangered under the CESA, fully protected by CDFW, and its nest sites, even inactive, are protected by the Bald and Golden Eagle Protection Act. The biologists observed bald eagles during 2024 field surveys; and the pair, active nest, and young were observed during 2023 surveys, approximately 0.25 miles south of the Study Area at a known nest site. Although nearby, bald eagles are likely to prefer foraging over the sloughs more than the grassland within the Study Area, and the larger trees outside of the Study Area are likely to be preferred as nesting habitat.

Bullock's oriole (*Icterus bullockii*). The Bullock's oriole is a USFWS BCC. This species was observed near Harkins Slough in 2026 (eBird 2026). Riparian habitat within the Study Area provides suitable nesting habitat.

California gull (*Larus californicus*). The California gull is a USFWS BCC. This species commonly forages within the Landfill boundary and nearby at Harkins Slough (eBird 2026). Although nesting is uncommon within the County, rooftops within the Study Area provide a suitable substrate.

California thrasher (*Toxostoma redivivum*). The California thrasher is a USFWS BCC. This species was observed in scrub habitat at the southern extent of the Study Area along the SCBRL southwest of the Old Landfill. Suitable scrub habitat for foraging, roosting, and nesting exists along the margins of the Study Area. This species has also been documented near Gallighan Slough and Harkins Slough (eBird 2026).

Golden eagle (*Aquila chrysaetos*). The golden eagle is a CDFW fully protected species and listed as S3 (Vulnerable) by NatureServe (2026). eBird (2026) documents numerous occurrences of this species, including one pair, near the Study Area along Harkins Slough and Gallighan Slough. The Study Area provides marginal hunting habitat due to the disturbed and fragmented quality of non-native and ruderal grassland, limited small mammal burrows, and active Landfill activities.

Grasshopper sparrow (*Ammodramus savannarum*). The grasshopper sparrow is a CDFW SSC and listed as S3 (Vulnerable) by NatureServe (2026). There is one recent (2022) record for this species at the Landfill; however, occurrences in the immediate area are rare and mostly outside of breeding season. Other observations are from Harkins Slough and Struve Slough (eBird 2026). The grasshopper sparrow may inhabit the grassland habitats of the Study Area.

Lawrence's goldfinch (*Spinus lawrencei*). The Lawrence's goldfinch is a CDFW SSC and listed as S3S4 (Vulnerable/Apparently Secure) by NatureServe (2026). An individual Lawrence's goldfinch was observed during 2018 surveys roosting in coyote brush scrub at the northern extent of the Study Area, near the proposed location for Transfer Station A. Coastal scrub, oak woodland, and grassland habitats provide foraging, roosting, and nesting habitat. Nesting on the central coast is erratic, and nest sites closer to the sloughs may be preferable to this species. This species is also known from Harkins Slough and Struve Slough (eBird 2026).

Northern yellow warbler (*Setophaga aestiva*). The northern yellow warbler is a CDFW SSC and listed as S3 (Vulnerable) by NatureServe (2026). eBird (2026) documents recent (2024 and 2026) observations during nesting season along Harkins Slough, and in 2022 along the SCBRL southwest of the Old Landfill. This species has been documented breeding in riparian vegetation along Harkins Slough and the Pajaro River (eBird 2026). The riparian habitats within the Study Area provide potential foraging, roosting, and nesting habitat.

Nuttall's woodpecker (*Picoides nuttallii*). The Nuttall's woodpecker is a USFWS BCC. Field surveys detected Nuttall's woodpecker vocalizing along Channelized Gallighan Slough near the main entrance to the Landfill. Oak woodland and riparian habitats within the Study Area provide foraging and nesting habitat for this species.

Oak titmouse (*Baeolophus inornatus*). The oak titmouse is a USFWS BCC. This species was observed during 2018 and 2024 surveys within oak woodland and riparian habitats. Oak woodland and other woodlands with cavities and hollows provide foraging, roosting, and nesting habitat.

Olive-sided flycatcher (*Contopus cooperi*). The olive-sided flycatcher is a CDFW SSC and a USFWS BCC. eBird (2026) documents few observations from the immediate vicinity from along the SCBRL southwest of the Old Landfill (2014), near the corner of San Andreas Road and Buena Vista Drive (2017), and from Rancho Road (2018). Forested areas, including non-native eucalyptus groves, within the Study Area may provide potential nesting habitat for this species.

Western burrowing owl (*Athene cunicularia*). The western burrowing owl is a candidate for listing as endangered under CESA, a CDFW SSC, listed as S2 (Imperiled) by NatureServe (2026), and a USFWS BCC. Recent winter or migrant sightings of individuals are from Watsonville Slough Farm (2025) 0.5 miles southeast, the confluence of Watsonville Slough and Struve Slough along the SCBRL (2021 and 2024), and the Pajaro Valley High School open space (2018–2019) (eBird 2026). There have been no nesting records in Santa Cruz County since 1987, and nesting is considered to be extirpated (Center for Biological Diversity [CBD] et al. 2003; Townsend and Lenihan 2007; Trulio et al. 2018). Non-native grassland within the Study Area provides marginal potential wintering or migrant habitat because of the limited number of small mammal burrows.

Western gull (*Larus occidentalis*). The western gull is a USFWS BCC. This species commonly forages within the Landfill boundary and nearby at Harkins Slough (eBird 2026). Rooftops within the Study Area provide suitable nesting habitat.

White-tailed kite (*Elanus leucurus*). The white-tailed kite is a CDFW fully protected species. eBird (2026) documents numerous recent sightings from Harkins Slough (2018–2025) and two sightings from Gallighan Slough (2021 and 2025), including juveniles. Tree stands within and adjacent to the Study Area provide potential nesting habitat. Grasslands with small mammals provide foraging habitat.

Wrentit (*Chamaea fasciata*). The wrentit is a USFWS BCC. During 2023 and 2024 field surveys, wrentits were observed in the oak woodland in the northeast corner of the Study Area and in the coastal scrub, willow forest, and oak woodland habitats along the SCBRL south of the Old Landfill. Open scrub, woodland, and forest habitats provide potential foraging, roosting, and nesting habitat for this species.

Other nesting avian species. The biologists recorded breeding activity (nest building, eggs in nest, young in nest, feeding young in and out of nest, and/or fledglings) of the following birds during 2023 and 2024 field surveys: black phoebe, bushtit, hooded oriole, killdeer, lesser goldfinch, orange-crowned warbler, purple finch, house finch, and red-tailed hawk. **Appendix G2.4** lists bird species observed during the field surveys and their associated habitats. A comprehensive breeding bird survey was not conducted because nest sites for most avian species are dynamic, and nest locations vary from year to year, but incidental observations of breeding activity are noted in **Appendix G2.4**. Nesting habitat with sufficient nearby food sources is present within the Study Area for numerous common nesting bird species.

The biologists observed a juvenile red-tailed hawk foraging over the Project area in September 2018, and they observed and heard a begging fledgling red-tailed hawk in July 2024. A red-tailed hawk nest is located in the stand of eucalyptus trees near the northwest corner of the Study Area, near the entrance gate to the adjacent property to the north. Observations over multiple years indicate nest fidelity to this site.

Bushtits and black phoebes were engaged in nest building during the 2018 field visits. During the June 2018 survey, a female killdeer was protecting an active nest with four eggs at the edge of the grassland on the adjacent property to the north. A pair of hooded orioles was also observed making multiple visits carrying food to a location within the oak woodland, likely to a nest with young. A house finch was visiting an active nest of unknown status in the rafters of the shed at the main landfill entrance during the May 2024 survey, and multiple old nests were also visible in the vicinity. Lesser goldfinch, orange-crowned warbler, and purple finch were observed feeding fledglings during 2018 surveys, and begging song sparrow fledglings were heard in July 2024.

Both sensitive and common avian species (such as those species listed in **Appendix G2.4**) are likely to utilize the habitats of the Study Area and the surrounding area for nesting activities, including non-native and ruderal grassland, coastal scrub, oak woodland, non-native forest, riparian, and wetland habitats. Opportunistic and ground-nesting species may also utilize equipment and buildings, ruderal habitat, debris piles, and even gravel (killdeer) as nest substrates.

Construction

Project construction would result in the displacement of 2.11 acres of non-native grassland, coast live oak woodland and forest, non-native forest (including eucalyptus), riparian, wetland, and riverine habitats. Approximately 154 trees would be removed to facilitate Project construction, including 91 trees (0.54 acres) in coast live oak woodland and forest, a habitat type known to support high avian species diversity because of the complex multi-tiered structure of the woodland and diverse habitat features (branches, foliage, cavities, leaf litter, and understory). In addition, an undetermined number of blue gum eucalyptus trees would be removed for construction of the Equipment Parking and Storage Area in the southeast corner of the Project area. Displacement of these habitats would reduce foraging, roosting, and nesting habitat for birds in the vicinity and increase fragmentation. Tree removal is depicted on **Figure 3.4-4** and **Figures 3.4-4a–k**.

Final Landfill Closure would result in the creation of additional non-native and ruderal grassland, as it is converted from the active landfill, which would provide habitat for some species (e.g., meadowlark [*Sturnella neglecta*], killdeer, savannah sparrow [*Passerculus sandwichensis*], and song sparrow).

Construction-related Project activities which occur during the avian breeding season (February 1 to August 31) may disrupt breeding activities, cause nest abandonment or failure, premature fledging, or directly harm or cause mortality to nesting birds, eggs, and young located within the Project area and surroundings.

Tree and vegetation removal, grubbing, grading, and earth movement may directly impact active nests present in trees, shrubs, grasslands, or on the ground. Construction activities, including grubbing, grading, earthmoving, excavation, equipment and vehicle operation and access would generate increased dust, noise, and vibrational and visual disturbances. These activities may disrupt sensitive and common bird species nesting within or adjacent to the Project area.

Operation

Operation of Transfer Station A would bring increased human activity, traffic, trash, noise, dust, vibrations, and the introduction of other potential pollutants to an area that currently consists of ruderal, grassland, and oak woodland habitats. Because Transfer Station A would be located immediately adjacent to the Wildlife Refuge, it would also degrade the adjacent habitat.

Additionally, Transfer Station A would introduce lighting to the northeast portion of the landfill area, which could negatively impact birds (and other wildlife species). Potential impacts from lighting include, but are not limited to: interrupting sleep patterns of diurnal animals such as many bird species; serving as an attractant to insects (and in turn birds), thereby drawing them to human-occupied areas and making them more susceptible to predation; deterring nesting birds and wildlife movement from lighted areas; and reducing available habitat. However, because site access would be largely limited to daylight hours, lighting would be utilized only where necessary for function and safety and would be dark sky compliant to minimize light pollution and glare.

Operation of Transfer Station B would bring increased human activity, traffic (especially franchise haulers and larger commercial vehicles), trash, noise, dust, vibrations, and the introduction of other pollutants on the internal roads within the landfill. This would impact remaining sensitive habitats such as the Gallighan Slough drainage, adjacent riparian, and ruderal grasslands on the closed (capped) Landfill, and degrade habitat for birds.

If ODF Option 2 is approved, the Organics Diversion Facility would be sited on the Old Landfill, and thus there may be similar impacts as those listed above for Transfer Station A to the wetland habitat immediately west of the Old Landfill.

In summary, the Project could result in construction and operation impacts to avian species, their habitats, and nesting activities. Specifically, construction activities such as tree and vegetation removal, grubbing, grading, and general site disturbance would result in loss of foraging and nesting habitat, could cause nest abandonment, or could cause direct injury or mortality to nesting birds protected under the MBTA and CFGC. Operation activities, such as increased traffic and lighting, could degrade habitat and disrupt nesting or foraging behavior for sensitive and common avian species. However, these impacts would be reduced to a less than significant level by avoiding vegetation removal during breeding bird season or conducting nesting bird surveys, conducting surveys for wintering sensitive bird species, scheduling construction to avoid sensitive biological resources, conducting environmental training, and mitigating for permanent impacts to sensitive habitats including aquatic features. Therefore, the impact would be **Less than Significant with Mitigation** (Mitigation Measures BIO-1a, BIO-1b, BIO-5a, BIO-5b, and BIO-8d).

Mitigation Measure BIO-1a: Conduct Environmental Training prior to Construction

Refer to the descriptions of Mitigation Measure BIO-1b for Impact BIO-1 above.

Mitigation Measure BIO-1b: Schedule Construction to Avoid Impacts to Sensitive Biological Resources

Refer to the descriptions of Mitigation Measure BIO-1b for Impact BIO-1 above.

Mitigation Measure BIO-5a: Avoid Vegetation Removal During Breeding Bird Season or Conduct Nesting Bird Surveys

The County or their construction contractor will schedule construction to avoid vegetation removal during breeding bird season or conduct pre-construction nesting bird surveys. Typically, the avian breeding season occurs between February 1 and August 31 (see the Recommended Construction Timing to Avoid/Minimize Impacts to Sensitive Biological Resources table in Mitigation Measure BIO-1b) with some species (e.g., hummingbirds and owls) nesting outside of this period. If feasible, perform vegetation removal activities outside of breeding bird season (ideally between September 1 and October 15) to avoid direct harm or mortality to potential nesting bird species and other sensitive biological resources.

For all construction activities initiated during the breeding bird season, or if construction activities lapse for a period of one week or more during breeding bird season, an agency-approved biologist will conduct a breeding bird survey for nesting birds, including raptors. Surveys will be conducted within 7 days, prior to beginning construction activities and will include all work, staging, access areas, and minimum survey radii surrounding the work area as follows:

- 250 feet for non-raptors;
- 500 feet for small raptors such as accipiters; and
- 1,000 feet for larger raptors such as buteos.

The survey will include potential habitat for raptors, sensitive and common nesting avian species and will include trees, other vegetation and suitable habitat (buildings, equipment, ruderal areas, brush piles, gravel, rocks) for ground-nesting and opportunistic species (e.g., house finch, California towhee, dark-eyed junco, and/or kildeer). The following measures will be implemented based on the survey results.

- If no nesting sensitive or common avian species are observed during breeding bird surveys no additional measures would be required.
- If common nesting birds are observed within or adjacent to the project area, postpone activities until young have fledged to avoid direct harm or mortality of nesting birds and/or establish buffers appropriate to the species, such as protective buffers recommended in PG&E et al. (2015). The size of the buffer would also depend on the location of the nest relative to the project area, construction activities proposed for this location, and other specific conditions (e.g., equipment operation).
- Sensitive bird species, if nesting in or near the project area, will be given special consideration and may require additional protective measures as determined through consultation with the relevant agency (USFWS or CDFW), such as protective buffers recommended in PG&E et al. (2015):
  - Bald eagle, golden eagle: 2,640 feet;
  - White-tailed kite, and other raptors: 300 feet;
  - California gull and western gull: 150 feet;
  - California thrasher, Bullock's oriole, grasshopper sparrow, Lawrence's goldfinch, yellow warbler, wrentit: 75 feet; and
  - Allen's hummingbird, oak titmouse, olive-sided flycatcher, Nuttall's woodpecker: 50 feet.
- An agency-approved biologist will monitor active nest sites for construction-related disturbances and adjust protective buffers as necessary to prevent disruption of nesting activities.
- No construction activity shall be allowed in the buffer until the biologist determines that the nest is no longer active, or unless monitoring determines that a smaller buffer will protect the active nest. The buffer may be reduced if the biologist monitors the construction activities and determines that no disturbance to the active nest is occurring.
- If an active nest is identified in or adjacent to the construction zone after construction has started, the above measures will be implemented to ensure construction is not causing disturbance to the nest.

Mitigation Measure BIO-5b: Conduct Surveys for Wintering Sensitive Bird Species

The County or their construction contractor will ensure an agency-approved biologist conducts surveys for wintering sensitive bird species. The following measures will be implemented to protect wintering sensitive bird species, if present:

- If any work is performed during the burrowing owl wintering period (November–March), conduct a survey for these species. The survey will be conducted by an agency-approved biologist and include the Project area and suitable habitat within 490 feet.
- If burrowing owls are detected, injury and mortality of individuals, and destruction of occupied habitat will be avoided, as follows:
  - Avoid destruction of fossorial mammal burrows during construction;
  - Place visible markers near occupied burrows and fence off suitable habitat;
  - Avoid direct destruction of burrows, and
  - Include the burrowing owl in the environmental training for construction personnel (**Mitigation Measure BIO-1a**).

Mitigation Measure BIO-8d: Prepare and Implement a Habitat Mitigation Plan for Permanent Impacts to Sensitive Habitats, Including Aquatic Features, for Proposed Project

Refer to the description of Mitigation Measure BIO-8d for Impact BIO-8 below.

Impact BIO-6 PROJECT CONSTRUCTION AND OPERATION MAY RESULT IN IMPACTS TO BAT SPECIES, THEIR HABITATS, AND ROOSTING ACTIVITIES. (LESS THAN SIGNIFICANT IMPACT WITH MITIGATION)

Overview

The proposed Project may impact roosting bat habitat and bats occupying trees slated for removal, buildings proposed for demolition, and culverts within or near the Project area. The California Fish and Game Code Sections 86; 2000; 2002; 2014; 3000–3012; and 4150 and several sections under Title 14 of the CCR protect non-listed bat species and their roosting habitat, including individual roosts and maternity colonies (14 CCR Section 472). Sensitive roosting bat species (such as western red bat [*Lasiurus blossevillii*] listed as CDFW SSC and High Priority by WBWG), if present, may receive additional protections, such as larger buffers from maternity roost sites.

Project components that may result in this impact include Transfer Station A (including Harkins Slough Road Realignment) and Transfer Station B.

Occurrence Potential

The riparian forest, oak woodland, and non-native forest in and near the Project area provide potential bat roosting habitat. The western red bat may roost within the foliage of the riparian habitat within or adjacent to the Project area, along Channelized Gallighan Slough, and along the Buena Vista Drive Tributary.

During a July 2024 night survey, bats of unknown species were observed emerging from the culvert that conveys Channelized Gallighan Slough under the internal roadway to the Old Landfill. Bats may also utilize the non-native trees adjacent to this drainage.

The oak woodland along Harkins Slough Road that slopes down to Harkins Slough includes large, mature oak trees that possess bat roost features, such as cavities and peeling bark. The oak woodland that would be displaced by Transfer Station A consists of younger trees that lack suitable roost features. The non-native trees along the landfill boundary provide marginal bat roost habitat because they exist as a linear strip of trees and are positioned between the roadway and the landfill. However, the landfill provides an abundant source of insects, so bats may elect to use these trees for roosting.

Non-native trees are also present within the proposed location for the optional Equipment Parking and Storage Area; these trees also provide potential roosting habitat. The buildings proposed for demolition at the Transfer Station B site (the heavy equipment and vehicle maintenance building and the landfill office building) also provide suitable roosting habitat.

Common bat species such as California myotis, Yuma myotis, and big brown bat may roost in the buildings and culverts; and utilize the cracks, crevices, and foliage in mature oak trees or other non-native trees for roosting.

The typical breeding season for bats is from May to September. Depending on the species, female bats congregate in small or large numbers to form maternity colonies to give birth and rear their young over the spring/summer season, while males roost separately as individuals or in small bachelor groups. Juvenile bats begin flying in the summer and fall to forage and prepare for migration. Maternity roosts may be present within or near the Project area. Also, depending on the species, males and females communally

roost during the fall to breed before and during migration or hibernate through the winter season (H.T. Harvey & Associates 2021). Winter hibernacula may also be present in or near the Project area.

Construction

During construction, tree removal or work in or adjacent to oak woodland, riparian forest, or non-native trees may impact roosting bats, if present. If roosting bats are present in trees proposed for pruning, limbing, or removal, direct harm or mortality may occur. Noise, vibrations, dust, and other disturbances associated with construction activities may disrupt roosting bats, including maternity roosts and winter hibernacula, if present.

Demolition of buildings (the heavy equipment and vehicle maintenance building and the landfill office building) at the Transfer Station B site, as well as the replacement of the culvert that conveys Channelized Gallighan Slough under the internal road to the Old Landfill, may also impact roosting bats, including maternity roosts or winter hibernacula.

To realign Harkins Slough Road at the Transfer Station A site, the Project would displace 0.54 acre of coast live oak woodland, including 0.17 acre within or adjacent to mature trees that contain suitable bat roost features. An additional 0.58 acre of non-native forest would be displaced as a result of Project construction.

Within the Project area, a total of approximately 154 trees, including 95 oak trees and 34 non-native trees, would be removed for the transfer stations, Harkins Slough Road Realignment, and the optional Equipment Parking and Storage Area. Additionally, an undetermined number of eucalyptus trees (0.28 acres) would also be removed at this latter location. Displacement of these trees and habitat features would reduce potential roosting habitat for bats in the vicinity and increase fragmentation.

Operation

Operation of the Project (Transfer Station A, the optional Equipment Parking and Storage Area, and ODF Option 2) would introduce lighting to these portions of the landfill area, which could negatively impact bats (and other wildlife species). Potential impacts from lighting include, but are not limited to, serving as an attractant to insects (and in turn bats), thereby drawing them to human-occupied areas and making them more susceptible to predation, and reducing available habitat. However, because visitor access would be limited to daylight hours, lighting would be utilized only where necessary for function and safety.

In summary, Project construction and operation could impact bat species, their habitats, and roosting activities. Specifically, Project activities such as tree removal, building demolition, and work and operation near potential roosting sites could result in injury, mortality, or disturbance to roosting bats, including maternity roosts and winter hibernacula, if present. However, these impacts would be reduced to a less than significant level by scheduling tree removal to avoid bat maternity roosts and winter hibernacula, conducting pre-construction surveys and implementing protective measures for bat roosts, scheduling construction to avoid sensitive biological resources, conducting environmental training, and mitigating for permanent impacts to sensitive habitats. Therefore, the impact would be **Less than Significant with Mitigation** (Mitigation Measures BIO-1a, BIO-1b, BIO-6, BIO-8d).

Mitigation Measure BIO-1a: Conduct Environmental Training prior to Construction

Refer to the descriptions of Mitigation Measure BIO-1b for Impact BIO-1 above.

Mitigation Measure BIO-1b: Schedule Construction to Avoid Impacts to Sensitive Biological Resources

Refer to the descriptions of Mitigation Measure BIO-1b for Impact BIO-1 above.

Mitigation Measure BIO-6: Schedule Tree Removal to Avoid Bat Maternity Roosts and Winter Hibernacula and/or Conduct Pre-Construction Surveys and Implement Protective Measures for Bat Roosts

If feasible, the County or their construction contractor will conduct limbing/tree removal operations between September 15 and November 1 to avoid bat maternity roosts and winter hibernacula. During all months, prior to limbing/tree removal, the County or their construction contractor shall ensure an agency-approved biologist conducts a pre-construction survey for bats to determine if crevice or foliage-roosting bats are present, as follows:

- An agency-approved biologist shall determine if bats are utilizing the area for roosting. For any buildings, culverts, or trees/snags that could provide roosting space for cavity or foliage-roosting bats, potential bat roost features shall be thoroughly evaluated to determine if bats are present. Visual inspection and/or acoustic surveys shall be utilized as initial techniques. If roosting bats are found, the biologist shall develop and implement acceptable passive exclusion methods in coordination with or based on CDFW recommendations. Exclusion shall take place during the appropriate windows (September 1 and November 1) to avoid harming bat maternity roosts and/or winter hibernacula. (Authorization from CDFW is required to evict winter hibernacula for bats).
- If established maternity colonies are found, in coordination with CDFW, a buffer shall be established around the colony to protect pre-volant young from construction disturbances until the young can fly; or implement other measures acceptable to CDFW.
- If a building or tree is determined not to be an active roost site for roosting bats, proceed with work immediately. For trees to be limbed or removed, proceed as follows:
    - If foliage-roosting bats are determined to be present in the Project area (e.g., hoary bat or western red bat), limbs shall be lowered, inspected for bats by an agency-approved biologist, and if no bats are found, chipped immediately or moved to a dump site. Alternatively, limbs may be lowered and left on the ground until the following day, when they can be chipped or moved to a dump site. No logs or tree sections shall be dropped on downed limbs or limb piles that have not been in place since the previous day.
    - If the tree is not limbed or removed within four days of the survey, the survey efforts shall be repeated.

Mitigation Measure BIO-8d: Prepare and Implement a Habitat Mitigation Plan for Permanent Impacts to Sensitive Habitats, Including Aquatic Features, for Proposed Project

Refer to the description of Mitigation Measure BIO-8d for Impact BIO-8 below.

Impact BIO-7 PROJECT CONSTRUCTION MAY RESULT IN IMPACTS TO SAN FRANCISCO DUSKY-FOOTED WOODRAT HOUSES, INDIVIDUALS, OR YOUNG. (LESS THAN SIGNIFICANT IMPACT WITH MITIGATION)

Overview

The proposed Project may impact San Francisco dusky-footed woodrat individuals and houses during construction. The San Francisco dusky-footed woodrat is listed as S2/S3 by NatureServe and is considered under CEQA (CNDDB 2026a). In 2026, the San Francisco dusky-footed woodrat was removed from the list of CDFW SSC.

Project components that may result in this impact include Transfer Station A (including Harkins Slough Road Realignment) and Equipment Parking and Storage Area.

Occurrence Potential

During the 2018, 2023, 2024, and 2025 surveys, San Francisco dusky-footed woodrat houses were observed within oak woodland, eucalyptus forest, and riparian vegetation habitat types, especially those on the margins with grassland habitat, where edge habitats or ecotones exist.

Construction

Tree and vegetation removal may directly impact woodrat stick houses. Destruction of houses may result in mortality of dependent young or loss of food caches and shelter. Removal of trees and/or vegetation adjacent to woodrat houses may result in changes to microclimate conditions, reduce insulation and expose woodrats to weather (sun, wind, cold), expose woodrats to predators, and reduce or eliminate available food sources and foraging habitat. Construction may directly impact woodrat individuals if present within the work area.

Potential impacts would be reduced to a less than significant level by conducting pre-construction surveys, scheduling construction to avoid sensitive biological resources, conducting environmental training, and mitigating for permanent impacts to sensitive habitats. Therefore, the impact would be **Less than Significant with Mitigation** (Mitigation Measures BIO-1a, BIO-1b, BIO-7, BIO-8d).

Mitigation Measure BIO-1a: Conduct Environmental Training prior to Construction

Refer to the descriptions of Mitigation Measure BIO-1b for Impact BIO-1 above.

Mitigation Measure BIO-1b: Schedule Construction to Avoid Impacts to Sensitive Biological Resources

Refer to the descriptions of Mitigation Measure BIO-1b for Impact BIO-1 above.

Mitigation Measure BIO-7: Conduct Pre-Construction Surveys and Flag Woodrat Nests

Prior to construction, the County or their construction contractor will ensure an agency-approved biologist conducts a pre-construction survey for San Francisco dusky-footed woodrat houses and clearly flags all houses within the Project area and immediate surroundings, as follows:

- The agency-approved biologist will determine, to the extent feasible, whether the houses are active or inactive [e.g., freshly chewed (green) vegetation is visible on the house, at least some entrances are clear and free of cobwebs, fresh sticks are piled on the top of the house, the house is not composed entirely of old dry sticks and has a flattened shape (has collapsed over time)]. If this determination cannot be made, the house will be presumed to be active.
- If an active woodrat house is found during surveys, it will be protected during construction with flagging or silt fencing between the work area and the house.
- The construction contractor will avoid woodrat houses to the extent feasible by installing a buffer with silt fencing or other material that shall prohibit encroachment. If this buffer and avoidance is not feasible, the agency-approved biologist shall allow encroachment into the buffer, but preserve microhabitat conditions such as shade, cover and adjacent food sources.

- If avoidance of woodrat houses is not possible, the agency-approved biologist will dismantle woodrat houses, capturing woodrats if feasible, or allowing woodrats to flee. The biologist will preserve sticks, food caches, and nesting materials separately. The materials will be relocated to the nearest unoccupied suitable habitat. The relocation site will mimic the original house site in terms of vegetation and environmental conditions, if feasible. The agency-approved biologist will create an artificial shelter using a pine box as a base, installing food and nesting materials inside the shelter, and piling sticks on top. An effort will be made to protect the opening from predators. A scent trail will be left from the original house site to the artificial shelter, if needed. If feasible, relocation will occur during the appropriate time of year (August 1–September 30) to avoid impacting dependent young that may be present within the stick house.

Mitigation Measure BIO-8d: Prepare and Implement a Habitat Mitigation Plan for Permanent Impacts to Sensitive Habitats, Including Aquatic Features, for Proposed Project

Refer to the description of Mitigation Measure BIO-8d for Impact BIO-8 below.

Threshold B:	Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.

Sensitive Habitats

The proposed Project would impact sensitive habitats, as defined by CDFW (2026d), the 2024 County General Plan/LCP, the Sensitive Habitat Protection Ordinance (SCCC Section 16.32), and the Riparian Corridor and Wetlands Protection Ordinance (SCCC Section 16.30). Within the Study Area, five sensitive habitats (coast live oak woodland and forest, mixed broadleaf riparian, willow riparian forest, palustrine emergent wetlands, and riverine) may be impacted by the Project (**Figure 3.4-1 and Figures 3.4-2a–e**). Aquatic features (wetlands and riverine) are discussed below under Threshold C in the Wetlands/Other Waters section.

The Study Area also includes habitats that may support sensitive wildlife species (such as CRLF [aquatic, upland, movement, and dispersal habitat], NWPT, San Francisco dusky-footed woodrat, and sensitive bird species), and areas of high biological diversity, such as edge habitats. Edge habitats occur between coast live oak woodland, coastal scrub, and non-native/ruderal grassland habitats on the Buena Vista Landfill property. These are also considered sensitive habitats (SCCC 16.32.040).

Figure 3.4-1 and **Figures 3.4-2a–e** depict the extent of sensitive habitats, including wetlands and non-wetland "other waters" in the Study Area. **Table 3.4-7** details regulatory authority over these sensitive habitats, focusing on areas that may incur direct and indirect impacts as a result of the proposed Project including all Project options. Descriptions of wildlife species that may utilize the sensitive habitats listed below are provided in Section 3.4.1 above.

Table 3.4-7. Sensitive Habitats and Regulatory Authority Considered Under CEQA

Habitat Type	CEQA	CCC ESHA	County of Santa Cruz Sensitive Habitat	CDFW Sensitive Natural Community	CWA Section 401 and 404	Porter-Cologne Water Quality Control Act
Coast Live Oak Forest	X	X	X			
Mixed Broadleaved and Willow Riparian Forest	X	X	X	X		X
Palustrine Emergent Wetland	X	X	X	X	X	X
Riverine (Aquatic)	X	X	X		X	X
Special-Status Plants and Wildlife	X	X	X			

Notes: CCC = California Coastal Commission; CDFW = California Department of Fish and Wildlife; CEQA = California Environmental Quality Act; ESHA = Environmentally Sensitive Habitat Areas

Table 3.4-8 and **Figures 3.4-2a–e** present approximate potential temporary and permanent impacts associated with the Project by sensitive habitat types. Construction and operation of the Project would adversely affect sensitive habitats including coast live oak woodland and riverine habitat in Harkins Slough Road Drainage (**Table 3.4-8**). In addition, the Project may impact habitat for CRLF, edge habitats, and areas of high biological diversity. These impacts are discussed further below.

Table 3.4-8. Temporary and Permanent Project Impacts to Sensitive Habitat Types

	ODF Option 1		ODF Option 2	
Habitat Type Project Element	**Permanent Impacts**	**Temporary Impacts**	**Permanent Impacts**	**Temporary Impacts**
Coast Live Oak Woodland	**0.540**	**0.100**	**0.540**	**0.100**
Harkins Slough Road Realignment	0.170	0.100	0.170	0.100
Transfer Station A	0.370	0	0.370	0
Coastal Scrub	**0**	**0**	**0**	**0**
Freshwater Emergent Marsh	**0**	**0**	**0**	**0**
Mixed Broadleaf Riparian	**0**	**0**	**0**	**0**
Mixed Willow Riparian	**0**	**0**	**0**	**0**
Riverine	**0.010**	**0**	**0.010**	**0**
Harkins Slough Road Drainage – Harkins Slough Road Realignment	0.010	0	0.010	0
Seasonal Wetland Old Landfill Wetland – Stormwater Runoff Outlet Feature	**0**	**0**	**0.002**	**0**
Total Sensitive Habitats Impacts	**0.550**	**0.100**	**0.552**	**0.100**

Additional beneficial effects would be associated with the Project's proposed Environmental Enhancement and Restoration Features. These elements would temporarily impact riparian forest, discussed below, and aquatic habitats, discussed under Threshold C, in the next Impact Section. **Tables 3.4-9** and **3.4-10** present restoration areas in sensitive habitats associated with proposed Restoration and Enhancement Features. **Table 3.4-9** shows acreages of restoration areas within sensitive habitat types, while **Table 3.4-10** lists restoration areas by the Restoration and Enhancement Feature.

Table 3.4-9. Proposed Project Restoration Areas within Sensitive Habitats

Habitat Type Project Element	ODF Option 1	ODF Option 2
Mixed Broadleaf Riparian Internal Roadway to Old Landfill Culvert Replacement	**0.015**	**0.015**
Mixed Willow Riparian	**0.073**	**0.073**
Harkins Slough Road Drainage Restoration	0.045	0.045
Landfill Entrance Culvert Modification	0.002	0.002
Internal Roadway to Old Landfill Culvert Replacement	0.026	0.026
Freshwater Emergent Marsh Landfill Entrance Culvert Modification	**0.003**	**0.003**
Seasonal Wetland Old Landfill Drainage and Wetland Restoration	**0**	**0.233**
Riverine	**0.077**	**0.077**
Harkins Slough Road Drainage Restoration	0.051	0.051
Buena Vista Drive Tributary – Landfill Entrance Culvert Modification	0.013	0.013
Channelized Gallighan Slough – Internal Roadway to Old Landfill Culvert Replacement	0.013	0.013
Seasonal Wetland Old Landfill Drainage Restoration	**0**	**0.233**
Total Restoration Areas	**0.168**	**0.401**

Table 3.4-10. Proposed Project Restoration and Enhancement Features and Associated Restoration Areas within Sensitive Habitats

Restoration and Enhancement Feature Sensitive Habitat Type	ODF Option 1	ODF Option 2
Landfill Entrance Culvert Modification		
Freshwater Emergent Marsh	0.003	0.003
Mixed Willow Riparian	0.002	0.002
Buena Vista Drive Tributary	0.013	0.013021
Total Restoration Area	**0.018**	**0.018**
Internal Roadway to Old Landfill Culvert Replacement		
Mixed Broadleaf Riparian	0.015	0.015
Mixed Willow Riparian	0.026	0.026
Channelized Gallighan Slough (Riverine)	0.013	0.013
Total Restoration Area	**0.054**	**0.054**
Harkins Slough Road Drainage Restoration		
Mixed Willow Riparian	0.045	0.045
Harkins Slough Road Drainage (Riverine)	0.051	0.051
Total Restoration Area	**0.096**	**0.096**
Old Landfill Drainage Restoration		
Seasonal Wetland and Drainage	0	0.233
Total Restoration Area	**0**	**0.233**

Transfer Station A and the Harkins Slough Road Realignment have been sited and redesigned to minimize impacts to sensitive habitat and ESHA (coast live oak woodland and forest and the Harkins Slough Road Drainage). The proposed Project includes the on-site restoration and enhancement of sensitive habitats, and mitigation includes the off-site creation of coast live oak woodland at a ratio to be determined by the County and the CCC, as described in Mitigation Measure BIO-8d below. These project components and mitigation compensate for impacts to sensitive habitats and ESHA, as required by the Sensitive Habitat Protection Ordinance (Section 16.32.090).

The Project also includes minimal impacts to sensitive habitats and ESHA to implement activities associated with Environmental Enhancement and Restoration Features, as described in Section 2.4. These features have been designed to minimize impacts to sensitive habitats and ESHA, and would enhance and restore riverine, riparian, and wetland habitats and improve ecological conditions of the Study Area overall.

Impacts to sensitive habitats are likely to require exceptions to the Sensitive Habitat Protection Ordinance (SCCC Chapter 16.32) and Riparian Corridor and Wetlands Protection Ordinance (SCCC Chapter 16.30). Impacts to riparian forests are also likely to require permits from CDFW (Lake and Streambed Alteration Agreement) and the Regional Board (Water Quality Certification). See also Section 3.4.2, Regulatory Setting, above, and Threshold E below.

Impact BIO-8 PROJECT CONSTRUCTION AND OPERATION WOULD RESULT IN IMPACTS TO COAST LIVE OAK WOODLAND AND FOREST. (SIGNIFICANT AND UNAVOIDABLE IMPACT)

Overview

Coast live oak woodland and forest habitats are present within the Project area and would be impacted by the proposed Project. Coast live oak woodlands and forests are considered ESHA by the County of Santa Cruz LCP (Santa Cruz County 2024) and a sensitive habitat pursuant to the County of Santa Cruz Sensitive Habitat Ordinance (SCCC Chapter 16.32). This habitat type is also considered "Especially Valuable Habitat" (EVH) by the CCC based on the "special role" of this habitat to support a diversity of wildlife species, as well as its aesthetic and carbon sequestration values (PRC Section 30107.5). In addition, coast live oak forest in immediate proximity to the Wildlife Refuge has the additional importance of contributing to contiguous habitat area and creating a vegetative barrier between the Wildlife Refuge and Harkins Slough Road. Coast live oak woodland and forest habitat within the Project area expands and buffers the overall ecological values of the refuge.

All trees occurring within this sensitive habitat type, regardless of species, are also considered "significant" by the County of Santa Cruz (SCCC Chapter 16.34.030) (also refer to Local Policies and Ordinances section under Threshold E below).

Project components that would result in this potential impact include Transfer Station A and the Harkins Slough Road Realignment.

Occurrence

Coast live oak woodland and forest habitats in the Project area are limited in their extent, occurring within and adjacent to the proposed footprints of Transfer Station A and the Harkins Slough Road Realignment (**Figure 3.4-2b**). The narrow band of trees along Harkins Slough Road and the cluster of trees on the hillslope within the proposed location of Transfer Station A appear to be less than 40 years old based on the size of the trees and a review of historical aerial photographs of the area (Google Earth 2026; UCSB Library Geospatial Collection 2025). These trees were likely planted or allowed to establish

naturally following expansion of the landfill and previous realignment of Harkins Slough Road in the late 1980s. Although the coast live oak woodland and forest habitats situated within the Project area are relatively young, they are near or contiguous with the dense, mature coast live oak forest within the Wildlife Refuge that extends downslope (eastward) to Harkins Slough. The less mature trees serve to buffer this intact habitat, contributing to overall habitat value.

Construction

Construction of Transfer Station A and the realignment of Harkins Slough Road, which borders the Wildlife Refuge, would result in impacts to coast live oak woodland and forest, including approximately 0.54 acres of permanent impacts (90 coast live oak trees and one blue gum) and 0.10 acres of temporary impacts. **Table 3.4-8** lists the impacts associated with each location. Refer to the Local Policies and Ordinances section under Threshold E below for the number of trees anticipated for removal.

The majority of coast live oaks planned for removal are relatively young (approximately 35–40 years old), as described in Section 3.4.1 above, and lack the habitat features that more mature oaks possess, such as multi-tiered canopy, vertical and horizontal structural complexity, cavities, and peeling bark. Nevertheless, removal of this sensitive habitat would reduce the buffer along the Wildlife Refuge and connectivity to adjacent habitat patches such as the native grassland north of the Study Area and increase habitat fragmentation.

No on-site or near-site location for in-kind coast live oak woodland and forest mitigation (creation of coast live oak woodland and forest habitat) has been identified to date. Closed landfill areas are not suitable for planting oak trees or understory vegetation, because of the clay or linear low-density polyethylene cap that is used to contain landfill materials and landfill gas, and prevent infiltration of surface water. Both types of landfill cap are potentially vulnerable to penetration by tree roots and other deep-rooted vegetation, which would compromise the caps' integrity. There is not sufficient acreage of available land for coast live oak woodland and forest creation on or near the landfill. Various options for acquisition of private landholdings or conservation easements on adjacent properties have been explored by the County but are unconfirmed at this time.

Creation of coast live oak woodland and forest on existing County parks, such as Freedom Lake County Park in Corralitos, has also been considered. This park is located approximately 3.3 miles north of the landfill, which is outside of the Coastal Zone where the ESHA (i.e., coast live oak woodland and forest) is being displaced. Coast live oak woodland and forest creation at this location would be considered off-site mitigation, which may require a higher replacement ratio. In addition, replacement oak trees require 35–40 years to reach the stature and maturity of the trees being removed. Therefore, permanent displacement of oak woodland cannot be fully mitigated.

As described in Section 2.4.3, Landfill Closure and Revegetation, under Environmental Enhancement and Habitat Restoration Features of this EIR, the Project includes features to improve the function and value of biological resources within the Buena Vista facility limits. Although largely out-of-kind, these features would compensate for impacts to sensitive habitats, and include:

- Restoration of the Harkins Slough Road Drainage to reduce erosion, improve sediment transport competence, and overall ecological functions and values[22];
- Culvert Modification with Small Wildlife Passage at Main Entrance (Buena Vista Drive Tributary) to facilitate small wildlife passage;
- Culvert Replacement under the Internal Roadway to the Old Landfill (Channelized Gallighan Slough) to improve ecological conditions in the drainages; and
- Creation of a Wildlife Movement Corridor between Gallighan Slough and Harkins Slough through planting of shallow-rooted native perennial plants across the southern portion of the landfill.

These Project features work within the constraints of the landfill setting, expand and connect native habitats, and create opportunities for wildlife to utilize the landfill, post-closure. However, these Project features would not reduce the impact to a less than significant level. For the reasons described above (lack of available on-site mitigation and lag time until newly planted trees reach maturity), the impact of permanent displacement of coast live oak woodland and forest would be considered **Significant and Unavoidable**.

Operation

The Project would introduce increased vehicle traffic and visitation to several areas immediately adjacent to protected and "de facto" open space[23] including: the proposed location for Transfer Station A bordering the Wildlife Refuge and, if ODF Option 2 is selected, the upper deck of the Old Landfill bordering Gallighan Slough and the SCBRL, and the forested hillslope between the Old Landfill and the City of Watsonville Landfill.

Proposed Project improvements and increased human activity around the perimeter of the Landfill may inadvertently result in direct and indirect impacts to these lands including unauthorized access which may degrade sensitive habitats, including edge habitats, through introduction of additional invasive weeds, off-trail trampling and compaction, alteration of the native vegetation, increased trash, and pollution of aquatic habitat.

The Project's enhancement and restoration features would reduce operational impacts to a less than significant level.

In summary, Project construction activities such as tree removal, road realignment, other construction activities, and ongoing operational traffic would result in direct and indirect impacts to coast live oak woodland and forest, including habitat loss, fragmentation, and reduced connectivity to adjacent habitat. The impacts would be reduced by adhering to required policies and regulations, implementing the Environmental Enhancement and Habitat Restoration Features proposed as part of the Project, and implementing identified mitigation measures (habitat protection measures and BMPs during construction, restoring temporary impact areas, and preparing and implementing a Habitat Mitigation Plan for permanent impacts).

The County, in coordination with their construction contractor and agency-approved biologists as applicable, would adhere to the County's General Plan/LCP policies and local habitat regulations to

[22] Ecological functions are the natural processes and physical, chemical, and biological activities within an ecosystem, such as nutrient cycling or carbon sequestration, that maintain its health and stability. "Ecological values" are the benefits derived from the functions such as: habitat and refuge for plants and wildlife, water storage and flood control, water quality protection and purification, groundwater recharge, and food chain support.

[23] De facto open space is land that functions as open space in practice, even if it is not officially designated or protected for that purpose by law. The term comes from the Latin phrase "de facto," meaning "in fact" or "in reality."

protect sensitive habitat and follow conservation regulations, policies, and principles in Chapter 5, Conservation and Open Space, of the General Plan/LCP (2024); and applicable regulations from Chapters 16.30 and 16.32 of the Environmental and Resource Protection section of Santa Cruz County Code. However, an exception to the Sensitive Habitat Protection Ordinance (Chapter 16.32), which limits development in ESHA to resource-dependent uses, would be required. These requirements are described above in the Impacts to Sensitive Habitats Section, as well as in Section 3.4.2, Regulatory Setting.

Adhering to required policies and implementing Project features and additional mitigation measures would not fully reduce this impact to a less than significant level because on-site mitigations are out-of-kind, and tree replacement would take place off-site and require 35–40 years for replacement habitat to attain the habitat features and qualities of the displaced habitat. Therefore, the impact would be **Significant and Unavoidable** (Mitigation Measures BIO-8a, BIO-8b, BIO-8c, BIO-8d)**.**

Mitigation Measure BIO-8a: Implement Measures to Protect Sensitive and Native Habitats during Construction

The County, in coordination with their construction contractor and agency-approved biologists, will implement the following measures to protect sensitive and native habitats during construction:

- Follow all conservation regulations, policies, and principles in Chapter 5, Conservation and Open Space, of the General Plan and LCP (2024). For wildlife habitats and sensitive communities, including wetlands, follow applicable regulations from Chapter 16.30 and 16.32 of the Environmental and Resource Protection section of County of Santa Cruz Municipal Code, wherever feasible. Obtain exceptions to these regulations, as applicable.
- Avoid and reduce impacts to sensitive and native habitats. The construction footprint will be minimized.
- Stage equipment in ruderal and/or developed areas.
- Confine construction activities and operation of equipment and vehicles, including site access and parking, to designated staging, access, and work areas.
- Except as necessary for project implementation, avoid grubbing and construction within 100 feet of the edge of aquatic features (wetlands and other waters), including Harkins Slough Road Drainage, Buena Vista Drive Tributary, Channelized Gallighan Slough, freshwater emergent marsh (by the main landfill entrance), and the seasonal wetland adjacent to the Old Landfill. Where work occurs within 100 feet of aquatic features, secondary containment measures (e.g., Visqueen sheeting and/or drip pans under staged equipment and for maintenance) will be employed.
- Prior to initiation of construction activities, an agency-approved biologist will identify all areas to be avoided and/or protected and will mark sensitive habitats in the field.
- Minimize removal and disturbance of native vegetation, and implement the following when disturbance to native vegetation is required:
    - Limbing of native trees and cutting (above the ground) of shrubs will be favored in lieu of removal. Stumps of native vegetation will be retained to allow for re-sprouting following Project completion where vegetation will not interfere with the Project features.
    - Maintain native understory plants to the extent feasible. Do not grub within sensitive habitat types unless no other alternative exists.
- Preserve native edge habitats wherever feasible, such as boundaries between coast live oak woodland/forest and grassland, and transitions between riparian and wetland vegetation.

- The County, in coordination with their construction contractor and an agency-approved biologist, will remove invasive non-native plants from the work area as designated by Cal-IPC (2026) as having "high" potential for "severe ecological impacts on physical processes, plant and animal communities, and vegetation structure."

Mitigation Measure BIO-8b: Implement Best Management Practices During Construction

The County, in coordination with their construction contractor, will implement the following best management practices during construction:

- Prior to staging equipment on-site, clean all equipment caked with mud, soil, or debris from off-site sources or previous Project sites to avoid introducing or spreading invasive exotic plant species. All equipment used on the premises will be cleaned prior to leaving the area for future projects.
- Refueling and/or maintenance of vehicles and equipment will be performed in designated staging areas. Workers will be informed of the importance of preventing spills and of the appropriate measures to take should a spill occur. Follow all state and federal laws pertaining to hazardous material handling and management.
- Position all stationary equipment such as motors, pumps, generators, and/or compressors over drip pans. Store vehicles and equipment in designated staging area. Position parked equipment over drip pans or absorbent material.
- All construction vehicles and equipment will be checked daily for fuel, oil, and hydraulic fluid leaks or other problems that could result in spills of toxic materials.
- Prohibit smoking.
- During construction, all food trash that may attract predators into the work area will be properly contained and removed from the work site on a daily basis. Construction debris and trash should also be properly contained and removed from the work site on a regular basis.

Mitigation Measure BIO-8c: Stabilize and Restore Temporary Impact Areas

The County and/or their construction contractor, in coordination with an agency-approved biologist, will stabilize and restore sensitive and native habitat areas that are temporarily impacted by construction activities, as described below:

- During construction, stabilize all exposed or disturbed areas within the construction area. Install erosion control measures such as silt fences, weed-free straw bales, plywood, straw wattles, water check bars, and broadcast weed-free straw wherever silt laden water has the potential to leave the work site and enter the nearby drainages. Modify, repair, and/or replace erosion control measures as needed.
- During construction, to minimize the risk of entangling and strangling wildlife, erosion control materials containing synthetic (e.g., plastic or nylon) monofilament netting will not be used, and any geo-textile material or filter fabric used will not contain any petroleum-based products. Geotextiles, fiber rolls, and other erosion control measures will be made of loose-weave mesh, such as jute or coconut (coir) fiber.
- At the end of construction activities, restore habitat contours to their original (or agency-approved) configuration in all sensitive habitats or adjacent areas (**Figures 3.4-1, 3.4-2a-e, and Figure 6.4-1**) that have been temporarily disturbed by activities associated with construction.

- At the end of construction activities, where temporary impacts to sensitive and native habitats occur, revegetate as needed with native seed mix or locally sourced native plantings. Revegetate all disturbed areas. An agency-approved biologist will determine a palette/seed mix suitable to the location. Adjacent non-native grasslands and ruderal habitats may also be planted with native vegetation, preserving edge effects, where appropriate.

Mitigation Measure BIO-8d: Prepare and Implement a Habitat Mitigation Plan for Permanent Impacts to Sensitive Habitats, Including Aquatic Features, for Proposed Project

- The County, in coordination with qualified biologists, will prepare and implement a Habitat Mitigation Plan (HMP), as outlined below, to mitigate for permanent impacts to sensitive habitats and ESHA, including aquatic features. This plan will compensate for impacts to coast live oak woodland and forest, riverine habitat (Harkins Slough Road Drainage), and significant trees. In addition, the HMP will provide additional recommendations for implementation and monitoring of the Environmental Enhancement and Restoration Features. The HMP will mitigate for impacts to sensitive wildlife species, if present (Crotch's bumble bee, California red-legged frog, northwestern pond turtle, avian and bat species, San Francisco dusky-footed woodrat), habitat for these species, and wildlife movement through the restoration and enhancement of potential habitat. This plan establishes sensitive habitat off site as compensatory mitigation. The Habitat Mitigation Plan (HMP) will be prepared by a qualified biologist prior to submission of permit applications in coordination with the relevant resource agencies (County Environmental Planning Division, the CCC, CDFW, RWQCB, USACE, and/or USFWS) and approved prior to initiation of construction. The conceptual framework for the HMP is as follows:
- Coast live oak woodland and/or forest will be established at a location and ratio to be determined in coordination and consultation with the County Environmental Planning Division, the CCC, and an agency-approved biologist.
- The detailed HMP) will include the following:
    - Description of the Project elements including acreage of temporary and permanent impacts to sensitive habitats, including coast live oak woodland and riverine habitat (Harkins Slough Road Drainage) and the number of significant trees removed for the Project.
    - Description of Environmental Enhancement and Restoration Features including acreage of restoration areas within sensitive habitat types and tree removal, if required.
    - Goals of compensatory mitigation project including types and areas of habitat to be created, restored, and/or enhanced, and mitigation ratios (created/restored/enhanced: impacted). At a minimum, the Project will not result in a reduction in area of sensitive habitats, ESHA, wetlands, or riparian corridors.
    - Ratio and species composition for significant tree mitigation as determined in coordination with the County Environmental Planning Division (for coast live oak woodland and forest) and the CCC; and with the County, CCC, California Regional Water Quality Control Board (Regional Board), and California Department of Fish and Wildlife (CDFW) for tree removal in mixed willow riparian habitat.
    - In-kind restoration and/or enhancement of riverine habitat on site at Harkins Slough Road Drainage.

- Location and acreage of mitigation areas, and Significant Tree replacement planting, including size and ownership status.
- Detailed construction and planting techniques.
- Description and design of habitat requirements for special-status wildlife, including California red-legged frog and northwestern pond turtle.
- Strategies for protecting the habitat values of the larger Watsonville Sloughs ecosystem, including wildlife movement.
- Maintenance activities during the monitoring period, including replanting native vegetation and weed removal, that will not result in take of special-status plant and wildlife species.
- Performance standards and specific success criteria, quantitative and qualitative monitoring and reporting, documenting ability to meet or surpass success criteria.
- Adaptive management strategies to ensure long-term viability of mitigation areas.

- The following Environmental Enhancement and Habitat Restoration Features, included as part of the Proposed Project, will be developed by qualified biologists in coordination with County engineers and implemented on-site as both in-kind and out-of-kind mitigation.
  - **Wildlife Movement Corridor between Gallighan Slough and Harkins Slough**. Establish a Wildlife Movement Corridor between Gallighan Slough and Harkins Slough on the southern portion of the landfill after closure, by establishing shallow-rooted native perennial vegetation (see **Appendix G4**),[24] including suffrutescents,[25] shrubs, and vine plantings that will not compromise the landfill cap, to facilitate refuge and cover opportunities for wildlife moving across the area. The landfill cap will have a minimum of 24 inches (30–36 inches is preferred) of vegetative layer/topsoil to allow for shrub plantings. Place downed logs on flatter portions of the corridor, and any appropriate areas of the already closed landfill to provide additional shelter for wildlife.
  - **Culvert Modification with Small Wildlife Crossing at Main Entrance**. Modify the culvert under the main entrance to the landfill to add a ledge within the culvert to facilitate safe passage of CRLF and other small wildlife species under most hydrologic conditions.
  - **Culvert Replacement under the Internal Roadway to the Old Landfill**. Replace the existing culvert with a larger structure (e.g., a larger culvert with a natural streambed or a clear-span bridge) designed to reduce the hydraulic constriction, associated flooding, and sedimentation upstream within Channelized Gallighan Slough and the Buena Vista Drive Tributary.
  - **Wildlife Directional Features at Key Locations**. Construct wildlife directional features such as angled fencing to direct wildlife away from high operational activity areas, including transfer stations and internal roadways toward Channelized Gallighan Slough, the Wildlife Movement Corridor, and the culvert with wildlife passage.
  - **Restoration of Harkins Slough Road Drainage**. Rehabilitate the Harkins Slough Road Drainage through re-grading the elevation profile of the channel to repair existing incision, accommodate

[24] A 20-year study demonstrated that the roots of shallow-rooted scrub vegetation grow laterally when the roots reach the barrier membrane layer of the landfill cap and do not penetrate through the membrane into the foundation layer or into the waste below the cap (Holl and McStay 2014).

[25] A suffrutescent plant has a woody lower portion at the base of its stems that persists year to year, while the upper softer growth is herbaceous (non-woody). See also **Appendix G4** for a planting palette of shallow-rooted shrubs, perennial herbs, and vines proposed for the landfill cap.

storm flows and transport sediment effectively. Remove red ironbark trees adjacent to the drainage and plant with suitable native riparian plant species including willows, dogwood, elderberry, and (above the break in bank) coast live oaks.

- If ODF Option 2 is approved for the top deck of the Old Landfill, the following measures will be implemented on site where the existing seasonal wetland and drainage extends along the southern boundary.
  - Restore and/or enhance the Old Landfill Seasonal Wetland and Drainage. The existing seasonal wetland and drainage will be recontoured to channel elevations that existed prior to the 2022–2023 storm season, and sediments will be removed to restore native wetland vegetation and wildlife habitat.

Impact BIO-9 PROJECT CONSTRUCTION WOULD RESULT IN MINIMAL IMPACTS TO RIPARIAN FOREST. (LESS THAN SIGNIFICANT IMPACT WITH MITIGATION)

Overview

Project construction of the Environmental Enhancement and Habitat Restoration Features included in the Project would result in minimal impacts to riparian forest (**Table 3.4-8** and **Table 3.4-9**). Riparian forest is considered a sensitive habitat type and ESHA by the County of Santa Cruz LCP, Sensitive Habitat Ordinance (SCCC Chapter 16.30), Riparian Corridor and Wetlands Protection Ordinance (SCCC Chapter 16.32), and a Sensitive Natural Community by CDFW (2026d). Willow riparian forests are also regulated as one- or two-parameter wetland habitats under the California Coastal Act when dominated by arroyo willow, red willow, and Pacific willow. All three willows are designated as FACW[26] species. Riparian and woody wetland communities are considered sensitive habitats due to their value to wildlife, water quality, limited distribution, and decreasing acreages statewide. Riparian vegetation is critical for wildlife habitat and movement, flood protection, stream bank stabilization, erosion control, and water quality related to nutrient and sediment filtration by riparian vegetation.

Impacts to riparian forests require a Riparian and Wetland Exception permit from the County of Santa Cruz. Moreover, riparian forests dominated by hydrophytic vegetation (e.g., willows) are regulated under the Coastal Act and County of Santa Cruz LCP as wetlands or an exception is required, as described under the Sensitive Habitat Impact Section above and in Section 3.4.2, Regulatory Setting. Impacts to riparian forests are also likely to require permits from CDFW (Lake and Streambed Alteration Agreement) and the Regional Water Quality Control Board.

The Environmental Enhancement and Habitat Restoration Features that would result in temporary impacts to riparian habitat include: Culvert Modification with Small Wildlife Crossing at Main Entrance, Culvert Replacement under the Internal Roadway to the Old Landfill, and the Restoration of Harkins Slough Road Drainage.

Occurrence

Within the Study Area, mixed broadleaved and willow riparian forest habitats occur along the margins of the Harkins Slough Road Drainage, the Buena Vista Drive Tributary, and Channelized Gallighan Slough, providing habitat and movement corridors for a variety of common and special-status wildlife species

[26] A FACW plant species is a plant that usually occurs in wetlands (67–99 percent) and occasionally in upland habitats (1–33 percent).

(**Figure 3.4-1 and Figures 3.4-2a–e**). This habitat type's rich ecological values for wildlife are described in Section 3.4.1 above.

Construction

Restoration areas within riparian forests are proposed for the Environmental Enhancement and Habitat Restoration Features that are part of the Project, including Culvert Modification with Small Wildlife Crossing at Main Entrance, Culvert Replacement under the Internal Roadway to the Old Landfill, and the Restoration of Harkins Slough Road Drainage.

These restoration activities would occur within 0.088 acres of riparian forest (also a Coastal Act wetland habitat) from tree removal (if required), trimming and limbing (for access); clearing, grubbing, and grading. **Table 3.4-9** and **Table 3.4-10** list restoration area acreages by each location.

Restoration within riparian vegetation would temporarily disrupt riparian vegetation structure and habitat values, including the provision of wildlife shelter and refuge, nesting substrate, and foraging opportunities. These effects are expected to be small in scale and short in duration and would be addressed through further implementation of the Environmental Enhancement and Habitat Restoration Features, including replacing, restoring and/or enhancing riparian vegetation within the disturbed areas (on site) and by implementing protective measures while working in or near these sensitive habitats. Therefore, the impact would be **Less than Significant with Mitigation** (Mitigation Measures BIO-8a, BIO-8b, BIO-8c, BIO-8d, BIO-9a, BIO-9b).

Mitigation Measure BIO-8a: Implement Measures to Protect Sensitive and Native Habitats during Construction

Refer to the description of Mitigation Measure BIO-8a for Impact BIO-8 above.

Mitigation Measure BIO-8b: Implement Best Management Practices During Construction

Refer to the description of Mitigation Measure BIO-8b for Impact BIO-8 above.

Mitigation Measure BIO-8c: Stabilize and Restore Temporary Habitat Impact Areas

Refer to the description of Mitigation Measure BIO-8c for Impact BIO-8 above.

Mitigation Measure BIO-8d: Prepare and Implement a Habitat Mitigation Plan for Permanent Impacts to Sensitive Habitats, Including Aquatic Features, for Proposed Project

Refer to the description of Mitigation Measure BIO-8d for Impact BIO-8 above.

Mitigation Measure BIO-9a: Replace, Restore and/or Enhance with In-Kind Riparian Vegetation on Site

Following project construction, the County will mitigate for temporary and permanent impacts to riparian forest on site, as necessary at the main landfill entrance (Buena Vista Drive Tributary), at the internal roadway to Old Landfill (Channelized Gallighan Slough), and along Harkins Slough Road Drainage, through in-kind replacement, restoration, and/or enhancement at a ratio to be determined in coordination with the relevant resource agencies (County, CCC, Regional Board, and CDFW).

In addition, the County in coordination with qualified biologists will plant suitable native trees and understory plants (including mixed willow riparian scrub and forest, mixed broadleaved riparian forest, and coast live oak woodland) where suitable space is available, such as along the Harkins Slough Road Drainage.

Mitigation Measure BIO-9b: Transplant Willows to Restore Riparian Areas

During construction activities within riparian habitat, if tree removal is required, the County or their contractor will excavate willow roots, cover with burlap, and set aside during construction. Following construction activities in this area, the willow roots will be replanted along the embankments of the Buena Vista Drive Tributary, Channelized Gallighan Slough, and/or Harkins Slough Road Drainage, as applicable.

Impact BIO-10 PROJECT CONSTRUCTION WOULD RESULT IN IMPACTS TO OTHER ENVIRONMENTALLY SENSITIVE HABITAT AREAS. (LESS THAN SIGNIFICANT IMPACT WITH MITIGATION)

Habitat for CRLF and NWPT habitat, edge habitats, and areas of high biodiversity are also considered sensitive habitats and ESHA. Construction activities would result in minimal impacts to these sensitive habitats and ESHAs.

Project components that may result in this impact include all Project components except ODF Option 1 and the optional Scale House Upgrades and Recycling Center Upgrades.

California Red-Legged Frog and Northwestern Pond Turtle Habitat

Aquatic, upland/refuge, movement, and dispersal habitat for CRLF and aquatic, movement, dispersal, and nesting habitat for NWPT include the sensitive habitats described for Impacts BIO-8 and BIO-9 above, aquatic habitats described for Impacts BIO-11 and BIO-12 below, and ruderal/non-native grassland, willow forest (non-riparian), and non-native forest habitats described above in Section 3.4.1, where these habitats are located in direct lines between aquatic features for CRLF (**Figures 3.4-2a–e** and **Figure 3.4-3**) or where located adjacent to aquatic features for NWPT.

The impacts to known and potential CRLF habitat and the required mitigation are described in the discussion for Impact BIO-3 above, and the impacts to potential NWPT habitat and the required mitigation are described in the discussion for Impact BIO-4 above.

Edge Habitats/Areas of High Biological Diversity

Within the Study Area, edge habitats (or ecotones) are present between coast live oak woodland and forest and non-native and ruderal grassland habitats where Transfer Station A and the Harkins Slough Road Realignment would be constructed; and between riparian, freshwater marsh, and non-native forest habitats along the Buena Vista Drive Tributary and Channelized Gallighan Slough where the Culvert Modification with the Small Wildlife Crossing at the Main Entrance, and the Culvert Replacement under the Internal Roadway to the Old Landfill would take place. Edge habitats typically support high biological diversity due to increased resource availability and physiognomic (habitat structure) heterogeneity.

In addition, edge habitats are present between riparian, non-native grassland, non-native forest, coastal scrub, and coast live oak woodland and forest habitats in the area proposed for Restoration of Harkins Slough Road Drainage (which primarily consists of a steep slope along a busy roadway); and between eucalyptus forest, other native and non-native trees, and non-native grassland in the area proposed for the optional Equipment Parking and Storage Area (which consists of a recent demolition site of the Hope Services building). These last two areas would not be considered areas of high biological diversity because of these anthropogenic factors, but they still function to provide a more diverse assortment of food and shelter resources.

Project construction activities such as vegetation removal, grubbing, and grading would temporarily degrade edge habitat and areas of high biological diversity, and reduce available refuge and foraging habitat for wildlife. Construction of Transfer Station A and Harkins Slough Road Realignment would permanently displace edge habitat and areas of high biological diversity.

These impacts would be reduced to a less than significant level by implementing habitat protection and restoration measures. Therefore, the impact would be **Less than Significant with Mitigation** (Mitigation Measures BIO-8a, BIO-8b, BIO-8c, BIO-8d).

Mitigation Measure BIO-8a: Implement Measures to Protect Sensitive and Native Habitats During Construction

Refer to the description of Mitigation Measure BIO-8a for Impact BIO-8 above.

Mitigation Measure BIO-8b: Implement Best Management Practices During Construction

Refer to the description of Mitigation Measure BIO-8b for Impact BIO-8 above.

Mitigation Measure BIO-8c: Stabilize and Restore Temporary Habitat Impact Areas

Refer to the description of Mitigation Measure BIO-8c for Impact BIO-8 above.

Mitigation Measure BIO-8d: Prepare and Implement a Habitat Mitigation Plan for Permanent Impacts to Sensitive Habitats, Including Aquatic Features, for Proposed Project

Refer to the description of Mitigation Measure BIO-8d for Impact BIO-8 above.

Mitigation Measure BIO-9a: Replace, Restore and/or Enhance with In-Kind Riparian Vegetation on Site

Refer to the description of Mitigation Measure BIO-9a for Impact BIO-9 above.

Mitigation Measure BIO-9b: Transplant Willows to Restore Riparian Areas

Refer to the description of Mitigation Measure BIO-9b for Impact BIO-9 above.

Threshold C:	Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.

Wetlands/Other Waters

The proposed Project would impact aquatic habitats, including both minimal impacts from Project activities (**Table 3.4-11**) and the beneficial effects from Environmental Enhancement and Habitat Restoration Features (**Table 3.4-12**). Three aquatic habitat types (freshwater marsh, seasonal wetland, and riverine) are present within the Study Area and would be affected by the Project (**Figure 3.4-1, Figures 3.4-2a–e, and Figure 2-4**). **Table 3.4-11**, **Figures 3.4-2a–e, and Figure 2-4** present approximate potential temporary and permanent impacts associated with the Project by sensitive habitat types.

Table 3.4-12 presents restoration areas associated with proposed Restoration and Enhancement Features within aquatic habitats. **Table 3.4-10** in the Sensitive Habitat Impact Section above lists restoration areas by the Restoration and Enhancement Feature.

Table 3.4-11. Temporary and Permanent Project Impacts to Aquatic Habitat Types

Habitat Type Project Element	ODF Option 1		ODF Option 2	
	Permanent Impacts	**Temporary Impacts**	**Permanent Impacts**	**Temporary Impacts**
Freshwater Emergent Marsh	**0**	**0**	**0**	**0**
Riverine	**0.010**	**0**	**0.010**	**0**
Harkins Slough Road Drainage – Harkins Slough Road Realignment	0.010	0	0.010	0
Seasonal Wetland				
Old Landfill Drainage and Wetland Swale – Stormwater Runoff Outlet Feature	**0**	**0**	**0.002**	**0**
Total Aquatic Habitats Impacts	**0.010**	**0**	**0.012**	**0**

Notes: Sensitive habitat types are indicated in bold.

Table 3.4-12. Proposed Restoration Areas within Aquatic Habitats for the Buena Vista Landfill Redevelopment Project

Habitat Type Project Element	ODF Option 1	ODF Option 2
Freshwater Emergent Marsh Landfill Entrance Culvert Modification	**0.003**	**0.003**
Riverine	**0.007**	**0.007**
Harkins Slough Road Drainage Restoration	0.051	0.051
Buena Vista Drive Tributary – Landfill Entrance Culvert Modification	0.013	0.013
Channelized Gallighan Slough – Internal Roadway to Old Landfill Culvert Replacement	0.013	0.013
Seasonal Wetland Old Landfill Drainage and Wetland Swale Restoration	**0**	**0.233**
Total Restoration Areas	**0.080**	**0.313**

Impacts to federally protected aquatic resources would require permits from the Regional Board (CWA Section 401 Water Quality Certification) and USACE (CWA Section 404 Nationwide Permit). In addition, impacts to aquatic resources are likely to require permits, approvals, and exceptions from the County and CDFW. See also Section 3.4.2, Regulatory Setting, above, and Threshold E below.

IMPACT BIO-11 PROJECT CONSTRUCTION WOULD RESULT IN MINIMAL IMPACTS TO WETLANDS. (LESS THAN SIGNIFICANT IMPACT WITH MITIGATION)

Overview

Several potential jurisdictional palustrine emergent wetlands meeting all three wetland parameters (i.e., hydrophytic vegetation, hydric soils, wetland hydrology) were identified within the Study Area, and one of the proposed Environmental Enhancement and Restoration Features would result in minor impacts to freshwater marsh habitat. An additional feature associated with ODF Option 2 would also impact a seasonal wetland, if this option is selected (**Figure 3.4-1; Figures 3.4-2a, c, and d; and Figure 2-4**).

Project components that would result in impacts to wetlands include Culvert Modification with Small Wildlife Crossing at Main Entrance and ODF Option 2.

Occurrence

Two palustrine emergent wetlands fall within the Project area. A freshwater marsh associated with the Buena Vista Drive Tributary is present immediately downstream of the culvert under the main landfill entrance (**Figure 3.4-2a**). A seasonal wetland swale (called Old Landfill Wetland) associated with an aggraded stormwater drainage ditch is present along the southwestern perimeter of the Old Landfill (**Figures 3.4-2c and d**). These areas were determined to support a preponderance of hydrophytic vegetation, evidence of hydric soils, and wetland hydrology as required by USACE wetland delineation guidelines. These features all have direct surface water connectivity to drainages entering Gallighan Slough and ultimately the Pacific Ocean, a TNW.

The small freshwater marsh is situated immediately southwest of the main landfill entrance (**Figure 3.4-2a**) and borders the Buena Vista Drive Tributary downstream and southeast of the existing box culvert beneath the entrance driveway. The freshwater marsh supports dense emergent hydrophytes including cutleaf water parsnip (OBL), cattails (OBL), marsh pennywort (*Hydrocotyle ranunculoides;* OBL), green dock (*Rumex conglomeratus*; FACW), and western goldenrod (FACW). This feature exhibits direct surface water connectivity to the Buena Vista Drive Tributary, and the confluence with Channelized Gallighan Slough is approximately 225 feet downstream of the wetland. The marsh is situated adjacent to the mixed riparian vegetation along the drainage and contributes to overall species richness and edge habitat qualities.

The palustrine emergent seasonal wetland swale is situated along the southernmost perimeter of the Old Landfill and immediately northeast of the SCBRL railroad tracks (**Figures 3.4-2c and d**). This feature is positioned in a former stormwater swale/ditch that is aggraded with agricultural sediments from the farms to the southwest. The upstream (northwestern) segment of the swale is shallow and narrow, and it gradually deepens and widens as it extends southeast along the edge of the Old Landfill. The upstream portion of the swale is drier and dominated by a mix of native and non-native grasses and forbs with FAC and FACW wetland indicator statuses. As the swale deepens and widens farther to the southeast, the hydroperiod is extended and soils are inundated or saturated for a sufficient duration to support predominantly native graminoids (e.g., rushes, sedges, cattails) and forbs (e.g., watercress, water parsley) with FACW and OBL wetland indicators. Accumulated sediments in this lower reach are present, but do not elevate to the level of the top deck of the Old Landfill. The feature exhibits direct hydrologic connectivity to Gallighan Slough via a culvert entering a perpendicular incised ephemeral drainage with a confluence at the northwest edge of the slough.

The landscape position and microtopography (concave) of the seasonal wetland swale provide some benefits (i.e., ecosystem services) to Gallighan Slough and the larger Watsonville Sloughs system in terms of water quality, contaminant sequestration, and nutrient cycling. The existing heterogeneous vegetation and presence of seasonally ponded water in the southeastern segment of the swale provide moderate to good habitat value for wildlife, including CRLF, known to occupy the Study Area and surrounding lands.

Impacts

Direct impacts to wetlands are not expected to result from the Project, with the exception of minor functional improvements and restoration. These impacts would largely be considered beneficial (i.e., resource-dependent) impacts to improve the functions and values of these features.

Project construction activities for Culvert Modification with Small Wildlife Crossing at Main Entrance and ODF Option 2 stormwater management would result in minimal impacts to palustrine emergent wetlands.

The freshwater marsh situated immediately downstream of the existing box culvert beneath the main landfill entrance driveway would be impacted by culvert modification, including approximately 0.003 acres of temporary impacts. The modified culvert design would incorporate a flat-bottom culvert with an elevated ledge along one side that allows for passage of small wildlife species under most hydrologic conditions. Additional information on restoration of Buena Vista Drive Tributary is provided in Impact BIO-12 below.

If ODF Option 2 is approved and implemented, there would be an impact of 0.002 acres for installation of an outlet feature and an impact of 0.233 acres for restoration of the seasonal wetland swale southwest of the Old Landfill. As described in Section 2.4 (under Additional Information for ODF Options 1 and 2), a new drainage ditch would be constructed parallel to the existing wetland swale to convey stormwater away from the Organics Diversion Facility. This new ditch would outlet into the existing swale downgradient of the ODF Facility. In addition, to restore native wetland vegetation and wildlife habitat, the wetland swale would be recontoured to channel elevations that existed prior to the 2022–2023 storm season, agricultural sediments would be removed, and native wetland vegetation would be replanted along the margins of the channel (**Figure 2-4**). The wetland restoration design would be developed by qualified biologists in coordination with the County of Santa Cruz Environmental Planning Division and other relevant regulatory agencies including USACE, Regional Board, and the CCC. Thus, ODF Option 2 would result in up to 0.233 acres of beneficial impacts for restoration of the wetland swale, which would compensate for the minimal impacts from construction of the outlet feature and would serve as compensatory mitigation for other Project-related impacts. If ODF Option 1 is selected (which places the ODF facility on top of the Current Active Landfill once it is closed), no impacts to the seasonal wetland swale would occur.

In summary, construction of the Culvert Modification with Small Wildlife Crossing at Main Entrance and the ODF Option 2 stormwater management facilities (new drainage ditch and outfall) would result in minimal impacts to wetland vegetation and function. However, the impacts would be reduced to a less than significant level by the benefits associated with restoration and by implementing habitat protection and restoration measures. Therefore, the impact would be **Less than Significant with Mitigation** (Mitigation Measures BIO-8a, BIO-8b, BIO-8c, BIO-8d).

Mitigation Measure BIO-8a: Implement Measures to Protect Sensitive and Native Habitats During Construction

Refer to the description of Mitigation Measure BIO-8a for Impact BIO-8 above.

Mitigation Measure BIO-8b: Implement Best Management Practices During Construction

Refer to the description of Mitigation Measure BIO-8b for Impact BIO-8 above.

Mitigation Measure BIO-8c: Stabilize and Restore Temporary Habitat Impact Areas

Refer to the description of Mitigation Measure BIO-8c for Impact BIO-8 above.

Mitigation Measure BIO-8d: Prepare and Implement a Habitat Mitigation Plan for Permanent Impacts to Sensitive Habitats, Including Aquatic Features, for Proposed Project

Refer to the description of Mitigation Measure BIO-8d for Impact BIO-8 above.

IMPACT BIO-12 PROJECT CONSTRUCTION WOULD RESULT IN MINIMAL IMPACTS TO RIVERINE HABITATS. (LESS THAN SIGNIFICANT IMPACT WITH MITIGATION)

Overview

The proposed Project would result in minimal impacts to riverine habitat associated with the Harkins Slough Road Realignment. In addition, restoration areas associated with Environmental Enhancement and Restoration Features would be located within the riverine habitat of the Buena Vista Drive Tributary, Channelized Gallighan Slough, and Harkins Slough Road Drainage.

Project components that would result in this impact include Culvert Modification with Small Wildlife Crossing at Main Entrance, Culvert Replacement under Internal Roadway to Old Landfill, and Restoration of Harkins Slough Road Drainage.

Occurrence

Riverine features include the Buena Vista Drive Tributary, which runs along the western frontage of the landfill (**Figures 3.4-2a and d**); Channelized Gallighan Slough (**Figure 3.4-2d**), which bisects the Current Active Landfill from the Old Landfill; and the Harkins Slough Road Drainage, situated along the northern boundary of the Project area (**Figures 3.4-2a and b**). In addition, one ephemeral drainage was identified within the Project area: a linear Irrigation Ditch extending from the toe of the slope proposed for Transfer Station A to the confluence with the Harkins Slough Road Drainage (**Figure 3.4-2b**). This ditch is likely not subject to USACE jurisdiction under the federal CWA, but may be subject to regulation and statutory protections by the Regional Board under the Porter-Cologne Water Quality Control Act.

The Buena Vista Drive Tributary is an aquatic feature that has been modified by anthropogenic influences (i.e., caused by human activity), largely agriculture and landfill activities, for at least 100 years (UCSB Library Geospatial Collection 2025). Archival photographs show this feature as a finger of Gallighan Slough that originates in terraced and sloped agricultural fields northwest of the Study Area and flows generally southward until its confluence with Channelized Gallighan Slough. Historically, the headwaters of the Harkins Slough Road Drainage originated north of Harkins Slough Road and cut through what is now the northern module of the active landfill to join the Buena Vista Drive Tributary. Both of these drainages frequently fill with sediments originating in nearby agricultural fields. Near the landfill entrance, the Buena Vista Drive Tributary often supports dynamic freshwater marsh vegetation on the sediments in the channel.

Both the Buena Vista Drive Tributary and Harkins Slough Road Drainage have incised and aggraded reaches. In the recent past, following storm events, these drainages have been cleared for road safety and landfill access, and the channels recontoured.

Currently, the Buena Vista Drive Tributary supports a narrow channel filled with agricultural sediments bordered by freshwater emergent marsh and mixed willow riparian vegetation, including: small-fruited bulrush (OBL), American brooklime (*Veronica americana;* OBL), water parsley (OBL), watercress (OBL), dotted smartweed (OBL), willowherb (FACW), silverweed cinquefoil (*Potentilla anserina* ssp. *californica*; OBL), California blackberry (FAC), creek dogwood (FACW), and willows (FACW).

Currently, the Harkins Slough Road Drainage still originates on a terrace supporting a commercial plant nursery north of the Study Area, then passes through the adjacent property immediately north of Harkins Slough Road and the Current Active Landfill. The drainage is mostly contained in belowground pipes and culverts before daylighting in the narrow linear drainage bordering the north side of Harkins Slough Road. This feature flows westward to the confluence with the Buena Vista Drive Tributary.

Channelized Gallighan Slough is positioned within a relatively broad arroyo bisecting the Active Landfill to the north and the Old Landfill to the south. Channelized Gallighan Slough flows to Gallighan Slough at the southern boundary of the Study Area, supporting dense broadleaved riparian habitat near the confluence with Buena Vista Drive Tributary and transitioning to mixed willow riparian southeast of the internal roadway to the Old Landfill. Although the channel is relatively narrow and bounded by the active Landfill and the Old Landfill, the drainage and its associated riparian corridor represent one of the more intact and complex habitat types within the Study Area.

Together, the drainages within the Study Area support riparian and emergent wetland vegetation and contribute to on-site habitat complexity and hydrologic connectivity. These flashy drainages carry elevated flow volumes immediately following storm events and during summer months due to irrigation runoff (tailwater) from adjacent agricultural fields.

Impacts

Minimal impacts to riverine features would result from Project activities and Environmental Enhancement and Restoration Features, including Culvert Modification with Small Wildlife Crossing at Main Entrance, Culvert Replacement under the Internal Roadway to the Old Landfill, Harkins Slough Road Realignment, and Restoration of Harkins Slough Road Drainage, with proposed restoration comprising the majority of impacts at the Harkins Slough Road Drainage.

One of the Environmental Enhancement and Restoration Features, Culvert Modification with Small Wildlife Crossing at Main Entrance, would disturb 0.013 acres of the Buena Vista Drive Tributary fronting the landfill. The existing culvert beneath the main landfill entrance would be modified to contain an elevated ledge along one side that allows for passage of small wildlife species under most hydrologic conditions. The wildlife crossing would be a beneficial impact that would serve as out-of-kind mitigation (**Figure 2-4**).

Potential impacts to the Buena Vista Drive Tributary may result from dewatering and installation of a diversion or bypass and installation of the ledge. Impacts to riverine habitat may also occur from the introduction of sediment or construction materials, potential unanticipated releases of equipment fuel, hydraulic fluid, or other potentially hazardous substances used in construction equipment.

A second Environmental Enhancement and Restoration Feature would be implemented on Channelized Gallighan Slough — Culvert Replacement under the Internal Roadway to the Old Landfill, which includes replacing the existing culvert with a larger structure (e.g., a larger culvert with a natural streambed or a clear-span bridge) designed to reduce the hydraulic constriction, associated flooding, and sedimentation upstream within Channelized Gallighan Slough and the Buena Vista Drive Tributary. This activity would disturb 0.013 acres of the stream.

Replacing and upsizing the culvert under the road to the Old Landfill would ultimately improve ecological and hydrologic conditions in Channelized Gallighan Slough as well as in Buena Vista Drive Tributary by maintaining sediment transport competence and reducing aggradation of the stream channels, thereby extending the return interval for maintenance and reducing frequent flood conditions near the current Landfill main entrance. Specifically, reducing sediment deposition in the channels would maintain a more stable bed, bank, and ordinary high-water mark while improving overall

ecological conditions of the streams by supporting open-water riverine conditions and an associated diverse riparian habitat. The upsized culvert or bridge would restore functional riverine habitat and reduce or eliminate the conversion to instream freshwater marsh features which have established on the agricultural sediments.

The instream freshwater marsh that has developed within the Buena Vista Drive Tributary is associated with the following negative ecological effects:

- Shorter hydroperiod;
- Lack of running water, pools, or riffles;
- Poor water quality (e.g., turbidity, less dissolved oxygen);
- Loss of temperature gradients (that support species diversity);
- Absent or degraded habitat for invertebrates (which are the basis of the food chain for fish and amphibians); and
- Diminished hydrologic capacity of the stream, exacerbating flood risk.

The larger capacity culvert or bridge would reduce or eliminate this conversion of habitat from riverine to instream freshwater marsh. Extensive freshwater marsh habitat would remain at the confluence with Gallighan Slough and in off-channel locations along the streams, resulting in aquatic habitat heterogeneity.

Restoration of the Harkins Slough Road Drainage would occur following construction of Transfer Station A and associated realignment of Harkins Slough Road, which would result in 0.010 acres of impacts to this feature (**Table 3.4-11**). Restoration of approximately 800 linear feet of the drainage would result in 0.051 acres of beneficial impacts to the channel (**Table 3.4-12**). The Project would improve this feature by stabilizing the bed and bank to prevent future erosion and rilling (i.e., forming small channels or grooves), as well as prevent further undermining of Harkins Slough Road during high flow events. In addition, the recontoured drainage would accommodate increased stormwater runoff from new impervious surfaces at Transfer Station A. The restoration would include removal of invasive weeds and will establish native riparian and wetland vegetation, where appropriate. Because this feature borders the roadway by less than 5 feet, riparian vegetation would be replanted on the upslope (north) embankment/hillslope bordering the drainage.

Potential impacts to the Harkins Slough Road Drainage may include dewatering and installation of a diversion or bypass, clearing, grubbing, excavation, and grading (recontouring). Impacts may also occur from the introduction of sediment or construction materials, potential unanticipated releases of equipment fuel, hydraulic fluid, or other potentially hazardous substances used in construction equipment.

As a separate project (Buena Vista Drive Rehabilitation Project), the County is planning two other improvements: 1) stabilizing the Buena Vista Drive Tributary along the Landfill frontage to reduce channel incision and remove agricultural sediment, and 2) replacing the culvert and adding a wildlife crossing under Buena Vista Drive from the outlet from the step-down pools across from the main Landfill entrance to increase capacity and allow CRLF to safely cross Buena Vista Drive. In conjunction, these improvements and project-related improvements restore and enhance the overall conditions of the drainages and associated riparian corridors.

In summary, Project construction activities along with Environmental Enhancement and Restoration Features could result in minimal disturbance to riverine vegetation, substrate, and wildlife habitat from culvert modification and replacement, drainage restoration, excavation, and grading. However, these

impacts would be reduced to a less than significant level by the restoration benefits and by implementing habitat protection and restoration measures. Therefore, the impact would be **Less than Significant with Mitigation** (Mitigation Measures BIO-8a, BIO-8b, BIO-8c, BIO-8d).

Mitigation Measure BIO-8a: Implement Measures to Protect Sensitive and Native Habitats during Construction

Refer to the description of Mitigation Measure BIO-8a for Impact BIO-8 above.

Mitigation Measure BIO-8b: Implement Best Management Practices During Construction

Refer to the description of Mitigation Measure BIO-8b for Impact BIO-8 above.

Mitigation Measure BIO-8c: Stabilize and Restore Temporary Habitat Impact Areas

Refer to the description of Mitigation Measure BIO-8c for Impact BIO-8 above.

Mitigation Measure BIO-8d: Prepare and Implement a Habitat Mitigation Plan for Permanent Impacts to Sensitive Habitats, Including Aquatic Features, for Proposed Project

Refer to the description of Mitigation Measure BIO-8d for Impact BIO-8 above.

Threshold D:	Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors or impede the use of native wildlife nursery sites.

IMPACT BIO-13 PROJECT CONSTRUCTION WOULD RESULT IN IMPACTS TO WILDLIFE MOVEMENT. (LESS THAN SIGNIFICANT IMPACT WITH MITIGATION)

Overview

The proposed Project would impact wildlife movement during construction and through the development of open space that currently provides opportunities for wildlife movement, dispersal, and refuge. Providing functional habitat connectivity between natural areas is essential to sustaining healthy wildlife populations, allowing for the continued dispersal of native plant and animal species.

Project components that would result in potential impacts to wildlife movement include Transfer Station A and Harkins Slough Road Realignment, ODF Option 2, the optional Internal Access Road Improvements and Equipment Parking and Storage Area, and Environmental Enhancement and Restoration Features (temporary impacts during construction).

Occurrence

Existing wildlife movement habitat is described above in Section 3.4.1 under Wildlife Corridors. Wildlife that are moving through the Study Area and surrounding area are likely to use the drainages and the sloughs within the Study Area as they provide water, foraging resources, shelter, and cover. A number of native wildlife species were observed within these habitats. In addition, the oak woodlands within the area proposed for Transfer Station A, the Harkins Slough Road Realignment, and on the adjacent Wildlife Refuge, as well as the oak woodland patch within the area proposed for Transfer Station A, provide stepping stones between the Wildlife Refuge, the adjacent property north of Harkins Slough Road, and

the riparian corridor of the Buena Vista Drive Tributary. Coyote and black-tailed deer scat was observed on the area proposed for Transfer Station A. These areas are considered habitat patches or linear habitats that facilitate wildlife movement between different natural landscapes.

The habitat patches and linear habitats within and near the Study Area provide opportunities for plant dispersal and wildlife movement. These areas are fragmented by busy roads, agricultural fields, and development, which are considered partially permeable to impermeable barriers to movement.

Despite the disturbed and fragmented nature of the Study Area, the following native wildlife species were observed during site visits: western monarch butterfly, Coast Range fence lizard, gopher snake, numerous common and sensitive avian species (**Appendix G2.4**), bats, brush rabbit, San Francisco dusky-footed woodrat, Sierran chorus frog, CRLF, sculpin, three-spine stickleback, and scat from coyote and black-tailed deer. A number of other wildlife species are likely to occur within the Study Area such as fox, raccoon, bobcat, opossum, and skunk.

Impacts

Construction of the Project could interfere with wildlife movement temporarily and may displace wildlife movement habitat features. This includes construction of Transfer Station A and the associated realignment of Harkins Slough Road. Additionally, work within the drainages (Culvert Modification with Small Wildlife Crossing at Main Entrance, Culvert Replacement under the Internal Roadway to the Old Landfill, Restoration of Harkins Slough Road Drainage, and ODF Option 2) would result in temporary impacts to riparian and wetland vegetation, may temporarily deter wildlife movement during construction due to vegetation removal, noise, vibrations, dust, and other activities. Until vegetation regrows, construction impact areas would lack cover for wildlife species; however, these areas are small in scale, and riparian vegetation would naturally recruit and be replanted within the work areas upon completion of construction.

The Project would displace oak woodland to realign Harkins Slough Road and construct Transfer Station A. These developments would interfere with wildlife movement between the Wildlife Refuge and Harkins Slough to the east, the undeveloped portions of the adjacent property on the north side of Harkins Slough Road, the Harkins Slough Road Drainage and Buena Vista Drive Tributary to the west, the groves of trees, riparian corridor, and Ellicott Slough Unit of the Wildlife Refuge farther west and northwest. Although evidence of wildlife movement (scat and wildlife trails) at this location exists, this area is already fragmented by the landfill, busy roads, agricultural fields, infrastructure, and other County facilities (Rountree Medium [Jail] Facility, Buena Vista Migrant Center [farmworker housing and childcare facility], and Tierra Alta Affordable Housing complex). Wildlife movement corridors along Channelized Gallighan Slough (although fragmented by roads) and along the SCBRL railroad tracks would continue to support wildlife movement.

The Project would also improve wildlife movement through implementation of Environmental Enhancement and Restoration Features including the Wildlife Movement Corridor between Gallighan Slough and Harkins Slough, across the southern end of the landfill (once capped and closed). In addition, the Culvert Modification with Small Wildlife Crossing at Main Entrance, the Culvert Replacement under the Internal Roadway to the Old Landfill, and Restoration of the Harkins Slough Road Drainage would also improve wildlife movement opportunities (**Figure 2-4**). These Project elements are being implemented in conjunction with several other restoration projects planned by the County in the Study Area, including rehabilitation of Buena Vista Drive Tributary and an additional culvert replacement under Buena Vista Drive that would allow for small wildlife passage (also refer to the Cumulative Impacts discussion in Chapter 4, Other CEQA-Required Discussions).

In summary, Project construction activities such as vegetation removal, grading, and drainage work could temporarily affect wildlife movement corridors and reduce available cover for wildlife and may permanently displace existing movement habitat. However, these impacts would be reduced to a less than significant level by installing protective fencing, relocating wildlife if necessary, conducting environmental training, and scheduling construction to avoid impacts to sensitive resources. The Environmental Enhancement and Habitat Restoration Features (**Figure 2-4**) would further reduce these impacts. Therefore, the impact would be **Less than Significant with Mitigation** (Mitigation Measures BIO-1a, BIO-1b, BIO-3, BIO-8d, BIO-13).

Mitigation Measure BIO-1a: Conduct Environmental Training prior to Construction

Refer to the description of Mitigation Measure BIO-1a for Impact BIO-1 above.

Mitigation Measure BIO-1b: Schedule Construction to Avoid Impacts to Sensitive Biological Resources

Refer to the description of Mitigation Measure BIO-1b for Impact BIO-1 above.

Mitigation Measure BIO-3: Implement Protective Measures and Biological Monitoring for California Red-Legged Frog and Northwestern Pond Turtle

Refer to the description of Mitigation Measure BIO-3 for Impact BIO-3 above.

Mitigation Measure BIO-8d: Prepare and Implement a Habitat Mitigation Plan for Permanent Impacts to Sensitive Habitats, Including Aquatic Features, for Proposed Project

Refer to the description of Mitigation Measure BIO-8d for Impact BIO-8 above.

Mitigation Measure BIO-13: Install Protective Fencing and Conduct Wildlife Relocation if Necessary

- The County or their construction contractor will work with an agency-approved biologist to ensure the following measures are implemented prior to and during construction.
- Prior to construction, an agency-approved biologist will determine locations for the installation of protective fencing with openings every 50 feet that would allow passage of wildlife.
- With agency approval, an agency-approved biologist will be present during construction to relocate wildlife species, as needed. The biologist will work with the County and contractor to implement monitoring measures, as determined in consultation with the resource agencies (County Environmental Planning, California Coastal Commission, U.S. Fish and Wildlife Service, and California Department of Fish and Wildlife). The monitor will be present during initial vegetation removal, grubbing, grading, or other ground disturbance and other activities that may impact sensitive wildlife species, as determined by the agencies and the agency-approved biologist. After these activities have been completed, the agency-approved biologist will remain on call to verify the identity of sensitive wildlife species and relocate animals, as needed.

Threshold E:	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

As described in Section 3.4.2 above, there are several local policies and ordinances for protecting biological resources that are relevant to the impact discussions above. This section focuses on potential conflicts with these ordinances, including the County's General Plan/LCP, and specifically, the Sensitive

Habitat Protection Ordinance, Riparian and Wetlands Protection Ordinance, and the Significant Tree Protection Ordinance, given the Project's location within the Coastal Zone. In addition, the Project would be required to comply with the County's Tree Removal Policy.

IMPACT BIO-14 PROJECT CONSTRUCTION WOULD CONFLICT WITH LOCAL POLICIES OR ORDINANCES PROTECTING BIOLOGICAL RESOURCES. (SIGNIFICANT AND UNAVOIDABLE IMPACT)

Santa Cruz County Local Coastal Program and Sensitive Habitat Protection Ordinance

Limited portions of the Proposed Project would be sited within ESHA, including minimally, within aquatic habitats, as defined by the Sensitive Habitat Protection Ordinance (SCCC Section 16.32.040), and as discussed under Thresholds B and C above. Therefore, an exception to the Sensitive Habitat Protection Ordinance would be required. As described in the Regulatory Setting (Section 3.4.2), development activities in or adjacent to sensitive habitat areas are required to conform to permitted uses identified in the ordinance and, for activities within the Coastal Zone, the LCP. As noted above under ARC-3.1.3, only resource-dependent uses shall be allowed within ESHA, unless the other uses are: (1) Consistent with sensitive habitat protection policies and serve a specific purpose beneficial to the public; (2) Determined through environmental review that any adverse impacts on the resource will be completely mitigated and there is no feasible less-damaging alternative; and (3) Legally necessary to allow a reasonable economic use of the land, and there is no feasible less-damaging alternative.

The Project does not fall within the allowed uses for ESHA (it is not resource-dependent), nor does it meet all three of the criteria for "other uses." Therefore, impacts to Sensitive Habitats and ESHA would require an exception to the Sensitive Habitat Protection Ordinance and the LCP under SCCC Section 16.32.100.

The rules and regulations for evaluating the impacts of development activities on sensitive habitats within the County (and the Coastal Zone), determining limitations to these activities to protect sensitive habitats, and identifying conditions of approval through the environmental review process are also outlined in the Sensitive Habitat Protection Ordinance, including in Scope (SCCC Section 16.32.020), Approval required (SCCC Section 16.32.060), Assessments and reports required (SCCC Section 16.32.070), Report preparation and review (SCCC Section 16.32.080), and Approval conditions (SCCC Section 16.32.090).

Section 16.32.090 identifies specific types of permitted uses allowed within sensitive areas and only allows resource-dependent uses within ESHA. Exceptions (SCCC Section 16.32.100) to the provisions of Section 16.32.090 may be made by the Decision-Making Body[27] if the following findings can be made:

(1) That adequate measures will be taken to ensure consistency with the purpose of this chapter to minimize the disturbance of sensitive habitats; and

(2) One of the following situations exists:

(a) The exception is necessary for restoration of a sensitive habitat; or

(b) It can be demonstrated by biotic assessment, biotic report, or other technical information that the exception is necessary to protect public health, safety, or welfare.

[27] Decision-Making Body means the Zoning Administrator, Planning Commission, or Board of Supervisors, whichever body is considering the development permit, when biotic review is concurrent with review of a development permit. When a biotic permit is required, the Decision-Making Body shall be the Planning Director.

The proposed Project may qualify for an exception to the Sensitive Habitat Protection Ordinance through 1 and 2b above, if the Decision-Making Body determines that the Project is necessary to protect public health, safety, or welfare, through the on-going provision of waste-management services, and the other provisions of the ordinance are upheld.

Riparian Corridor and Wetlands Protection Ordinance

Discrete and limited portions of the Project are located within a County-defined riparian corridor (see also Section 3.4.2). The potential impacts to biological resources within riparian corridors are discussed under **Threshold B** (Sensitive Habitats) and **Threshold C** (Wetlands/Other Waters) above.

As described in Section 3.4.2, the Santa Cruz County Riparian and Wetland Protection Ordinance (SCCC Chapter 16.30) requires projects to "minimize and to eliminate any development activities in the riparian corridor, preserve, protect, and restore riparian corridors" and "implement the policies of the General Plan and Local Coastal Program Land Use Plan." Within the Coastal Zone, *development activities* within riparian corridors[28] and associated buffers are prohibited, and permittable impacts are limited to a list of seven uses (see Section 3.4.2) as identified in the California Coastal Act (PRC Section 30233). Impacts to riparian corridors associated with the Project do not fall within these permitted uses; therefore, a Riparian Exception would be required (SCCC Section 16.30.060).

Minimal impacts to riverine habitat associated with the Harkins Slough Road Realignment may qualify for an exception to the County Ordinances and the LCP if it is determined that "adequate measures will be taken to ensure consistency with the purpose of [SCCC Chapter 16.32] to minimize the disturbance of sensitive habitats"; and the project is necessary to protect public health, safety, and welfare, as described above under the Sensitive Habitat Protection Ordinance. In addition, to comply with the Santa Cruz County Riparian and Wetland Protection Ordinance, an exception may be authorized by the County based on a preliminary analysis that the Project meets the criteria below. These permits would include conditions of approval for Project implementation, in addition to mitigation measures (Impacts BIO-8, BIO-9, BIO-10, BIO-11, and BIO-12).

If an exception is warranted, the County would be required to authorize a Riparian Exception and the following findings must be made:

1. There are special circumstances or conditions affecting the property.

   Closure of the landfill and the development of the transfer stations is necessary to serve the public by accommodating waste from County residents after the active landfill has reached capacity. Impacts to riparian corridors and wetlands are limited to minimal impacts largely associated with implementing restoration actions to improve the functions and values of the drainages within the Project area and to facilitate safe wildlife movement near the landfill.

2. The exception is necessary for the proper design and function of the Project.

   Minimal work within the riparian corridors and wetlands would be necessary to achieve the necessary goals of developing the transfer stations and would allow for restoration of the drainages and establishment of safe wildlife movement passage.

3. The granting of the riparian exception will not be detrimental to the public welfare or injurious to other property downstream or in the area in which the project is located.

[28] Riparian corridors within Santa Cruz County include wetlands, intermittent and perennial streams, associated riparian vegetation, and associated buffers. See also Section 3.4.2.

The Project would be beneficial to the public welfare and would not be detrimental to other property downstream. Avoidance and minimization measures would be implemented to protect water quality and minimize impacts to riparian corridors and wetlands, and the Project is designed to restore functions and values of the drainages including along the Harkins Slough Road Drainage, Buena Vista Drive Tributary, Channelized Gallighan Slough, and associated wetlands.

4. **The granting of the exception, in the Coastal Zone, will not reduce or adversely impact the riparian corridor, and there is no feasible less environmentally damaging alternative.**

   The Project has been designed to minimize impacts to riparian corridors and wetlands to the greatest extent feasible during minor Project-related impacts and restoration activities. Multiple designs have been explored to position transfer stations, organic diversion facilities, roads, and infrastructure improvements to avoid and minimize impacts to the riparian corridor and wetlands. The Project would ultimately improve conditions within the riparian corridors; and temporary impacts or displacement of riparian vegetation would be mitigated on site. The Project would result in no net loss of wetlands.

5. **The granting of the riparian exception is in accordance with the purpose of (SCCC Chapter 16.30 Riparian Corridor and Wetlands Protection), the objectives of the General Plan and elements thereof, and the LCP Land Use Plan.**

   While impacts to riparian corridors and wetlands would occur as a result of the Project, these impacts would be minimal and would result in improvements to the riparian corridors overall through restoration actions.

The required findings identified in bold above refer specifically to projects in the Coastal Zone and, as identified in Santa Cruz County General Plan/LCP ARC-3.3.3, require no net loss of riparian corridors and wetlands, and encourage restoration and a net increase of riparian corridors and wetlands. The Project would comply with these conditions.

Preliminary analysis has determined that the Project complies with these findings and that an exception may be approved.

Significant Tree Protection Ordinance

Overview

The Project area is located within the Coastal Zone of Santa Cruz County; therefore, the County of Santa Cruz Significant Tree Protection Ordinance (SCCC Chapter 16.34) would apply to the proposed Project. Trees meeting the criteria of "significant" as determined by the ordinance would be impacted by the Project.

The Study Area is located beyond the County of Santa Cruz Urban and Rural Services Line, but portions of the Study Area are visible from Buena Vista Drive, a designated scenic road. Two individual trees proposed to be removed for the Project are large enough (>40 inches DBH outside of the Urban and Rural Services Line) to be considered significant under the ordinance based on size criteria. Additionally, all trees within a County-designated sensitive habitat (Sensitive Habitats section above) are considered significant trees.

In addition, all trees proposed for removal within County rights-of-way are subject to the County of Santa Cruz Tree Removal Policy.

Project components that would result in impacts include Transfer Station A and Harkins Slough Road Realignment, Restoration of Harkins Slough Road Drainage, and Equipment Parking and Storage Area.

Occurrence

A survey of trees in or near the proposed Project area was conducted by James P. Allen & Associates, and an Arborist Report was prepared in February 2025 (Allen 2025). Trees proposed for removal are depicted on **Figure 3.4-4 and Figures 3.4-4a–k**. All surveyed trees are listed by species and DBH in the report (**Appendix G5**).

A total of 403 trees were identified within or near the Project area. Surveyed trees include coast live oak trees present as solitary trees and within coast live oak woodland and forest habitats, arborescent willow trees and California buckeyes within mixed willow riparian forest, and a number of non-native species that occur as ornamentals and are interspersed in naturalized or native habitat types.

A stand of blue gum eucalyptus in the southeast corner of the Project area was partially surveyed by JP Allen & Associates; the northern edge and a portion of the western edge of the grove were surveyed. Subsequent to the survey, the Project footprint was adjusted to avoid potential constraints associated with the neighboring property to the west (the Rountree Medium [Jail] Facility). As a result, the number of significant trees within this grove is currently undetermined. Trees would be classified as significant trees if they meet any of the following criteria: (1) equal to or greater than 40 inches DBH; (2) a sprout clump of five or more stems, each greater than 20 inches DBH; or (3) a group of 10 or more trees on one parcel, each greater than 20 inches DBH.

Impacts

The Project would result in the removal of at least 114 significant trees. **Table 3.4-13** lists all surveyed trees slated for removal, those trees situated within the temporary impact area (that would be limbed or pruned), and those trees that would be avoided during the Project. **Figure 3.4-4 and Figures 3.4-4a–k** depict the majority of these trees.

Table 3.4-13. Project Tree Removal, including Significant Trees

Habitat Type/ Project Element	**Species**	**Significant**	**Permanent**	**Temporary**	**No Impact**
Oak Woodland					
Harkins Slough Road Realignment					
	Blue Gum	X	1		
	Coast Live Oak	X	32	34	101
Transfer Station A					
	Coast Live Oak	X	58		
Equipment Parking and Storage Area					
	Coast Live Oak	X			15
Total Trees Oak Woodland			91	34	116
Mixed Willow Riparian					
Harkins Slough Road Drainage (Restoration)					
	Willow Species	X	12	9	

Table 3.4-13. Project Tree Removal, including Significant Trees

Habitat Type/ Project Element	Species	Significant	Permanent	Temporary	No Impact
Ameresco Building (No Impacts)					
	California Buckeye	X			5
Total Trees Mixed Willow Riparian			12	9	5
Non-Native Forest					
Harkins Slough Road Realignment/Transfer Station A					
	Coast Live Oak (Solitary)		2		
	Coast Redwood		11		
	Ironbark		3		
	Monterey Cypress		7		
	Monterey Pine		2		
Harkins Slough Road Drainage (Restoration)					
	Coast Live Oak	X	1		1
	Ironbark	X	8		1
Equipment Parking and Storage Area					
	Blue Gum	X (1)	6		2
	Coast Live Oak (Solitary)		2		1
	Coffeeberry		1		
	Liquidambar		1		
	Magnolia		4		3
	Monterey Cypress	X (1)	1		
	Monterey Pine		1		15
	Redwood				4
	Blue Gum Grove		Undetermined	Undetermined	Undetermined
Landfill Closure					
	Coast Live Oak				5
	Coast Redwood			11	14
	Monterey Cypress			9	18
Total Trees Non-Native Forest			50	20	64
Total Significant Trees Proposed for Removal			**114**		
Total Trees by Impact Type			**153**	**63**	**185**
Total Trees in/near Project Area			**402**		

Of the 403 surveyed trees, 153 trees are planned for removal to accommodate the Project, and 64 trees would be temporarily impacted (limbed or pruned). Additionally, an undetermined number of eucalyptus trees would be removed in the grove in the southeast corner of the Project area in the area proposed for the optional Equipment Parking and Storage Area.

As stated, at least 105 trees proposed for removal are considered "significant" by the County based on their location within designated sensitive habitats, including coast live oak woodland, mixed willow riparian forest, and habitats that support sensitive wildlife species.

The majority of significant trees planned for removal are situated along the proposed realignment for Harkins Slough Road and within the proposed site for Transfer Station A (**Figures 3.4-4c, d, and e**). Ninety-one coast live oak trees would be removed in this sensitive habitat to accommodate the Project.

Within the riparian corridor along the Harkins Slough Road Drainage, up to 12 willows, 1 coast live oak, and 8 red ironbark trees would be removed for the planned restoration of the drainage (**Figures 3.4-4a and b**). If feasible, willow trees would be avoided or salvaged and transplanted along the recontoured embankment on the north side of the Harkins Slough Road Drainage. These trees are situated within sensitive riparian habitat and are therefore considered significant.

The Project area and immediate surroundings provide minimal opportunities for on-site or near-site replacement tree planting:

- Closed landfill areas are not suitable for planting trees because of the clay or low-density polyethylene liner that is used as a barrier layer to cap landfill materials and prevent surface water infiltration. Both types of barrier layer are potentially vulnerable to penetration by tree roots and other deep-rooted vegetation, which would compromise the landfill caps' integrity.
- Various options for acquisition of private landholdings or conservation easements on adjacent properties that would be suitable for planting replacement trees have been explored by the County but are unconfirmed to date.
- Planting replacement trees (and creation of coast live oak woodland and forest) on existing County parks, such as Freedom Lake County Park in Corralitos, has also been considered. This park is located approximately 3.3 miles north of the landfill; therefore, tree replacement planting at this location would be considered off-site mitigation and may require a higher replacement ratio.

Project construction would result in the loss of at least 114 significant trees primarily within coast live oak woodland and mixed willow riparian habitat, which conflicts with the County's Significant Tree Protection Ordinance and Tree Removal Policy. An undetermined number of trees would be removed within County road rights-of-way.

To ensure the integrity of the landfill cap, closed landfill areas are not suitable for tree replacement planting. Therefore, off-site tree replacement planting areas (such as Freedom Lake County Park) would be identified, and the replacement planting ratio would be determined in consultation with County Environmental Planning and the CCC. Additionally, replacement trees would require 35–40 years to reach the stature and maturity of the trees being removed. For these reasons, this impact cannot be considered fully mitigated.

Summary

In summary, construction of the Proposed Project would conflict with three local policies and ordinances: the Sensitive Habitat Protection Ordinance, the Riparian Corridor and Wetland Protection Ordinance, and the Significant Tree Protection Ordinance. Implementing the environmental enhancement and habitat restoration features (e.g., restoration of drainages, wildlife corridor), the HMP for the Proposed Project (Mitigation Measure BIO-8d), and other mitigation measures would help reduce the ordinance conflicts, but not to a less than significant level. Therefore, the conflicts with local policies and ordinances would be **Significant and Unavoidable** (Mitigation Measures BIO-8a, BIO-8b, BIO-8c, BIO-8d, BIO-14).

Mitigation Measure BIO-8a: Implement Measures to Protect Sensitive and Native Habitats During Construction

Refer to the description of Mitigation Measure BIO-8a for Impact BIO-8 above.

Mitigation Measure BIO-8b: Implement Best Management Practices During Construction

Refer to the description of Mitigation Measure BIO-8b for Impact BIO-8 above.

Mitigation Measure BIO-8c: Stabilize and Restore Temporary Habitat Impact Areas

Refer to the description of Mitigation Measure BIO-8c for Impact BIO-8 above.

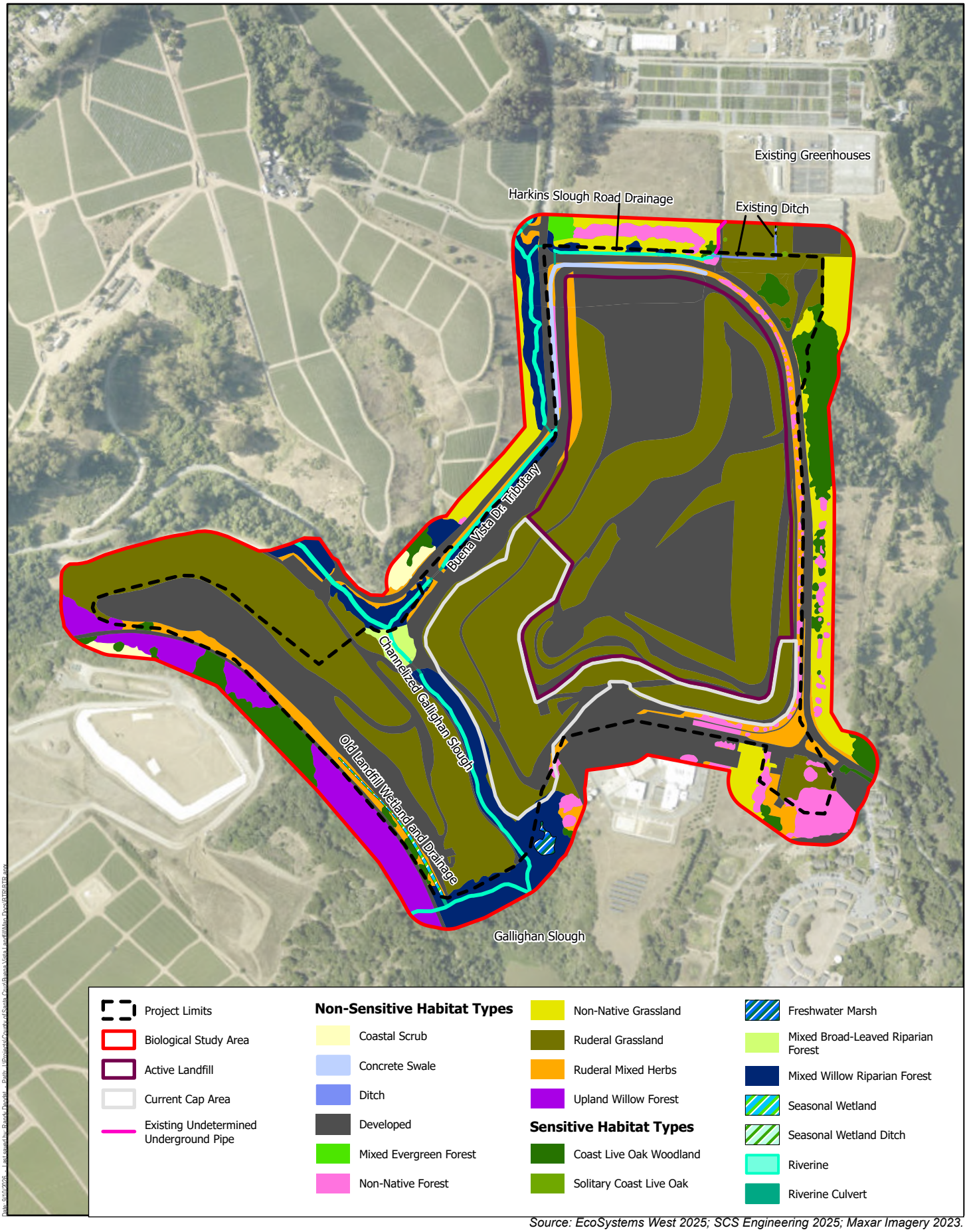
Mitigation Measure BIO-8d: Prepare and Implement a Habitat Mitigation Plan for Permanent Impacts to Sensitive Habitats, Including Aquatic Features, for Proposed Project

Refer to the description of Mitigation Measure BIO-8d for Impact BIO-8 above.

Mitigation Measure BIO-14: Implement Tree Replacement Planting and Habitat Enhancement

The County will mitigate for significant trees removed by confirming the number of trees required to be removed and implementing associated tree replacement planting at a ratio and species composition to be determined in coordination with the County Environmental Planning Division, the California Coastal Commission (CCC), and, for willow trees, the California Regional Water Quality Control Board (Regional Board) and California Department of Fish and Wildlife (CDFW).

Wherever feasible, tree replacement will occur on site. Off-site locations (such as Freedom Lake County Park) will be identified for tree replacement planting and to replace displaced sensitive habitat (coast live oak woodland and forest) through habitat enhancement or creation. The areas designated for replacement tree planting will be situated to improve the ecological landscape, including species richness, structural complexity, and an overall habitat mosaic that reflects plant communities present in or suitable to the surroundings.



Source: EcoSystems West 2025; SCS Engineering 2025; Maxar Imagery 2023.

Harris & Associates

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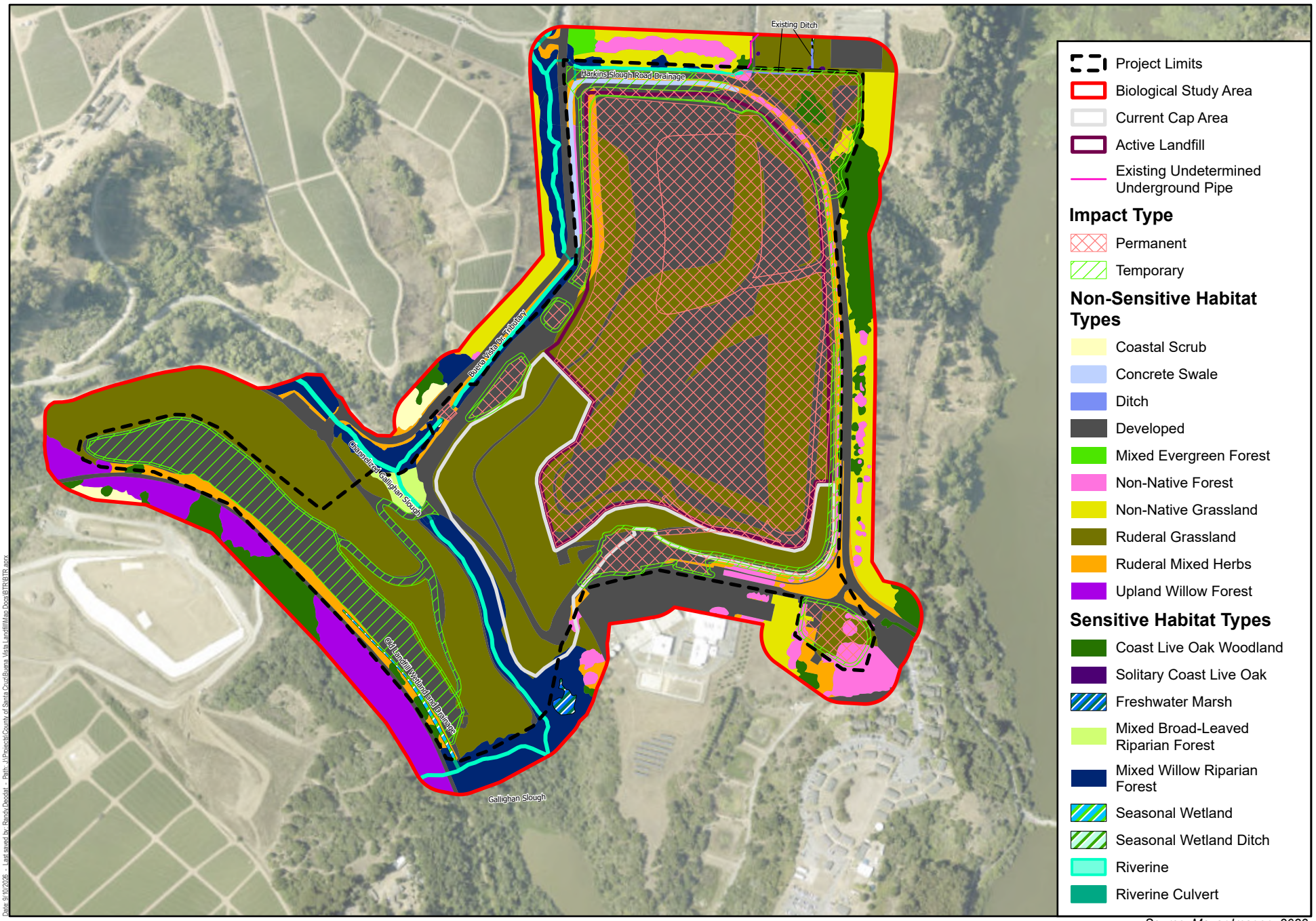
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Figure 3.4-1

Habitat Types within the Study Area

Buena Vista Landfill Redevelopment Project



Source: Maxar Imagery 2023.

Harris & Associates

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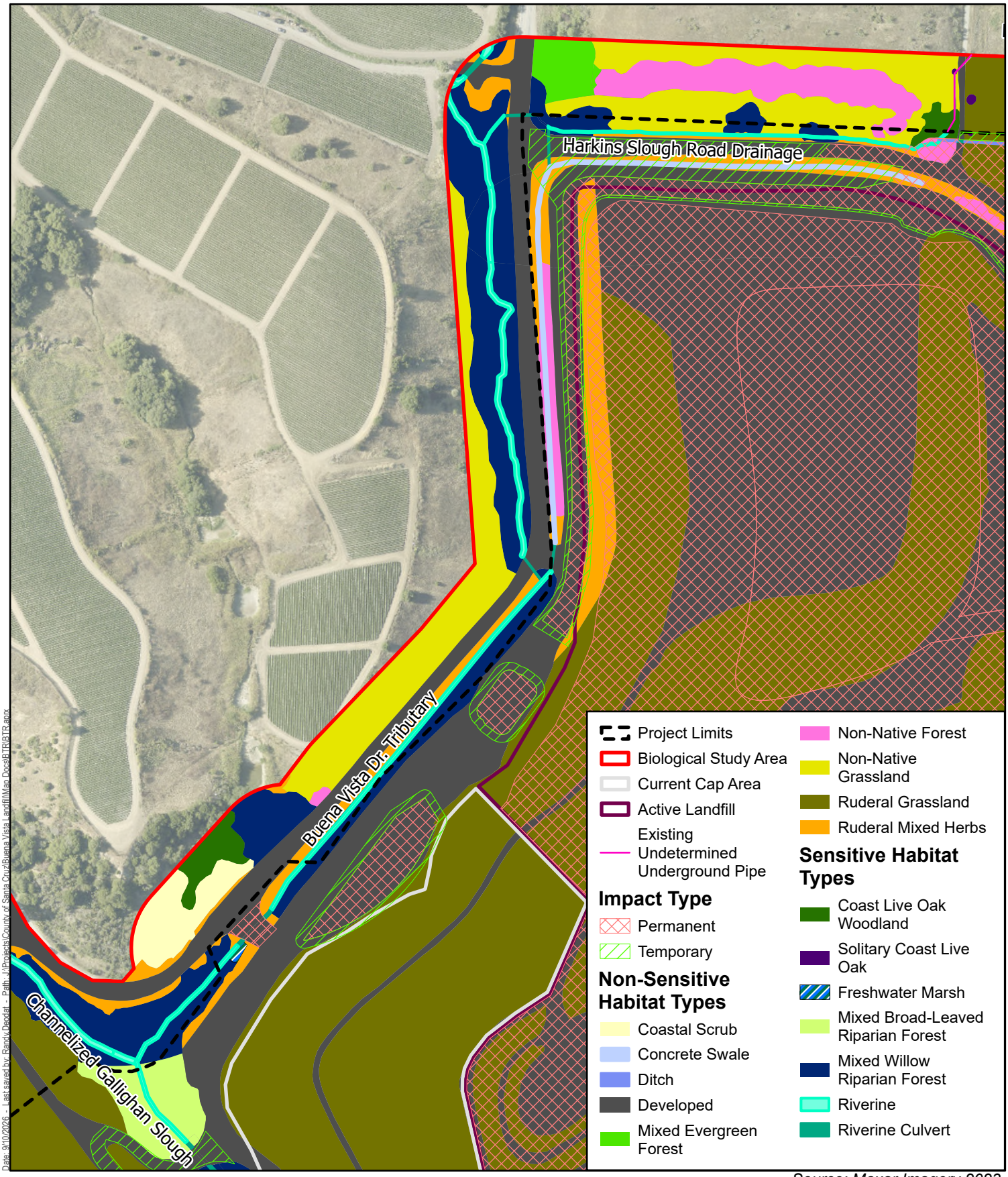
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Figure 3.4-2A

Habitat Type Impacts for Proposed Project

Buena Vista Landfill Redevelopment Project



Source: Maxar Imagery 2023.

Harris & Associates

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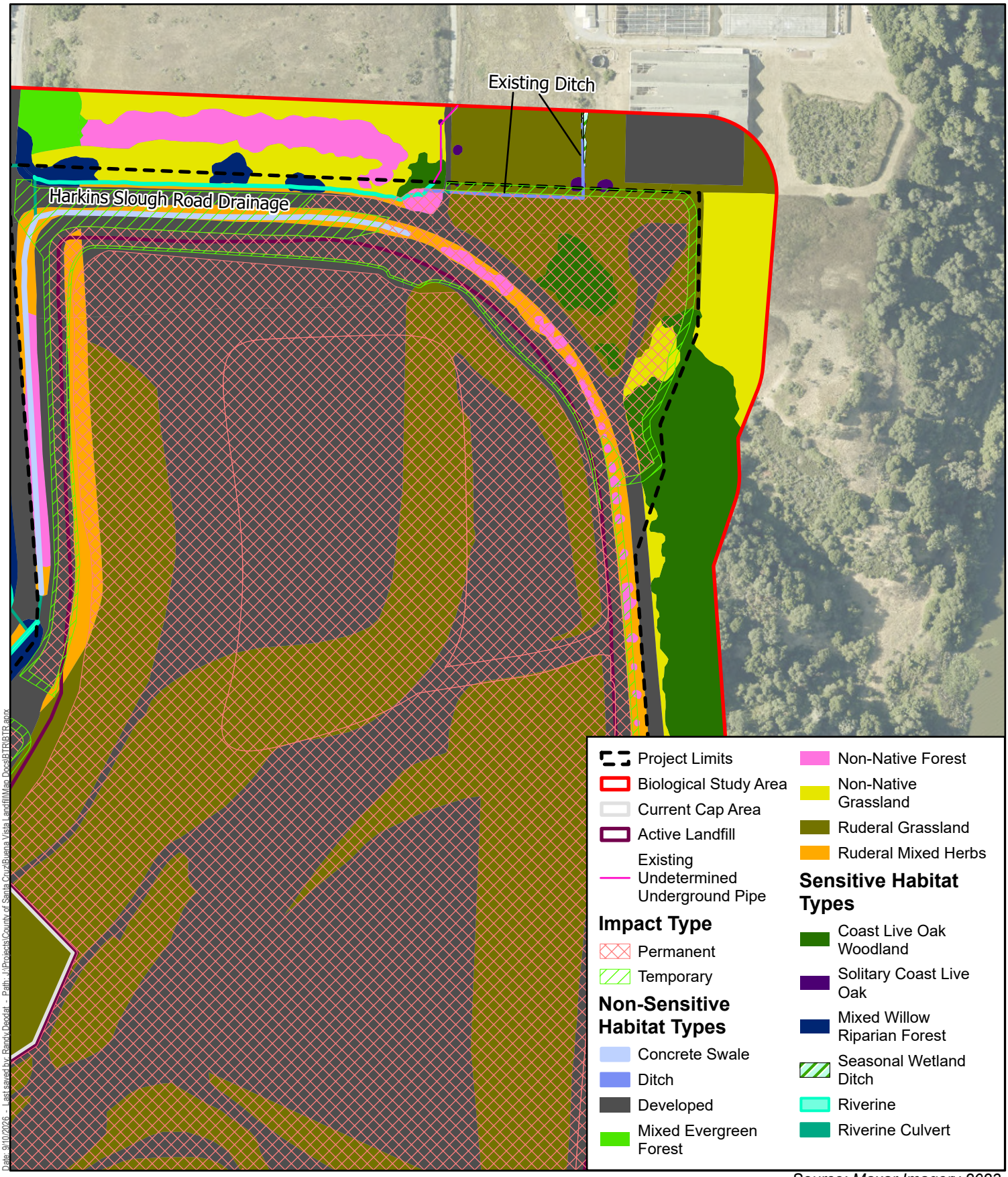
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Figure 3.4-2a

Habitat Type Impacts for Proposed Project

Buena Vista Landfill Redevelopment Project



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Source: Maxar Imagery 2023.

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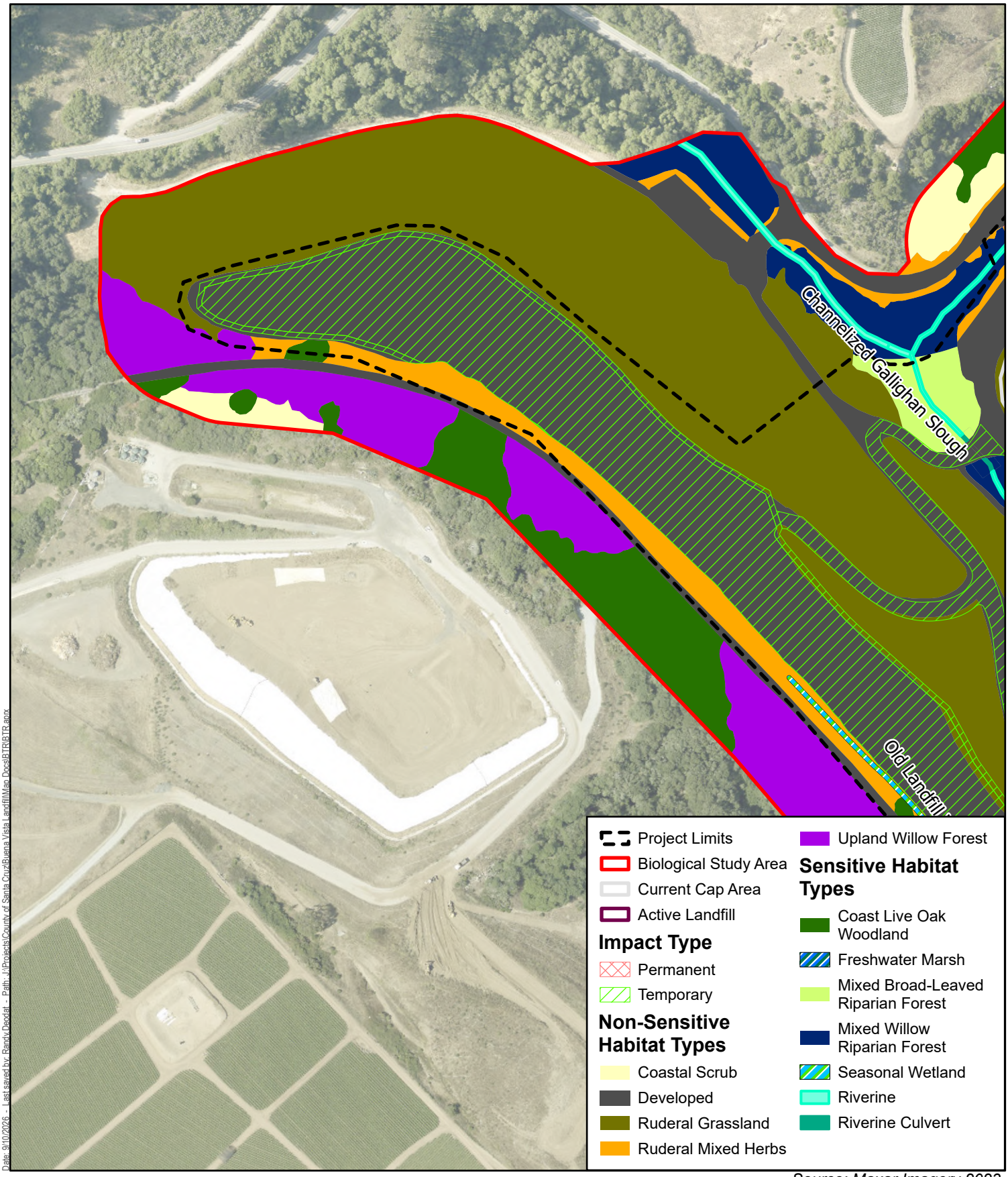
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Figure 3.4-2b

Habitat Type Impacts for Proposed Project

Buena Vista Landfill Redevelopment Project



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Source: Maxar Imagery 2023.

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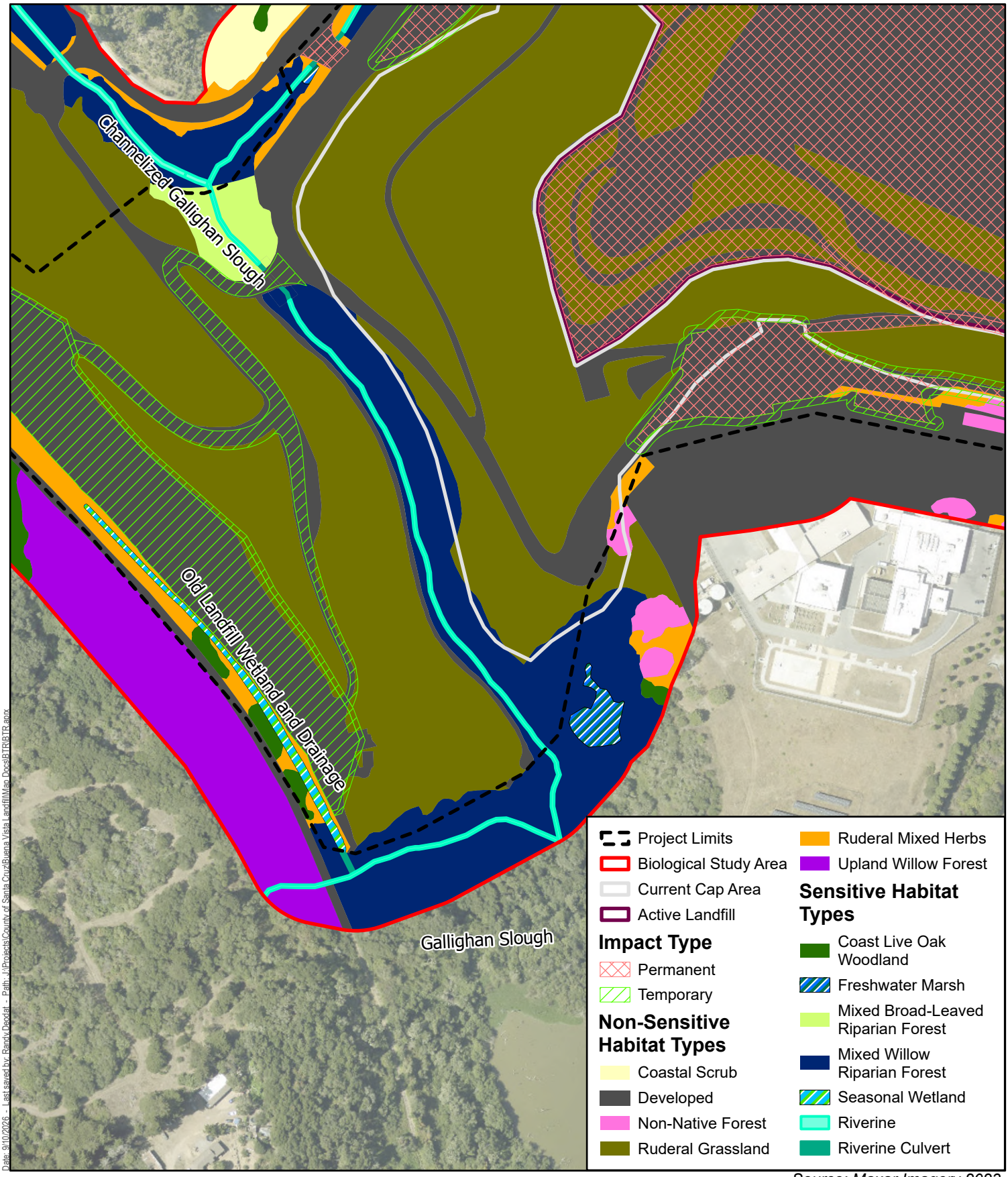
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Figure 3.4-2c

Habitat Type Impacts for Proposed Project

Buena Vista Landfill Redevelopment Project



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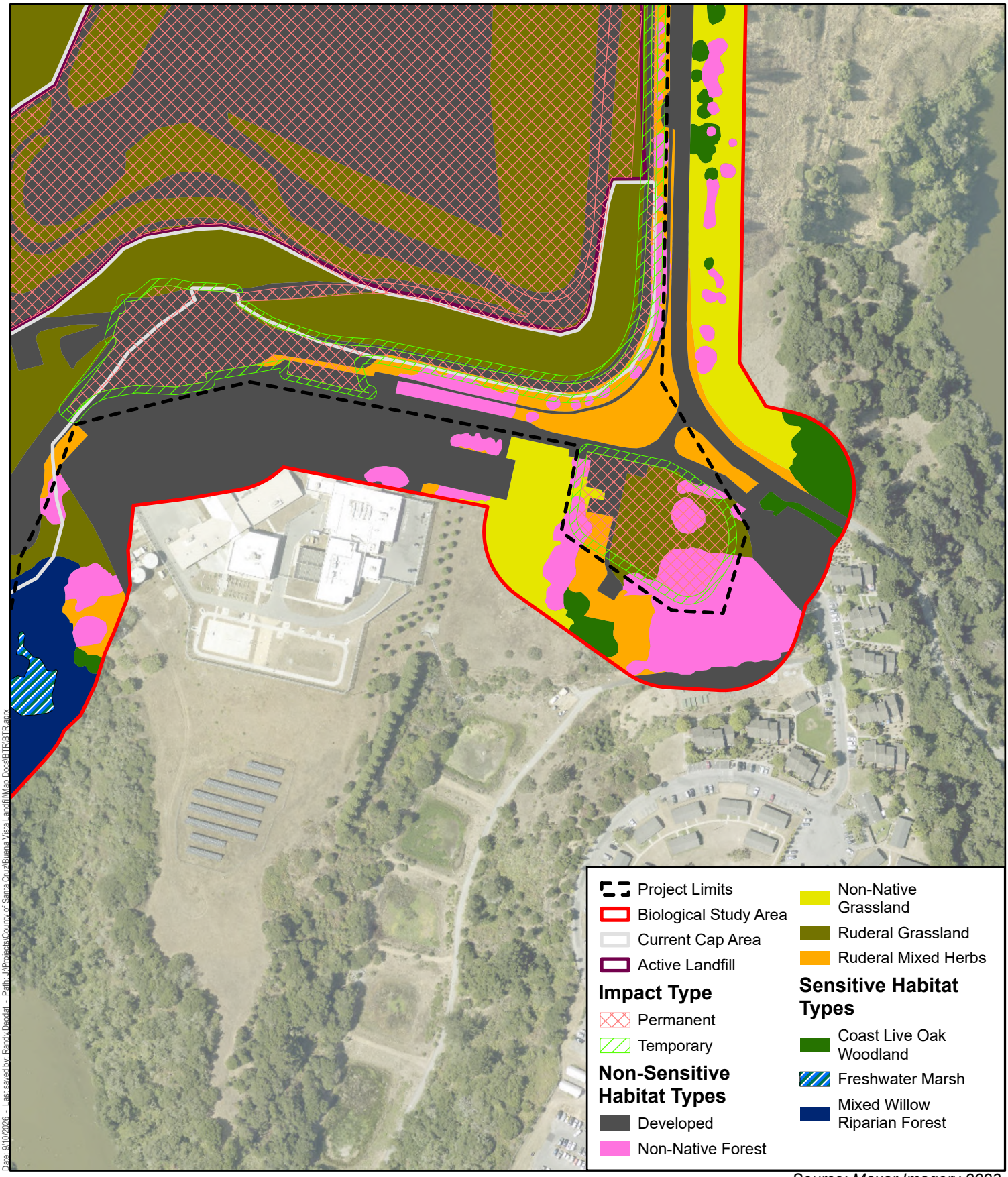
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Figure 3.4-2d

Habitat Type Impacts for Proposed Project

Buena Vista Landfill Redevelopment Project



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Source: Maxar Imagery 2023.

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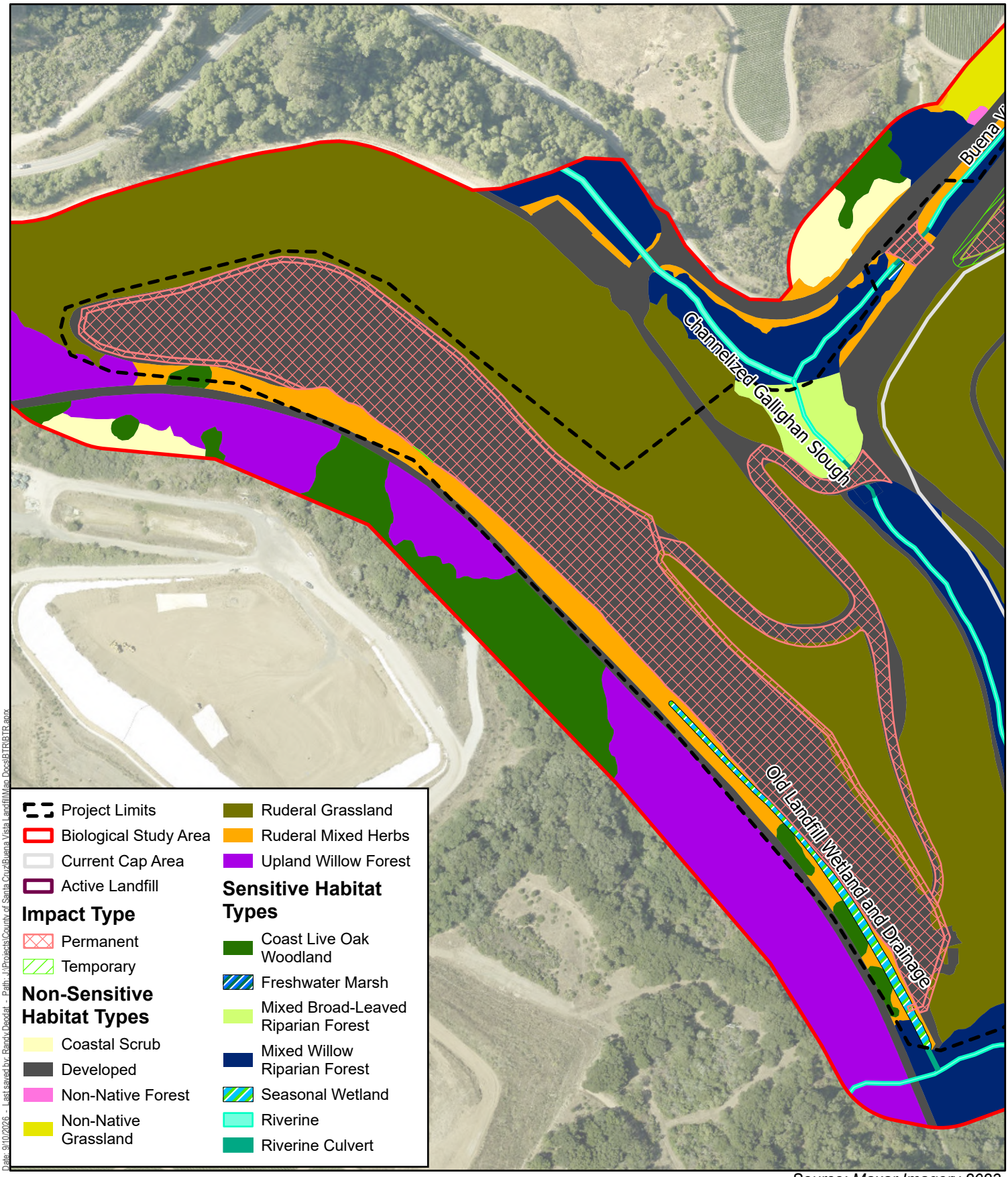
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Figure 3.4-2e

Habitat Type Impacts for Proposed Project

Buena Vista Landfill Redevelopment Project



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Source: Maxar Imagery 2023.

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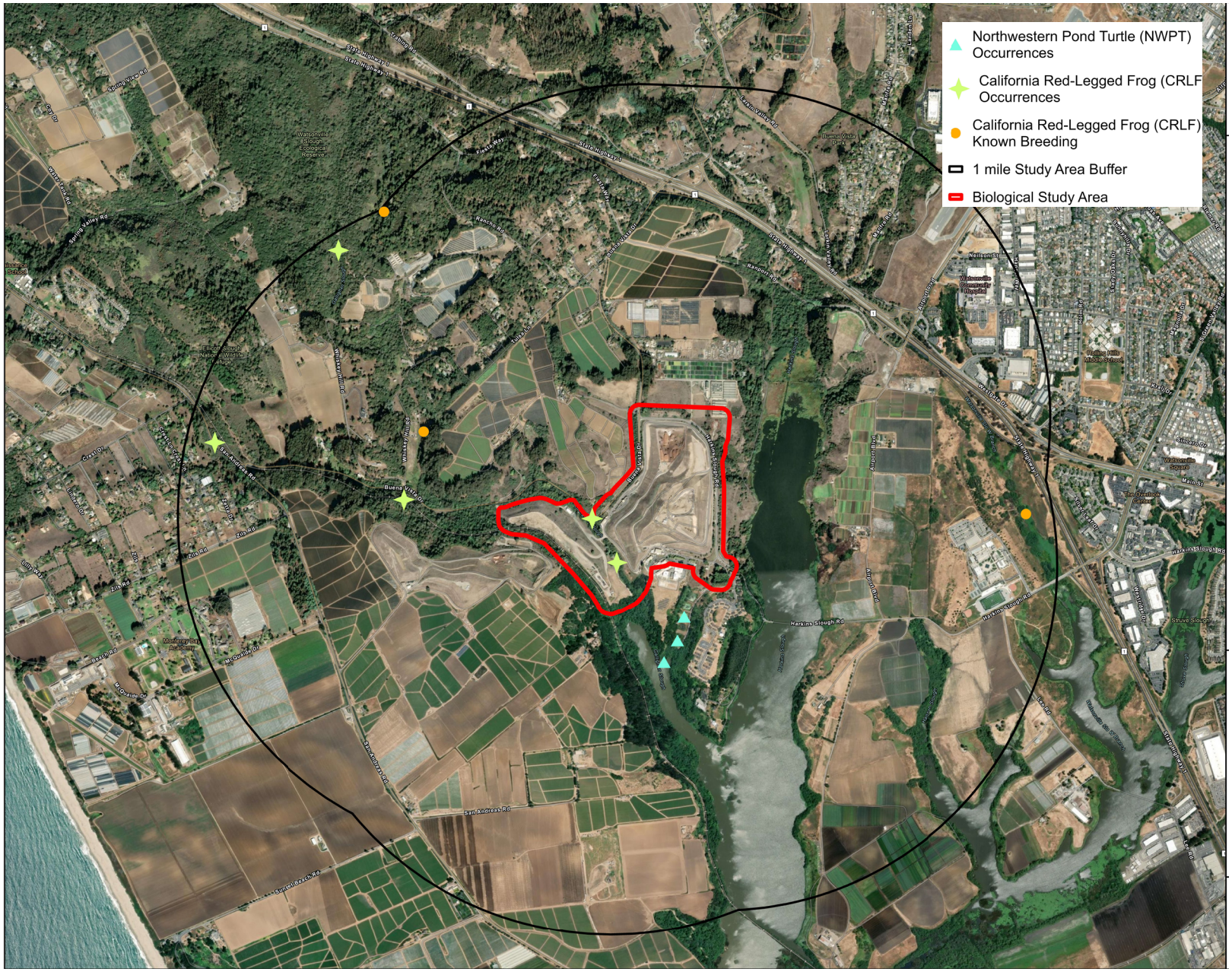
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Figure 3.4-2B

Habitat Type Impacts for ODF Option 2

Buena Vista Landfill Redevelopment Project



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Source: Ecosystems West 2025

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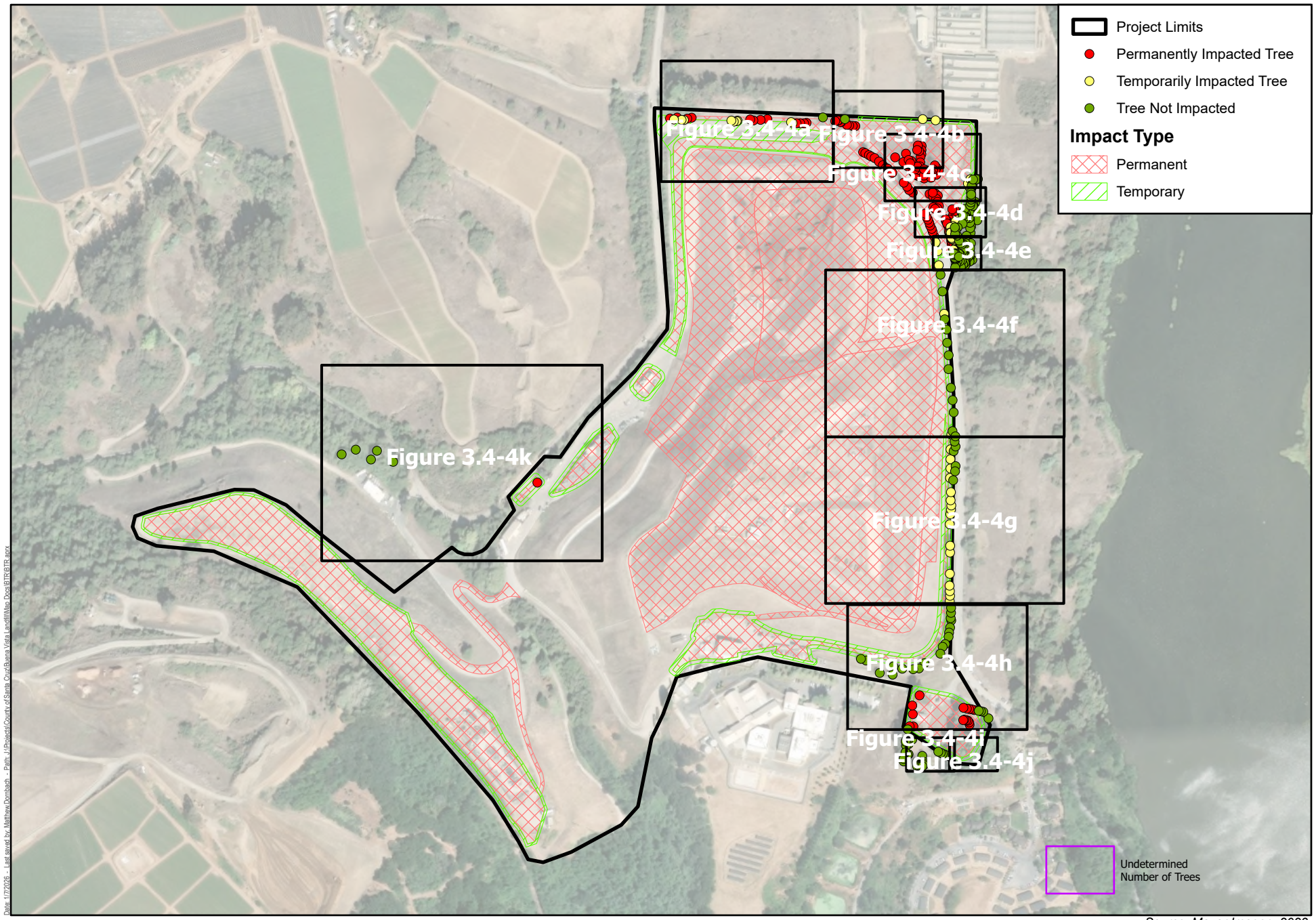
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Figure 3.4-3

Red-Legged Frog and Northwestern Pond Turtle Occurrences

Buena Vista Landfill Redevelopment Project



Source: Maxar Imagery 2023.

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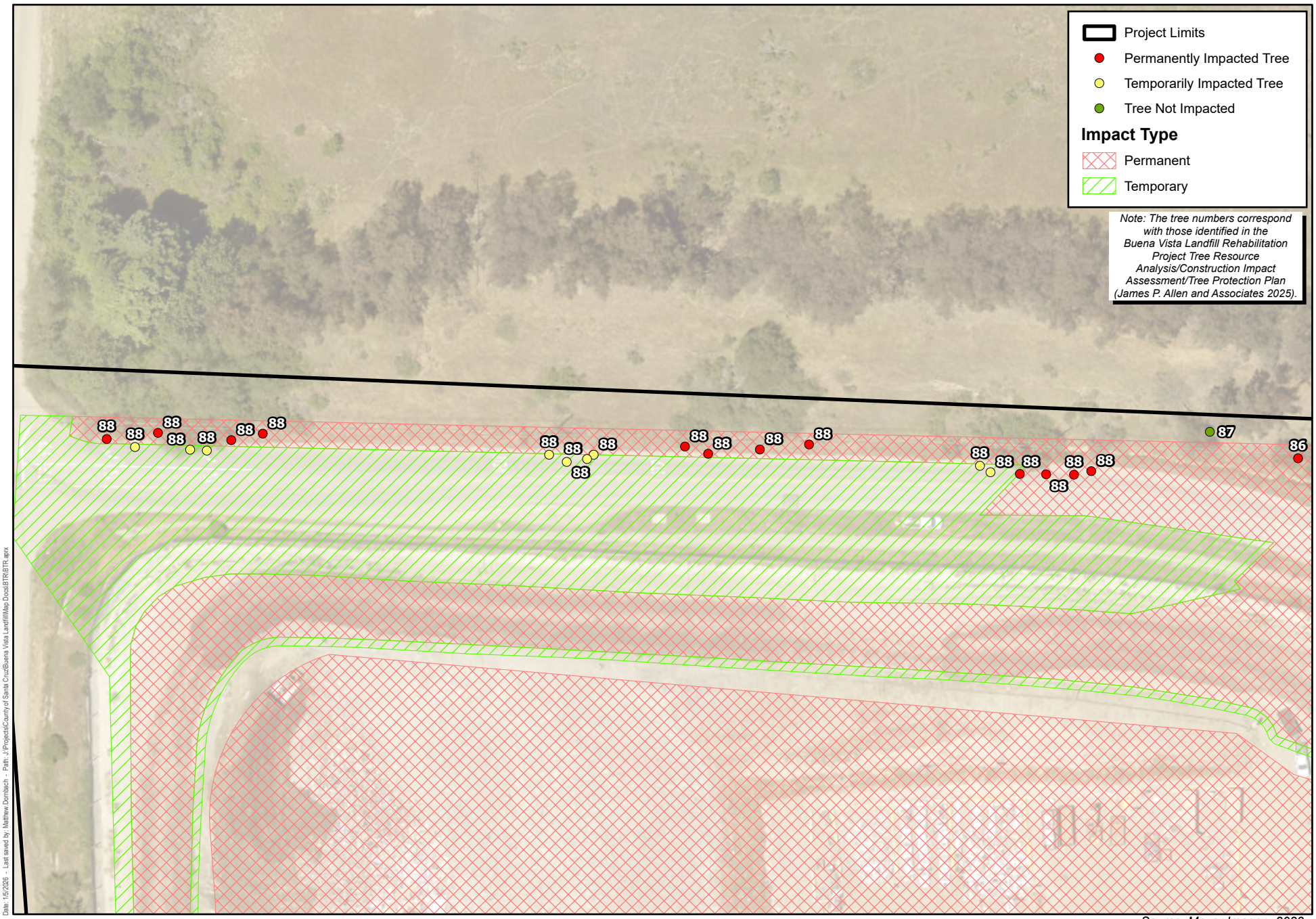
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Figure 3.4-4

Tree Impacts

Buena Vista Landfill Redevelopment Project



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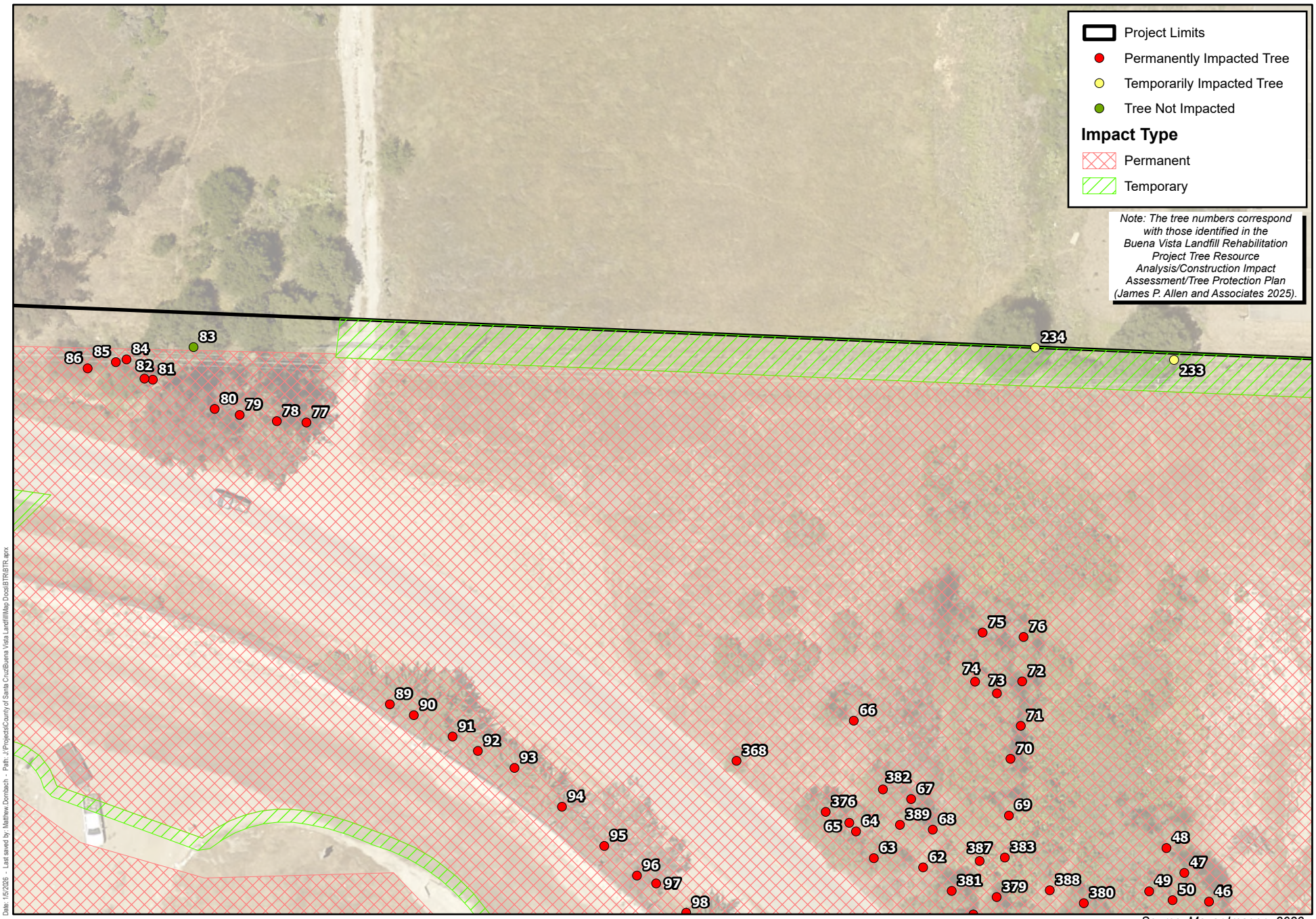
Source: Maxar Imagery 2023.

Harris & Associates

Figure 3.4-4a

Tree Impacts

Buena Vista Landfill Redevelopment Project



Source: Maxar Imagery 2023.

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Figure 3.4-4b

Tree Impacts

Buena Vista Landfill Redevelopment Project

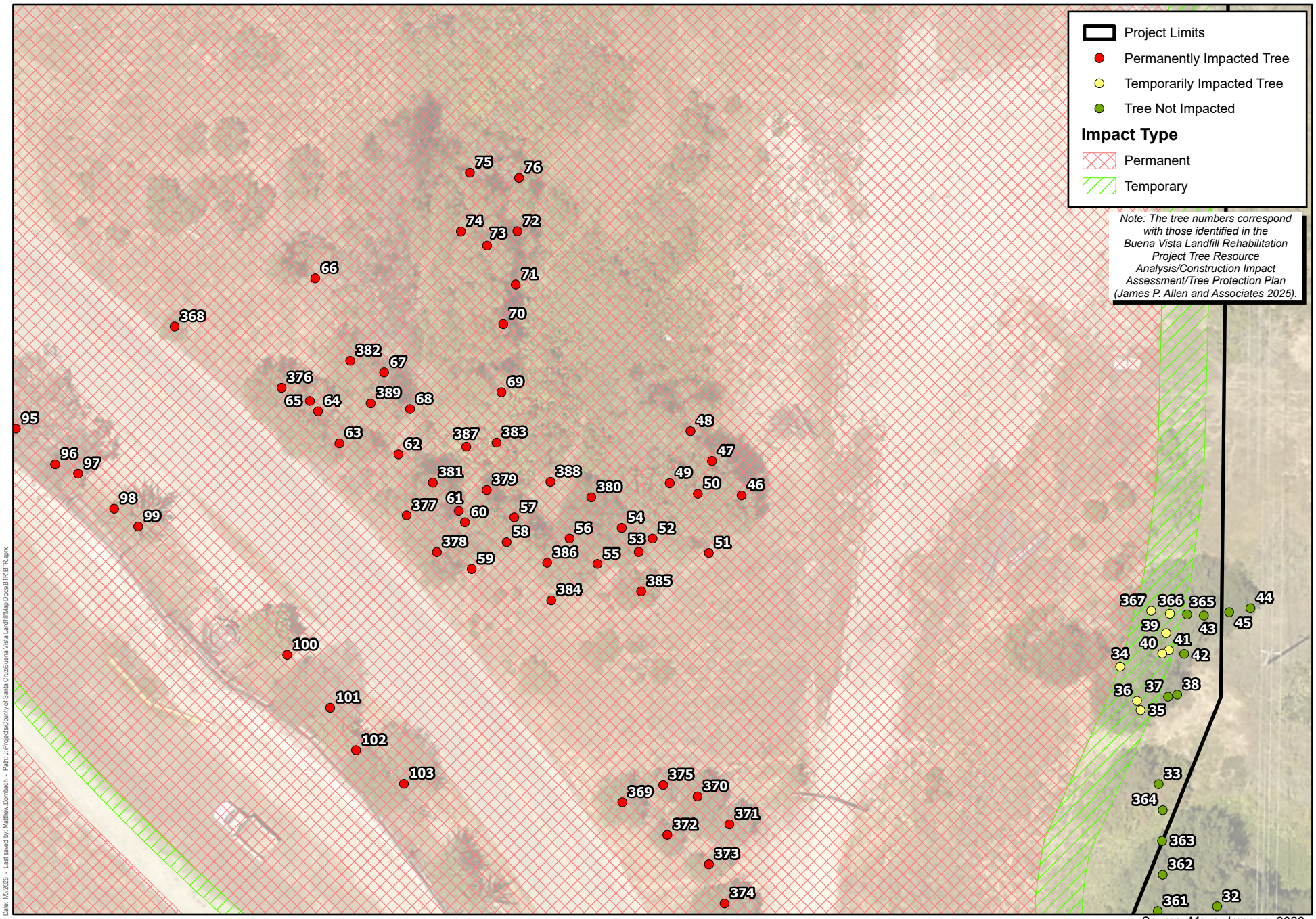
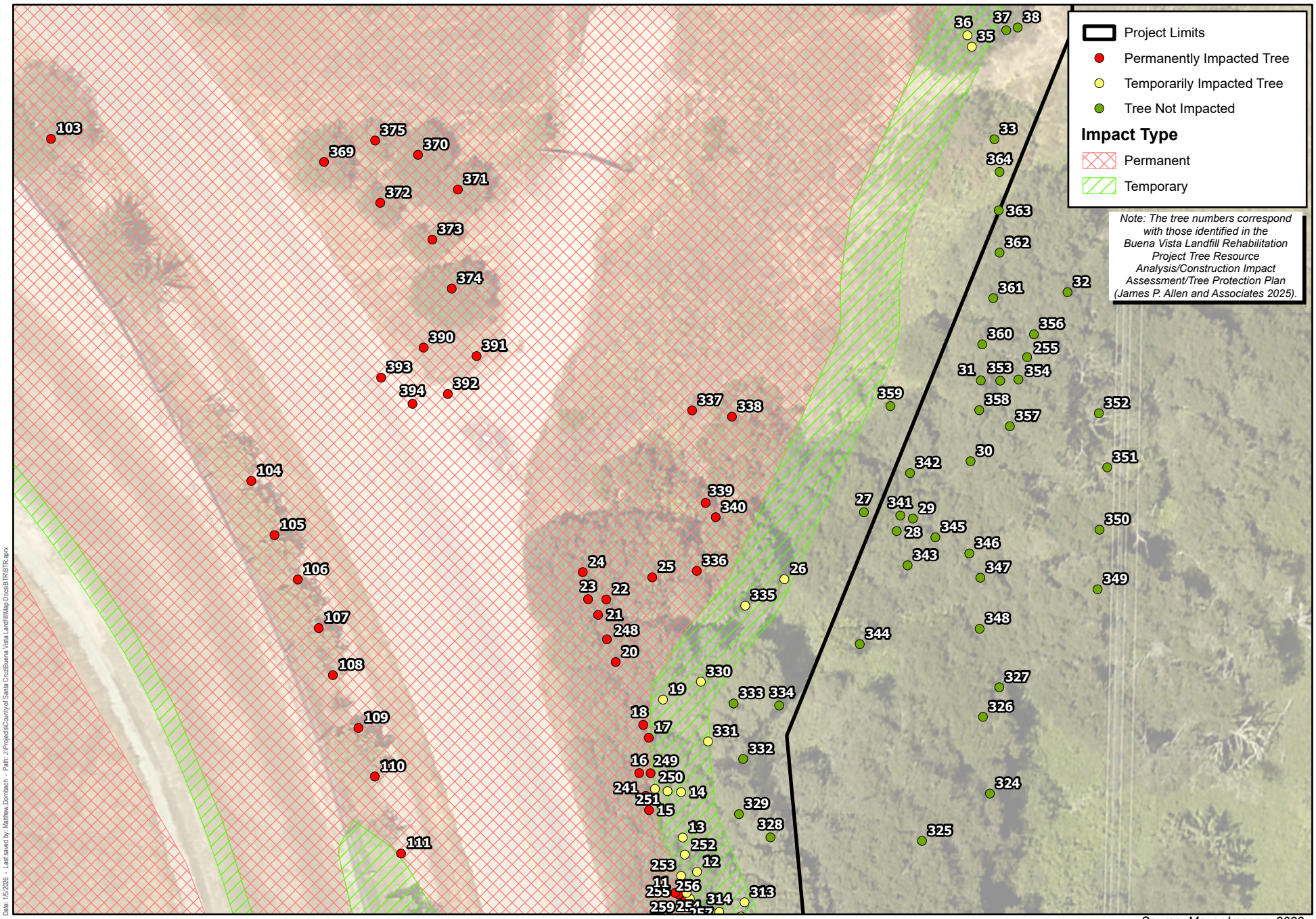


Figure 3.4-4c

Tree Impacts

Buena Vista Landfill Redevelopment Project



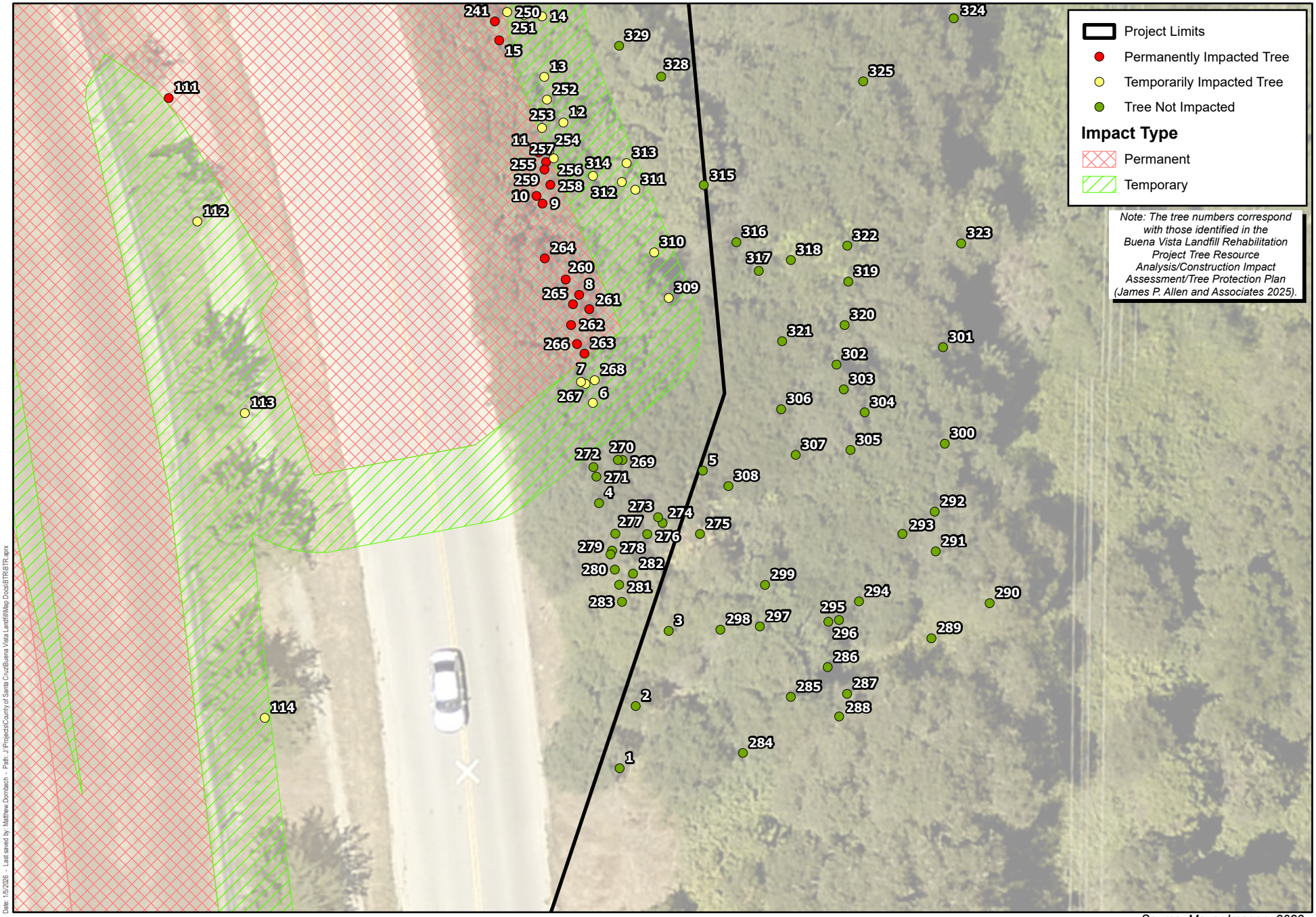
Source: Maxar Imagery 2023.

Harris & Associates

Figure 3.4-4d

Tree Impacts

Buena Vista Landfill Redevelopment Project



Source: Maxar Imagery 2023.

Harris & Associates

Figure 3.4-4e

Tree Impacts

Buena Vista Landfill Redevelopment Project



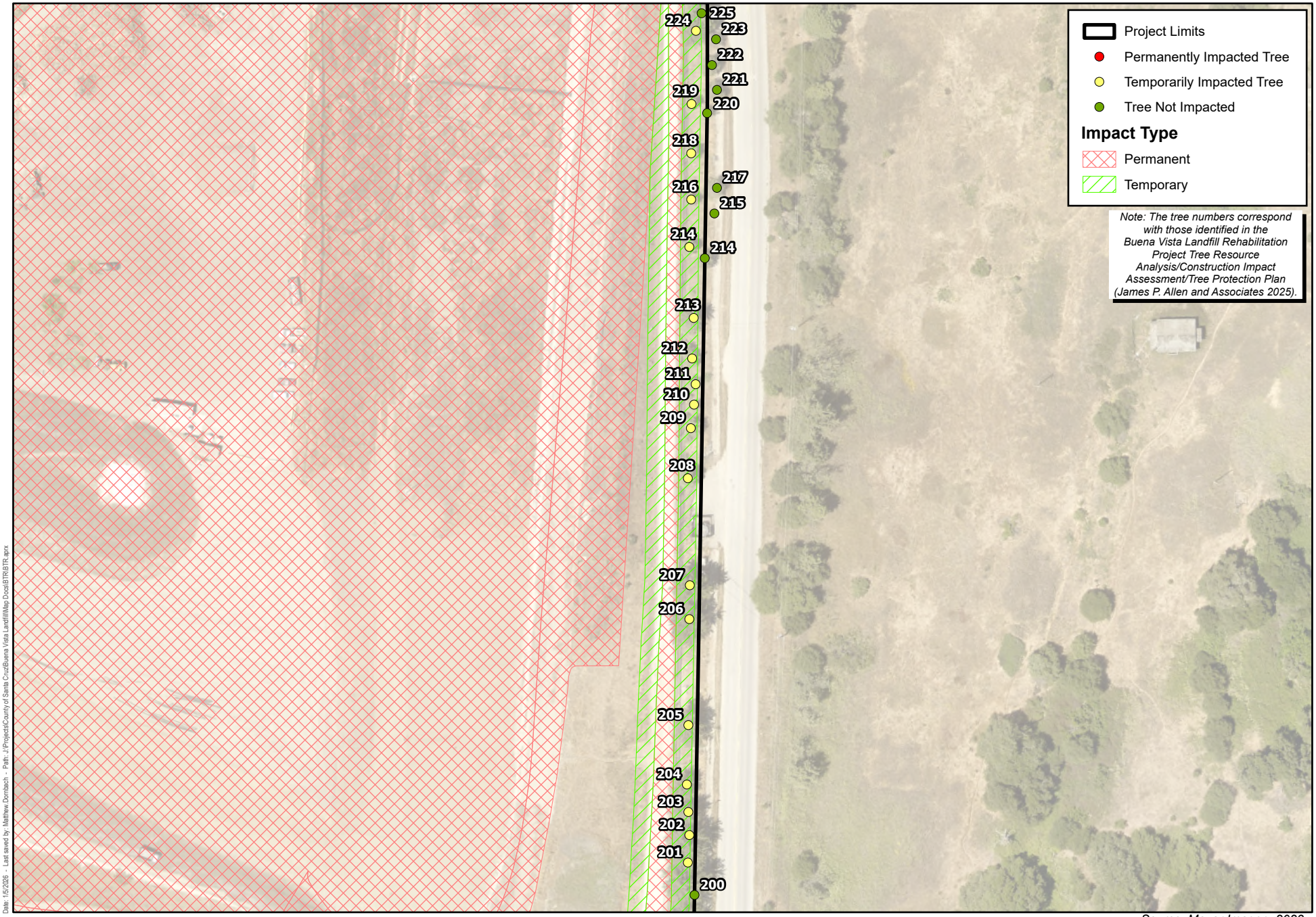
Source: Maxar Imagery 2023.

Harris & Associates

Figure 3.4-4f

Tree Impacts

Buena Vista Landfill Redevelopment Project



Source: Maxar Imagery 2023.

Harris & Associates

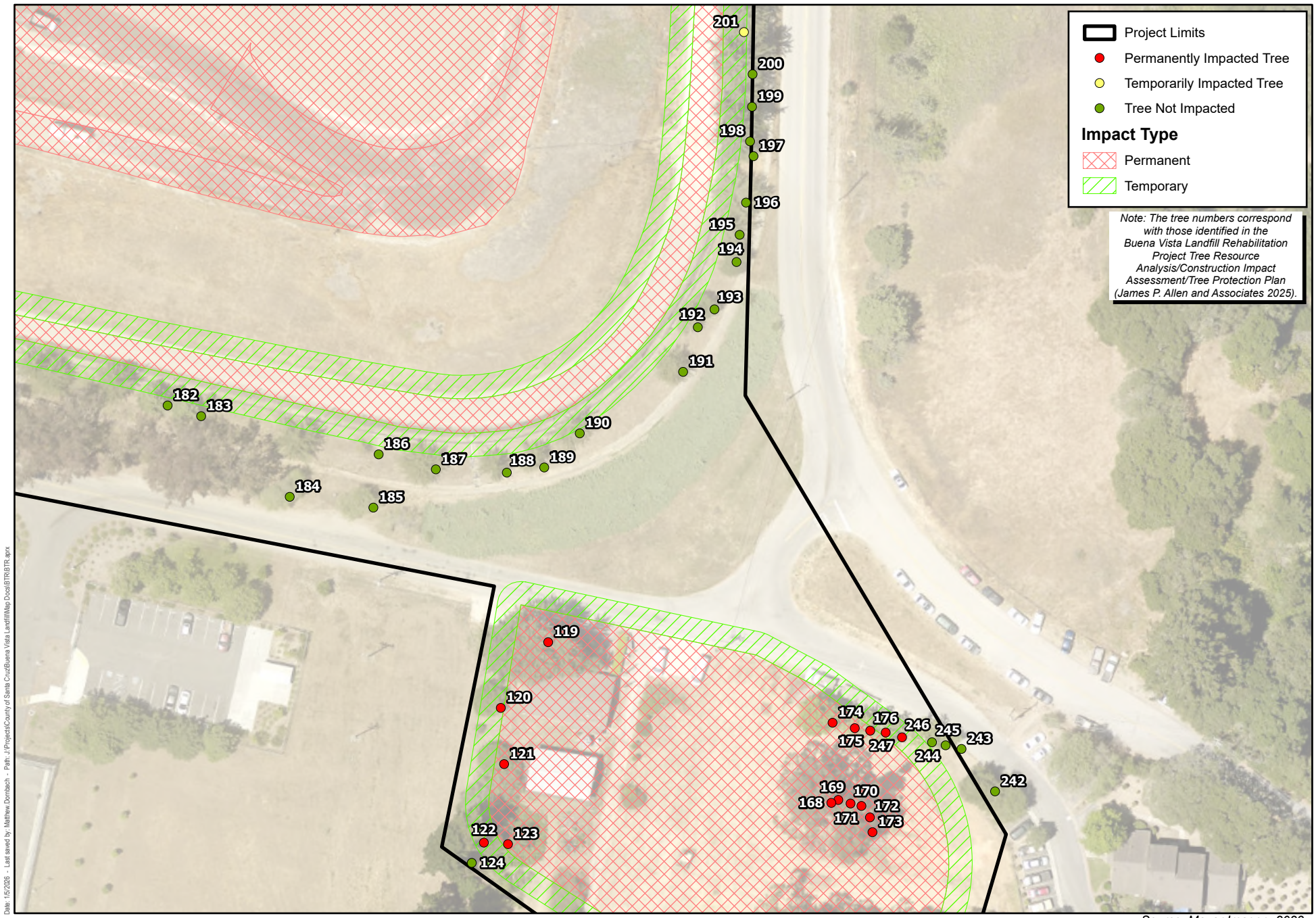
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Figure 3.4-4g

Tree Impacts

Buena Vista Landfill Redevelopment Project



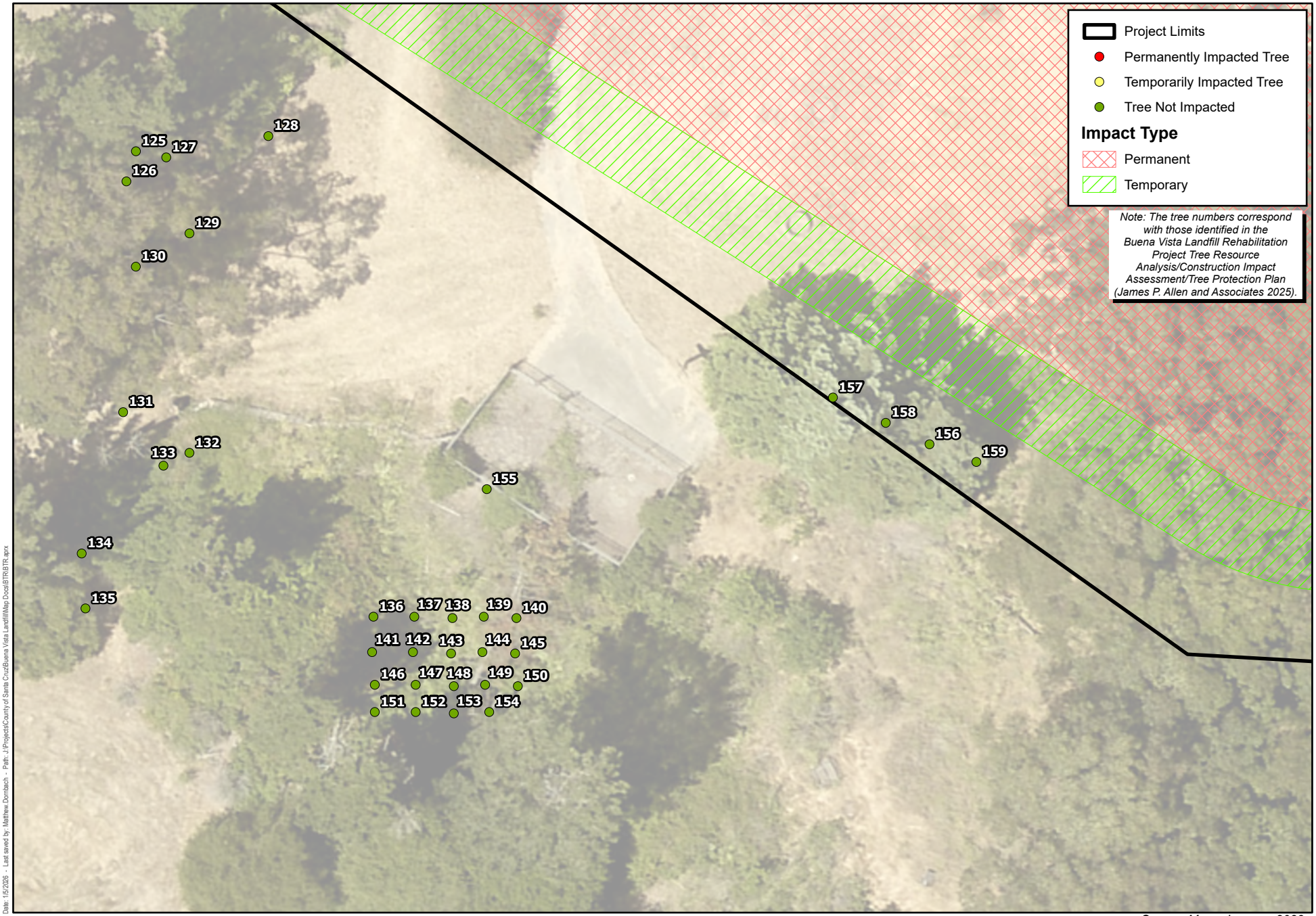
Source: Maxar Imagery 2023.

Harris & Associates

Figure 3.4-4h

Tree Impacts

Buena Vista Landfill Redevelopment Project



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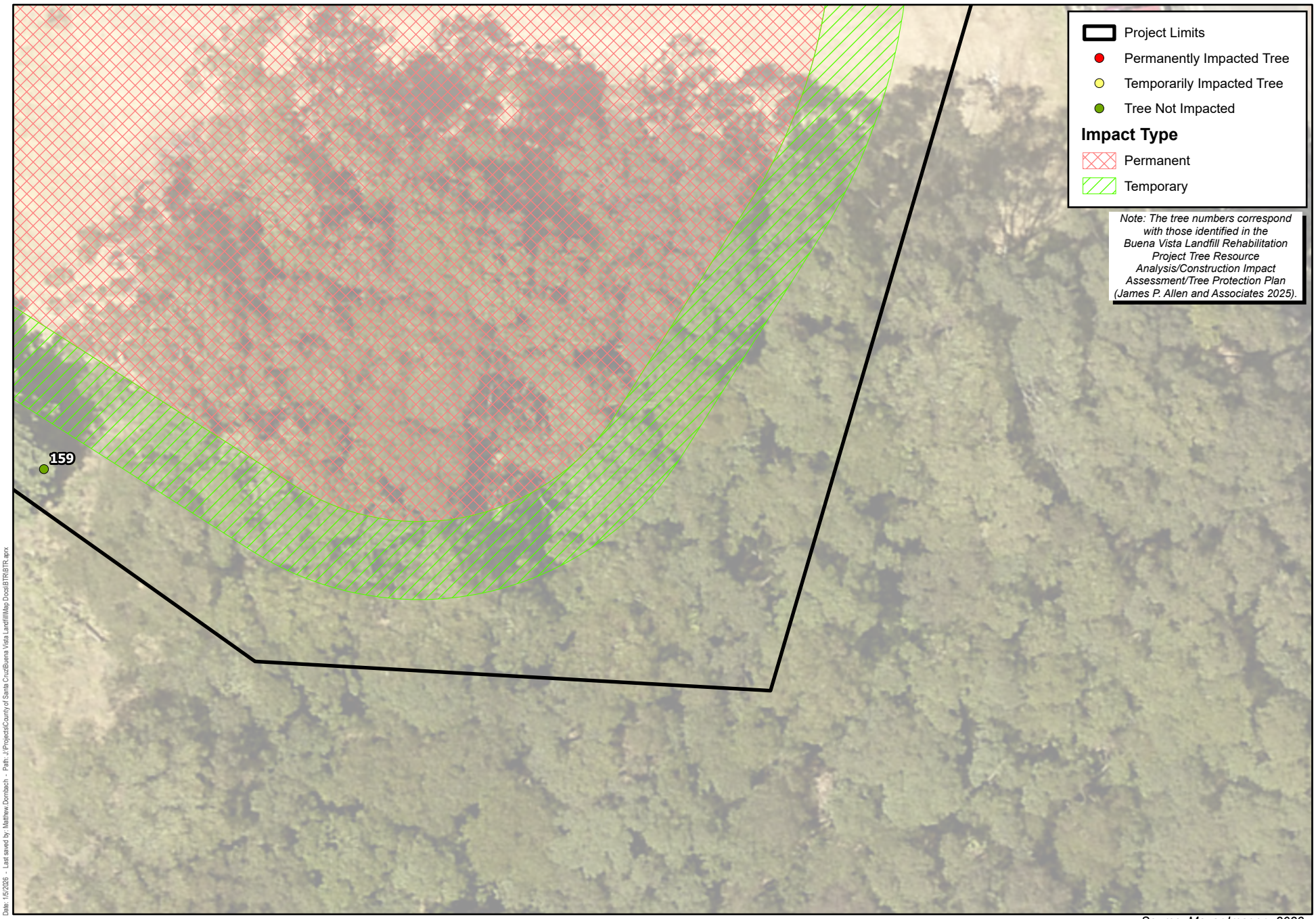
Source: Maxar Imagery 2023.

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Figure 3.4-4i

Tree Impacts

Buena Vista Landfill Redevelopment Project



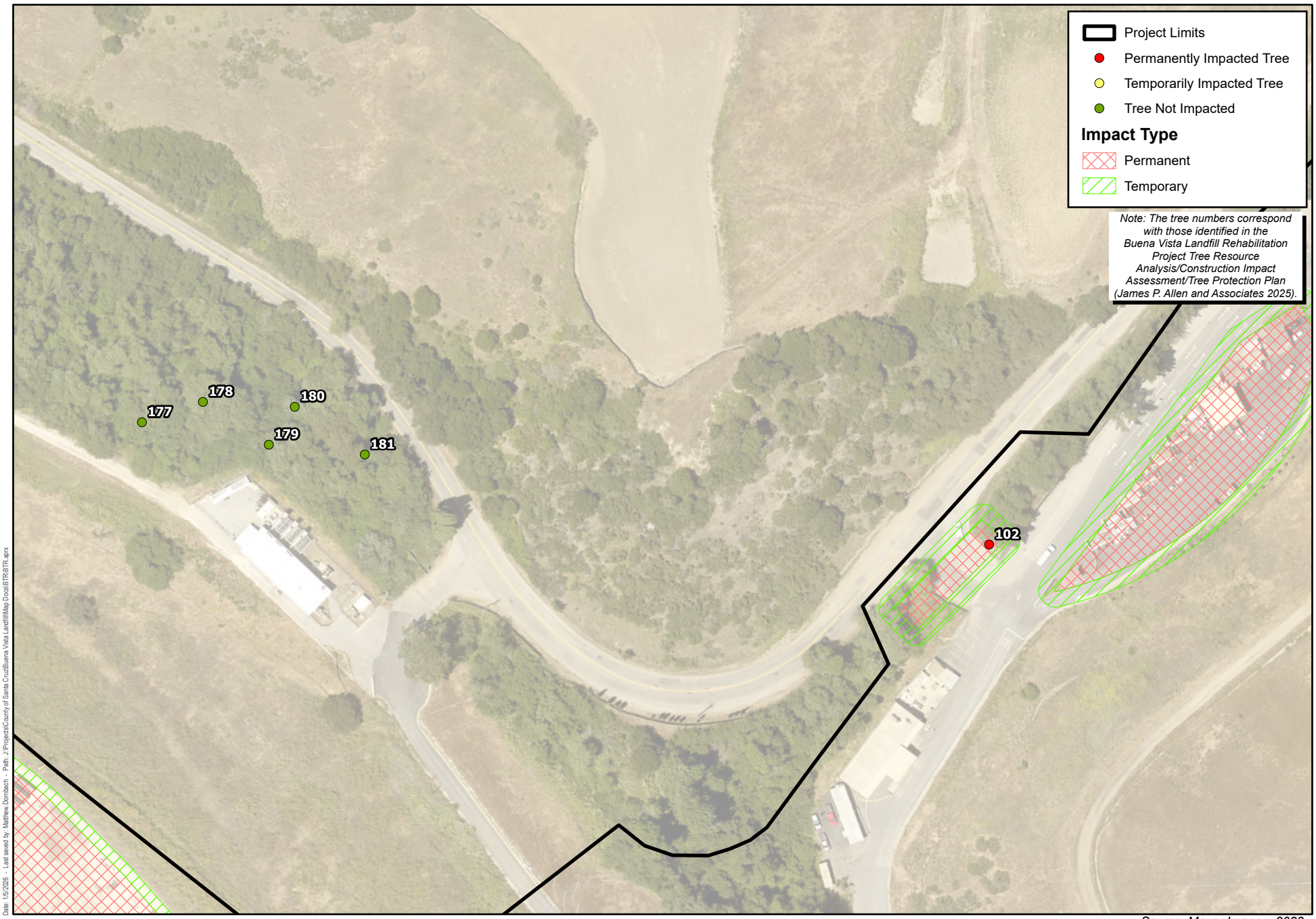
Source: Maxar Imagery 2023.

Harris & Associates

Figure 3.4-4j

Tree Impacts

Buena Vista Landfill Redevelopment Project



Source: Maxar Imagery 2023.

Harris & Associates

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0 20 40
Feet

Figure 3.4-4k

Tree Impacts

Buena Vista Landfill Redevelopment Project

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3.5 Cultural Resources

This section addresses potential impacts to cultural resources, including historical and archaeological resources, resulting from the Buena Vista Landfill Redevelopment Project (Project) construction and operation. It presents a discussion of known cultural and historical resources in the Project area and an evaluation of potential impacts of the Project on those resources, as well as potential impacts on unknown or undiscovered resources. The analysis of Tribal Cultural Resources provided in this section is based on the 2024 Phase I Cultural Resource Inventory for the Buena Vista Landfill Redevelopment Project, Santa Cruz County, California, prepared by Albion Environmental, Inc. (Albion 2024), and the 2025 Extended Phase I Archaeological Assessment for the Buena Vista Landfill Redevelopment Project Santa Cruz County, California, prepared by Albion Environmental, Inc. (Albion 2025). **Table 3.5-1** summarizes identified impacts related to cultural resources.

Table 3.5-1. Summary of Project Impacts Related to Cultural Resources

Impact	Significance before Mitigation	Mitigation	Significance after Mitigation
CR-1. The Project would not have an adverse effect on historical resources.	Less than Significant	None Required	Less than Significant
CR-2. Ground-disturbing activities during Project construction may unearth or adversely impact subsurface archaeological resources.	Potentially Significant	CR-2a, CR-2b	Less than Significant
CR-3. Ground-disturbing activities during Project construction may disturb human remains.	Potentially Significant	CR-2a, CR-2b	Less than Significant

Notes: The impact, significance determination, and mitigation apply to the Project as a whole, considering all Project components, unless otherwise noted.

3.5.1 Existing Conditions

Environmental Setting

The Project area is located within proximity to several freshwater sources. Gallighan Slough runs through the Project area and drains into the larger Harkins Slough to the south. Harkins Slough is part of the Ellicott Slough National Wildlife Refuge and is located along the eastern edge of the Project area. Refer to **Figure 3.10-1**, Watsonville Slough Watershed.

Precontact Setting

The archaeological context includes the Indigenous (Native American) history prior to contact with European explorers and settlers (i.e., pre-European contact). Although the history of archaeological investigation in California spans more than a century, certain areas of the state were largely passed over by researchers until recently. It has only been in the last few decades that California's Central Coast (including Santa Cruz, Monterey, and San Luis Obispo Counties) has witnessed intensive archaeological investigation. In recent years, a chronological sequence was specifically developed for the Central Coast. This sequence recognizes six major prehistoric periods of cultural adaptation extending through and beyond the last 10,000 years of human occupancy termed as Paleo-Indian, Millingstone (or Early Archaic), Early, Middle, Middle-Late Transition, and Late.

The Paleo-Indian Period is dated from pre-9950 Before Present (BP). Few components dating to the Paleo-Indian period have been investigated; and in the Santa Cruz region, the Paleo-Indian Period has not been readily described to date. The dearth of sites dating to this antiquity may be related in part to progressively rising sea levels that accompanied the end of the Pleistocene and the early Holocene. The Millingstone Period (9950–5450 BP) sites, in addition to milling equipment, are typified by eccentric crescents, cobble/core tools, and fewer flaked stone artifacts, such as large side-notched projectile points (Albion 2024). Shell beads from this time period are characterized as thick rectangular (L-series) Olivella beads. While there is still debate whether Millingstone Period groups were mobile or semi-sedentary, and whether they emphasized shellfish and small seeds, or small fauna or marine mammals as well, the coastal sites seem to rely heavily on marine resources.

The next few thousand years (5450–2550 BP) are referred to as the Early Period in central coastal California. Innovations in subsistence technology occurred at this time, especially the initial appearance of mortars and pestles (perhaps signaling acorn use) and a reversal in the ratio of ground stone to flaked stone, which is often interpreted as an increase in hunting. Flaked stone artifacts that signify the Early Period include contracting-stemmed and Rossi square-stemmed points, and continued use of large side-notched and other types of points. In contrast to Millingstone Period sites, Early Period sites are found in more diverse settings, including interior, estuary, and outer coast contexts.

Artifactual changes marking the transition from the Early to Middle Period (2550–950 BP) include the increased use of mortars and pestles, the continued use of contracting-stemmed points, and the discontinuation of square-stemmed and large side-notched points. Shell beads include Olivella saucer and saddle types, replacing the thick rectangular beads. Perhaps the most significant change in the artifact assemblage was the introduction of the circular shell fishhook. This artifact class is recovered more commonly on rocky coasts than in protected slough habitats where schooling fishes were likely captured through other means such as baskets, nets, or other trapping methods.

The Middle-Late Transition (950–700 BP) is a short period of time when there appears to have been a time of rapid change in settlement organization on parts of the Central California coast. While the Middle-Late Transition might not be present in all areas, major disruptions in settlement patterns and altered subsistence strategies occur between the Middle and Late Periods. Many coastal California sites that were inhabited in the Middle Period were subsequently abandoned during this time period, or by 1290 BP in the Monterey area, and not reoccupied.

Late Period (700–181 BP) populations on the Central Coast apparently rebounded from the environmental stresses that characterized the previous period. However, unlike native groups farther south—such as the Chumash and the Gabrieleño—the inhabitants of the Central Coast did not undergo increasingly maritime adaptations. Their subsistence practices continued to demonstrate a terrestrial focus. Late period midden sites on the interior are often associated with bedrock mortars, while the Monterey Peninsula has a plethora of shellfish processing sites unique to the area, where dense deposits of almost entirely abalone are found in a thick layer. Artifact assemblages from this time are marked by contracting-stem, leaf-shaped, and small, triangular-shaped and side-notched projectile points, mortars and pestles, and a variety of late prehistoric bead types.

Ethnographic Setting

Ethnographically, the Project area was inhabited by Ohlone or Costanoan populations. When first encountered by Spanish explorers, aboriginal inhabitants of the Bay Area and its vicinity were referred to as Costaños. The people came to be known as Costanoans; however, the descendants of

those earlier inhabitants currently prefer to be referenced as Ohlone. Both terms refer to the language group spoken by the people, rather than any sort of political group. The Ohlone inhabited the San Francisco Peninsula, the East Bay to the Delta, and south past Santa Clara Valley to the coast of the Monterey Bay.

The Ohlone occupied a relatively large area in North-Central California, from the San Francisco Peninsula and the East Bay, south to the Santa Clara Valley down to Monterey, and inland south to San Juan Bautista. This area encompassed a mosaic of different habitat types, including grasslands, woodlands, chaparral, redwood forests, coastal shrub, estuaries, and tidal marshes. Miwok tribelets were to the north and northeast of their Ohlone neighbors. Yokuts tribelets were to the east. Immediate neighbors to the south of the Ohlone included the Hokan-speaking Esselen and Salinan.

The Ohlone spoke a Costanoan language, which belongs to the Utian family of the larger Penutian language stock. Speakers of Penutian inhabited North-Central California and included Tribal groups such as the Maidu, Wintu, Miwok, and Yokuts. Shell mounds attest to the importance of shellfish in the Ohlone diet, particularly for coastal populations. Indeed, there are many references to shellfish collection and consumption in the diaries of Spanish explorers, indicating that this resource was of significance to Contact-Period diets. Shellfish resources of primary importance included mussels (*Mytilus* spp.), abalone (*Haliotis* spp.), and various clam, oyster, and scallop species.

Historic Setting

Spanish Setting

One of the earliest documented contacts with Native Americans in the area is Sebastian Vizcaino's landing at present-day Monterey in 1602. Following Vizcaino's landing, other Spanish ships may have stopped at Monterey, but contact was minimal until the initial overland exploration of the area by Gaspar de Portolá in 1769 (Albion 2024). Subsequent exploration of the region included Pedro Fages in 1770 and 1772, Fernando Javier de Rivera in 1774, and Juan Bautista de Anza in 1776.

Portolá's expedition, although at the time producing little lasting and substantive contact, was a harbinger of later developments. As a direct result of the expedition, the Spanish established a system of 21 fully functioning Franciscan missions over the length of Alta California, from San Diego in the south to the northern San Francisco Bay. The Spanish mission era began in San Diego in 1796 and lasted until 1823. Missions in the area included Mission San Antonio de Padua (1771), Mission Soledad (1791), Mission Santa Cruz (1791), Mission San Juan Bautista (1797), and Mission San Miguel (1797). Government policy in what was considered to be northwestern New Spain centered on the establishment of presidios (forts), missions, and pueblos (towns). No Spanish Period structures or features are known to have been present or adjacent to the Project area.

Mexican Setting

In 1821, Mexico achieved independence from Spain, and word of this event reached Alta California the following year. In California history, this era is known as the Mexican Period (ca. 1821–1848). The colonial policies of the republic were to be quite different from those of the Spanish monarchy. Not only were Californians allowed to trade with foreigners, but foreigners were allowed to hold land in the province, once they had been naturalized and converted to Catholicism. Under Spain, land grants to individuals were few, and title to these lands remained in the hands of the Spanish monarchy. Under Mexican rule, however, governors were encouraged to provide outright grants for individual

ranchos. Most importantly, the new Mexican republic was determined to "secularize" the missions to remove the natives and the mission property from the control of the Franciscan missionaries.

The new ranchos that arose from secularization created a wholly new culture in California, one that was centered on raising and maintaining vast herds of cattle. These ranchos were usually owned by individual families who supervised a large group of Indian laborers and vaqueros. The Project area is situated in the eastern portion of what was the San Andres Rancho, a 2-square-league (approximately 8,850 acres) Mexican Land Grant that extended from Manresa Beach to Sunset Beach and Beach Road. In 1833, the Rancho was given to José Joaquín Castro, son of Joaquín Ysidro Castro, who was one of the first colonists to arrive in Monterey in 1776 with De Anza. No Mexican Period structures or features are known to have been present or adjacent to the Project area.

American Setting

California became a U.S. territory following the conclusion of the Mexican American War in 1848 and the Treaty of Guadalupe Hidalgo. California was admitted as a state in 1850. The gold rush, beginning in 1848, brought a massive influx of immigrants to California.

The closest city to the Project area is Watsonville, which was first established in 1852 on a small portion of a rancho obtained from the Rodriguez family. Watsonville became an incorporated municipality in 1868, with a population of almost 2,000 people. Residential and commercial development increased over the next 3 decades, including annexation of nearby residential lots between 1907 and 1925. Between 1940 and 1960, the city nearly doubled in size. In the surrounding area, development patterns generally mirrored those of the city.

After 1940, the population of Watsonville changed significantly, with arrival of people from other parts of the United States and foreign immigrants. Many Japanese people who were interned during World War II returned to the area and faced new competition from the large numbers of Mexican workers who arrived through the Bracero Program.[1] Some Japanese families stayed and rebuilt their lives, while others left. As a whole, they did not return to agriculture in the same numbers as before the war.

The County acquired the privately owned Buena Vista Landfill in the 1960s, when there was little regulation of solid waste disposal in the United States. Buena Vista Landfill then occupied the 35-acre parcel that is now called the Old Landfill, located southwest of the current active landfill. After federal passage of the Solid Waste Disposal Act in 1965, landfill operations began to change in response to state and federal regulations governing landfills. Refer to Section 1.2.2, Buena Vista Landfill, for additional information.

Project Area Setting

Archaeological Resources

Albion conducted a cultural resource inventory of the Project area between 2022 and 2024 to identify cultural resources within and adjacent to the Project area and assess the potential for subsurface deposits. Background research consisted of a records search at the Northwest Information Center (NWIC) at Sonoma State University, a Native American Heritage Commission (NAHC) Sacred Lands File search, review of archival maps and aerial photographs, and a geoarchaeological review. In addition, outreach to identified Native American Tribes was conducted.

[1] The Bracero Program was a series of agreements between the United States and Mexico that allowed millions of Mexican men to work temporarily in the United Stated, mainly in agriculture, from 1942 to 1964.

Pedestrian fields surveys were completed as part of a Phase I cultural resource inventory (Albion 2024), and subsurface investigations were completed for an extended Phase I cultural resource assessment (Albion 2025).

Northwest Information Center Records Search

A cultural resources records search of the Project area and a 0.25-mile radius was conducted on June 20, 2022, at the NWIC, an affiliate of the California Office of Historic Preservation. The NWIC is the official State of California repository for cultural resource studies and records for Santa Cruz County. The records search included a literature review of the following:

- Built Environment Resources Directory, which includes:
  - National Register of Historic Places (NRHP)
  - California Historical Landmarks
  - Office of Historic Preservation Historic Properties Directory
- Office of Historic Preservation Archaeological Determinations of Eligibility
- California Inventory of Historical Resources

The records search did not identify any previously recorded archaeological or historical resources within the Project area or within a 0.25-mile radius of the Project area.

According to the NWIC, three cultural resource studies have been conducted within the Project area. These studies were negative, as they identified no resources within the Project area. The studies are listed in **Table 3.5-2**.

Table 3.5-2. Cultural Resource Studies Conducted Within the Project Area

Report No.	Citation Title	Authors	Citation Year
S-003919	An Archeological Reconnaissance of the San Andreas Disposal Site, County of Santa Cruz, California	C. Smith	1977
S-003935	An archaeological reconnaissance and literature search for certain areas which will be involved in improvements to the Watsonville Airport in Santa Cruz (letter report)	S. Dietz	1978
S-021261	Archaeological Survey Report for Bencich Farms in Watsonville, Santa Cruz County, California	K. Tremaine and J. Lopez	1998

According to the NWIC, six cultural resource studies have been conducted within a 0.25-mile radius of the Project area. The studies are listed in **Table 3.5-3**.

Table 3.5-3. Cultural Resource Studies Conducted Within 0.25-Mile of the Project Area

Report No.	Citation Title	Authors	Citation Year
S-003783	Report on Research on County Road Project near County Dump on Buena Vista Road	R. Edwards	1976
S-003964	Santa Cruz Regional Wastewater Treatment System Project, Santa Cruz County, California	Ann S. Peak & Associates	1977
S-007335	Preliminary Archaeological Reconnaissance of 53 Acres Adjacent to Gallighan Slough, West of Watsonville, Santa Cruz County, California	G. Breschini and T. Haversat	1985
S-022657	Phase 1 Archaeological Survey Along Onshore Portions of the Global West Fiber Optic Cable Project	I. Sawyer et al.	2000
S-024518	Preliminary Archaeological Reconnaissance for the Watsonville Municipal Airport Master Plan Improvements, Watsonville, Santa Cruz County, California	M. Doane and T. Haversat	2001
S-035147	Cultural Resources Study for the Watsonville Municipal Airport Updated Master Plan, Watsonville, Santa Cruz County, California	T. Vaughan	2008

Albion's database and the NWIC records search identified four previously recorded cultural resources within a 0.25-mile radius of the Project area. One is a precolonial site with human remains, one is historic, one is a multicomponent site with both precolonial and historic resources, and one is a redeposited precolonial resource. The resources are listed in **Table 3.5-4**.

Table 3.5-4. Previously Recorded Cultural Resources Within a 0.25-Mile Radius of the Project Area

Trinomial No.	Primary Number	Description	Distance from Project Area
CA-SCR-152	P-44-000155	Precolonial burials with chert flakes, burned bone, and fire-affected rock	~245 meters west of the Project area
No trinomial	P-44-000377	Historic Southern Pacific Railroad	~12 meters southwest of the Project area
CA-SCR-408	P-44-000773	Precolonial and historic resource with shell, flaked stone, and two historic structures	~115 meters east of the Project area
No trinomial	P-44-000802	Redeposited precolonial midden soils with shell and a bowl mortar	~240 meters northeast

Source: Albion 2024.

Sacred Lands File Search

A Sacred Lands File search request was sent to the NAHC with a response received on August 3, 2024. The NAHC returned a positive result and provided a list of Tribal contacts with knowledge of the area for input. Letters had already been sent to the Tribal contacts on August 22, 2023, and follow-up emails were sent on July 23, 2024. Native American outreach was conducted in two phases. The first phase was part of the Phase I cultural resources inventory completed in 2024 (Albion 2024), and the

second phase was part of the extended Phase I cultural resources assessment completed in 2025 (Albion 2025). No further information was received by the County during these outreach efforts regarding the Sacred Lands File positive search result.

Historical Imagery Review

Albion reviewed aerial photographs to determine the presence of historic-period buildings and/or structures within the Project area and general vicinity to assist in assessing the potential for historic-period archaeological deposits. Albion conducted an online search of historical maps and aerial photographs and found pertinent information from the following:

- 1860 rancho map
- 1886 Bureau of Land Management, General Land Office map
- 1931 aerial photograph
- 1948 aerial photograph
- 1964 aerial photograph

An aerial photograph from 1931 shows the Project area bordered by roads on the west and southwest with a road extending roughly east to west through the center. The northern portion of the Project area appears to have been partially under cultivation, while the southern portion appears to have been predominately a riverine environment. No structures appear in the photograph. The configuration of roads and cultivated lands versus riverine lands appears to be the same in an aerial photograph from 1948. According to the aerial photograph from 1964, the Project area appears to be roughly the same as in 1948, with the exception of a couple more roads running through the southern portion.

Geoarchaeological Sensitivity Review

This section considers the potential for the Project area to contain buried precontact-period archaeological resources. For purposes of this analysis, the phrase “archaeological sensitivity” is used to characterize a given area’s likelihood to contain buried archaeological resources. Through the review of geologic maps and studies, it was determined that approximately 85 percent of the Project area is mapped as Pleistocene age with approximately 15 percent mapped within Holocene-age deposits. The Pleistocene age spanned from 2.6 million to 11,700 years ago. The Holocene is the term used for the last 11,700 years of the Earth’s history, as defined by the International Commission on Stratigraphy. The Holocene time period is since the end of the last major glacial epoch and the most recent period of geological time. The general scientific consensus regarding the timing of human occupation of North America is that humans occupied North America around 13,500 years ago, or just before the end of the Pleistocene epoch. This indicates that landforms created before this period have limited sensitivity with respect to containing buried archaeological resources. The Holocene soils, which are sensitive for buried precolonial resources, are located primarily in the central portion of the Project area near and along Gallighan Slough. Therefore, there is high potential for buried archaeological deposits in this portion of the Project area.

Field Surveys

A pedestrian survey was initially conducted by a qualified archaeologist on August 9, 2022, with a subsequent survey conducted on July 22, 2024, to include areas outside the initial 2022 survey. Based on these results, Albion recommended an extended Phase I study of three areas, identified as

Areas 1, 2, and 3. These three areas are located where subsurface excavation is planned in areas currently accessible, including replacement of the culvert beneath the main landfill entrance driveway (Area 1), construction of Transfer Station A in the northeast corner of the Project area (Area 2), and potential construction of the optional equipment parking and storage area on the south side of Rountree Lane (Area 3).

The extended Phase I study consisted of the excavation of 14 shovel probes to assess the presence or absence of cultural materials within the Project area. A total of 76 artifacts were recovered, including unidentifiable glass, window glass, unidentifiable metal, mirror fragments, and one precolonial lithic fragment. All materials were temporally undiagnostic. Modern materials were also recovered and included Styrofoam, asphalt, plastic, ceramic tiles, concrete, and granite base rock. Most excavated soils were identified as disturbed fill layers.

Regarding surface precolonial resources, portions of the Project area have been heavily disturbed due to historical and recent land fill use, potentially affecting the sensitivity of these areas. As a result, at least 50 percent of the Project area, specifically those areas currently being used for landfill, are likely too disturbed to be sensitive for surface precolonial resources.

Built Environment Historical Resources

The Project includes the demolition of four structures related to the operation of the landfill. These include a metal maintenance shop and office building plus a metal tire shed (three separate structures totaling approximately 9,700 square feet). The shop and office building are estimated to date from 1987, with an addition from 2008, and the tire shed is estimated to have been constructed in 1989. The addition to the maintenance shop and office building consists of a parts/storage room at the back of the building. This building is described as a large metal shed that houses some office space and a large garage area. Also proposed for removal is a portable building used for office space, which had been moved to the site dating from 1996. The Project also includes optional improvements to the scale house (constructed date of 2005) and the recycling center (construction date of 2006).

3.5.2 Regulatory Setting

This section describes the applicable federal, state, and local laws; ordinances; regulations; and standards governing cultural resources.

Federal

National Register of Historic Places

Authorized by Section 106 of the National Historic Preservation Act, the NRHP is the nation's official comprehensive inventory of historic resources. The NRHP recognizes the quality of significance in American, state, and local history; architecture; archaeology; engineering; and culture present in districts, sites, buildings, structures, and objects. Per the Code of Federal Regulations, Title 36, Part 60.4, a property is eligible for listing in the NRHP if it meets one or more of the following criteria:

- **Criterion A:** Are associated with events that have made a significant contribution to the broad patterns of our history.
- **Criterion B:** Are associated with the lives of persons significant in our past.

- **Criterion C:** Embody the distinctive characteristics of a type, period, or method of installation, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction.
- **Criterion D:** Have yielded, or may be likely to yield, information important in prehistory or history.

In addition to meeting at least one of the above designation criteria, resources must also retain integrity. The National Park Service recognizes seven aspects or qualities that, considered together, define historic integrity. To retain integrity, a property must possess several, if not all, of these seven qualities, which include location, design, setting, materials, workmanship, feeling, and association.

Certain properties are generally considered ineligible for listing in the NRHP unless they qualify under special consideration, including cemeteries, birthplaces, graves of historical figures, properties owned by religious institutions, relocated structures, or commemorative properties. Additionally, a property generally must be at least 50 years of age to be eligible for listing in the NRHP. Properties that are less than 50 years must be determined to have "exceptional importance" to be considered eligible for NRHP listing.

State

California Environmental Quality Act

The California Environmental Quality Act (CEQA) requires a lead agency to consider the impacts of a project on historical resources. A historical resource is a resource listed in or determined to be eligible for listing in the California Register of Historical Resources (CRHR) (California Public Resources Code [PRC], Section 21084.1), a resource included in a local register of historical resources (CEQA Guidelines, Section 15064.5[a][2]), or any object, building, structure, site, area, place, record, or manuscript that a lead agency determines to be historically significant (CEQA Guidelines, Section 15064.5[a][3]).

CEQA Guidelines, Section 15064.5(a)(4), further states that "the fact that a resource is not listed in or determined to be eligible for listing in the California Register of Historical Resources, not included in a local register of historical resources (pursuant to Section 5020.1(k) of the Public Resources Code), or identified in an historical resources survey (meeting the criteria in Section 5024.1(g) of the Public Resources Code) does not preclude a lead agency from determining that the resource may be an historical resource as defined in Public Resources Code sections 5020.1(j) or 5024.1."

CEQA Guidelines, Section 15064.5(b), prescribes that project effects that would "cause a substantial adverse change in the significance of an historical resource" are significant effects on the environment. A substantial adverse change in the significance of a historical resource means demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of a historical resource would be materially impaired (CEQA Guidelines, Section 150645[b][1]).

CEQA Guidelines, Section 150645, further states that "the significance of an historical resource is materially impaired when a project... demolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its inclusion in the California Register... local register of historic resources... or its identification in an historic resources survey." As such, the Project would have a significant impact on identified historical resources if it would materially impair physical integrity of the historical resource such that it could no longer be listed in the CRHR or a local landmark program.

California Register of Historical Resources

The CRHR was established in PRC Section 5024.1, which states that it is "an authoritative guide in California to be used by state and local agencies, private groups, and citizens to identify the state's historical resources and to indicate what properties are to be protected, to the extent prudent and feasible, from substantial adverse change." A resource may be listed as a historical resource in the CRHR if it meets the criteria for listing (PRC Section 5024.1; 14 CCR 4852):

1. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage
2. Is associated with the lives of persons important in our past
3. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values
4. Has yielded, or may be likely to yield, information important in prehistory or history

Unique Archaeological Resources

PRC Section 21083.2(g) defines a unique archaeological resource as an artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it does one or more of the following:

- Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information
- Has a special and particular quality such as being the oldest of its type or the best available example of its type
- Is directly associated with a scientifically recognized important prehistoric or historic event or person

In addition, if a project can be demonstrated to cause damage to a unique archaeological resource, the lead agency may require reasonable efforts to permit any or all of these resources to be preserved in place or left in an undisturbed state. To the extent that resources cannot be left undisturbed, mitigation measures are required (PRC Sections 21083.2[a], [b], and [c]).

Health and Safety Code, Section 7050.5: Human Remains

Section 7050.5(b) of the California Health and Safety Code states that "in the event of discovery or recognition of any human remains in any location other than a dedicated cemetery there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains until the coroner of the county in which the remains were discovered has determined" whether they are subject to the coroner's authority. Further, the section states that "the coroner shall make his or her determination within 2 working days from the time the person responsible for the excavation, or his or her authorized representative, notifies the coroner of the discovery or recognition of the human remains." Additionally, the code states that "if the coroner determines that the remains are not subject to his or her authority and if the coroner recognizes the human remains to those of a Native American, or has reason to believe that they are those of a Native American, he or she shall contact, by telephone within 24 hours, the Native American Heritage Commission."

Coastal Act

The Project area is located in the Coastal Zone and, therefore, subject to the California Coastal Act. According to PRC Section 30244, "where development would adversely impact archaeological or paleontological resources as identified by the State Historic Preservation Officer, reasonable mitigation measures shall be required."

Local

Santa Cruz County General Plan/Local Coastal Program

The Agriculture, Natural Resources, and Conservation Element of the County General Plan includes objectives and policies to identify and protect the cultural heritage of Santa Cruz County, including Native American (Tribal) cultural resources, archaeological sites, and historical resources. Key policies and implementation strategies from the County General Plan pertaining to cultural resources are listed below (County of Santa Cruz 2024):

- **Policy ARC-8.1.1 (Local Coastal Program [LCP]), Evaluation of Native American Cultural Sites.** Protect all archaeological resources until they can be evaluated. Prohibit any disturbance of Native American Cultural Sites, archaeological sites, or identified tribal cultural resources without an appropriate permit. Maintain the Native American Cultural Sites ordinance.
- **Policy ARC-8.1.2 (LCP), Site Surveys.** Require an archaeological site survey (surface reconnaissance) as part of the environmental review process for all projects with very high site potential within the Archaeological Sensitive Areas, as designated on the General Plan/LCP Resources and Constraints Maps (Appendix F).
- **Policy ARC-8.1.3 (LCP), Development Around Archaeological Resources.** Protect identified archaeological resources from development by restricting improvements and grading activities to portions of the property not containing these resources, where feasible, or by preservation of the archaeological site through project design and/or use restrictions as determined by a professional archaeologist, and through tribal consultations where required.
- **Policy ARC-8.1.4 (LCP), Archaeological Evaluations.** Require the applicant for development proposals on any identified archaeological site to provide an evaluation, by a certified archaeologist, of the significance of the resource and what protective measures are necessary to preserve important and unique archaeological sites and to mitigate any impacts of proposed development consistent with General Plan/LCP Land Use Plan objectives and policies and California state law. Avoidance shall be the preferred mitigation measure.
- **Policy ARC-8.1.5, Accidental Discovery of Archaeological Resources.** If archaeological resources or human remains are discovered accidentally during grading or construction, the activity shall cease and the property owner shall notify the proper authority in accordance with the Native American Cultural Sites ordinance.
- **Policy ARC-8.1.6 (LCP), Environmental Review.** Environmental review shall be required for any project with the potential to significantly impact archaeological or tribal cultural resources.
- **Policy ARC-8.1.7 (LCP), Consultation for Discretionary Projects.** The County shall consult with any California Native American tribe that requests notice of projects in the geographic area traditionally affiliated with the tribe prior to the release of a Negative Declaration or Environmental Impact Report, pursuant to Public Resources Code sections 21073 and 21080. If tribal cultural resources are identified, the County shall work with the affected tribe to identify appropriate mitigation measures to protect the resource.

- **Policy ARC-8.1.8 (LCP), Consultation for General Plan Amendments.** The County shall consult with California Native American tribes as identified by the California Native American Heritage Commission (NAHC) prior to an amendment or update to the General Plan and prior to the designation of open space in order to identify and protect Native American cultural resources on land affected by the proposal, pursuant to California Government Code Section 65352.3.
- **Implementation Strategy ARC-8.1b.** Consult with local tribes as identified by the NAHC to identify tribal cultural resources, archaeological sites, and other resources and preserve confidentiality.
- **Implementation Strategy ARC-8.1c.** Review and update County policies, regulations and procedures to ensure consistency with state and federal laws regarding tribal consultations, CEQA review of archaeological resources and tribal cultural resources, NAHC recommendations for cultural resources assessments, and other laws protecting Native American cultural resources.
- **Implementation Strategy ARC-8.1g.** Include appropriate archaeological resources, tribal cultural resources, and other California Native American prehistoric, archaeological, cultural, spiritual, and ceremonial places in the public domain through donations or through purchase as part of open space and other programs. Consult with Native American tribes as identified by the NAHC prior to designating any Native American resources as open space in order to treat the resource appropriately and preserve confidentiality, in accordance with California Government Code Section 65562.5.
- **Implementation Strategy ARC-8.1h.** Encourage educational programs on the need for preservation of archaeological resources and tribal cultural resources, consulting with local tribes as appropriate.

Key policies and implementation strategies from the County General Plan pertaining to historical resources are listed below (County of Santa Cruz 2024):

- **Policy ARC-8.2.3, Development Activities.** For development activities on property containing historic resources, require protection, enhancement, and/or preservation of the historic, cultural, architectural, engineering, or aesthetic values of the resource consistent with regulations in the Historic Preservation ordinance as determined by the Historic Resources Commission.
- **Policy ARC-8.2.5, Encourage Protection of Historic Structures.** Encourage and support public and private efforts to protect and restore historic structures and to continue their use as an integral part of the community.
- **Policy ARC-8.2.8, Environmental Review.** Environmental review shall be required for any project with the potential to significantly impact historic resources.
- **Implementation Strategy ARC-8.2a.** Continue to sponsor investigative research to identify new historic resources and maintain and update an inventory of historic structures, objects, sites, and districts of significance to Santa Cruz County. Seek funding for updating the Santa Cruz County Historic Resources Inventory, prioritizing surveys in areas that have not been updated recently. (Responsibility: Historical Resources Commission, Board of Supervisors, CDID).
- **Implementation Strategy ARC-8.2q.** Continue the review of proposed applications for demolition of any structure more than 50 years old that has not been previously surveyed for historic significance, and require a historic report prepared by a qualified historic consultant for structures that may have the potential to qualify as a historic resource as determined by County Planning staff. (Responsibility: CDID).

Santa Cruz County Code

The Santa Cruz County Code, Title 16, Environmental and Resource Protection, includes regulations to implement policies in the County General Plan/LCP. Chapter 16.40, Native American Cultural Sites, and Chapter 16.42, Historic Preservation, include regulations to protect cultural resources.

Chapter 16.40 defines when archaeological surveys and reports are required. Section 16.40.040 identifies the necessary actions when Native American cultural sites or human remains are discovered during the review of a proposed project or during excavation or other ground-disturbing activities. Section 16.40.040(A) states that if human remains of any age or artifacts which appear to exceed 100 years of age are discovered, the property owner (or their construction contractor) shall:

1. Cease and desist from all further excavations and disturbances within 200 feet of the discovery.
2. Arrange for staking completely around the area of discovery by visible stakes no more than 10 feet apart, forming a circle having a radius of no less than 100 feet from the point of discovery; provided, however, that such staking need not take place on adjoining property unless the owner of the adjoining property authorizes such staking.
3. Notify the Sheriff-Coroner of the discovery if human remains have been discovered. Notify the Planning Director if the discovery contains no human remains.
4. Grant all duly authorized representatives of the Coroner and the Planning Director permission to enter onto the property and to take all actions consistent with this chapter.

Chapter 16.42 includes provisions for protecting historic resources in unincorporated portions of the County. Section 16.42.050(C) states:

> Structures, objects, sites and districts shall be designated as historic resources if, and only if, they meet one or more of the following criteria and have retained their architectural integrity and historic value:
>
> 1. The resource is associated with a person of local, state or national historical significance.
> 2. The resource is associated with an historic event or thematic activity of local, state or national importance.
> 3. The resource is representative of a distinct architectural style and/or construction method of a particular historic period or way of life, or the resource represents the work of a master builder or architect or possesses high artistic values.
> 4. The resource has yielded, or may likely yield, information important to history.

3.5.3 Methodology and Significance Thresholds

Methodology

The following section analyzes potential impacts on built environment and archaeological cultural resources, as well as human remains, that may be caused by the Project. The analysis of cultural resources is based on the Phase I cultural resource inventory of the Project area between 2022 and 2024 that included archival research and a background records search at the NWIC at Sonoma State University, NAHC Sacred Lands File search, outreach to Native American Tribes identified by the NAHC, and a pedestrian survey of the Project area (Albion 2024).

Based on these results, Albion completed an extended Phase I study of three areas, which included a review of the ethnographic setting of the Project area and a consideration of the results of Assembly Bill 52 consultation between the County and local Native Americans (Albion 2025).

Significance Thresholds

The introduction in Chapter 3, Environmental Impact Analysis, states that the significance thresholds used in this analysis are based on Appendix G of the CEQA Guidelines, which provides a sample Initial Study checklist that includes a number of factual inquiries related to the subject of cultural resources and the other environmental topics. Thus, the thresholds presented below correspond with the questions in the Appendix G Initial Study checklist. They also reflect the operative language of pertinent provisions of CEQA and the CEQA Guidelines (i.e., PRC Sections 21083.2 and 21084.1 and CEQA Guidelines, Section 15064.5).

For the purposes of this Environmental Impact Report, a significant impact would occur if implementation of the Project would result in any of the following conditions:

A. Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5.
B. Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5.
C. Disturb any human remains, including those interred outside of formal cemeteries.

Direct impacts can be assessed by identifying the types and locations of proposed development, determining the exact locations of cultural resources within a project vicinity, assessing the significance of the resources that may be affected, and determining the appropriate mitigation. Removal, demolition, or alteration of historical resources can permanently impact the historic significance of an archaeological site, structure, or historic district.

3.5.4 Project Impact Analysis

For each impact, the discussion is separated into Project construction, Project operation, and Project components as needed to describe the potential impact. The overall conclusion or significance determination is presented at the end of the discussion, as well as in parentheses at the end of the numbered impact statement.

As described in Chapter 2, Project Description, the Project components include:

1. Transfer Stations (Transfer Station A and Transfer Station B)
2. Organics Diversion Facility (ODF Option 1 and ODF Option 2)
3. Landfill Closure and Revegetation
4. Optional Improvements: a) Internal Access Road Improvements, b) Scale House Upgrades, c) Recycling Center Upgrades, d) Equipment Parking and Storage Area
5. General Plan/Local Coastal Program Land Use Designation and Zoning Map Amendments

Threshold A:	Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5.

IMPACT CR-1 THE PROJECT WOULD NOT HAVE AN ADVERSE EFFECT ON HISTORICAL RESOURCES. (LESS THAN SIGNIFICANT IMPACT)

The Project requires building demolition to construct Transfer Station B and the optional scale house upgrades and recycling center upgrades. The other project components do not require building demolition.

To construct Transfer Station B, the Project includes the demolition of four buildings related to the operation of the landfill: a metal maintenance shop and office building, which are three separate buildings, and a metal tire shed. All are of relatively recent construction, dating from 1987 (with an addition constructed in 2008) and 1989. Constructing Transfer Station B also requires removal of a portable building used for office space, which had been moved to the site dating from 1996.

The Project also includes optional improvements to the scale house (construction date of 2005) and the recycling center (construction date of 2006).

All the buildings and structures proposed for demolition were evaluated for historical significance as part of this impact assessment. None meet the criteria for eligibility at the federal, state, or local level, as the buildings were not constructed in important artistic or architectural styles, do not meet any of the criteria for local listing for association with an important person or event, and do not contain the potential to provide information important to history. The buildings are of newer construction and are simple, common, utilitarian industrial structures used for personnel and equipment in the operation of the landfill.

In summary, the Project, including the primary components and optional improvements described above, as well as the associated General Plan/LCP Land Use Designation and Zoning Map Amendments, would not result in a substantial adverse change in the significance of a built environment historical resource. Therefore, the project would not have an adverse effect on historical resources, and the impact would be **Less than Significant.** No mitigation is required.

Threshold B:	Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5.

IMPACT CR-2 GROUND-DISTURBING ACTIVITIES DURING PROJECT CONSTRUCTION MAY UNEARTH OR ADVERSELY IMPACT SUBSURFACE ARCHAEOLOGICAL RESOURCES. (LESS THAN SIGNIFICANT WITH MITIGATION)

Project construction requires ground disturbance for the primary project components (transfer stations, organic diversion facility, and landfill closure) and the optional improvements (internal road improvements, scale house and recycling center upgrades, and equipment parking and storage area). Ground-disturbing activities may unearth or adversely affect previously undiscovered archaeological resources.

Albion conducted a Phase I cultural resource inventory of the Project area between 2022 and 2024 that included archival research and a background records search at the NWIC at Sonoma State University, NAHC Sacred Lands File search and outreach to identified Native American Tribes, and a pedestrian survey of the Project area (Albion 2024).

Based on the results of the Phase I cultural resources inventory, Albion recommended and conducted an extended Phase I study of three areas where subsurface excavation is planned to

confirm the presence/absence of cultural resources within the Project area (Albion 2025). These three areas are located where subsurface excavation is planned, including: replacement of the culvert beneath the main landfill entrance driveway (Area 1), construction of Transfer Station A in the northeast corner of the Project area (Area 2), and potential construction of the optional equipment parking and storage area on the south side of Rountree Lane (Area 3).

Excavation in Areas 1, 2, and 3 was undertaken through the placing of 14 shovel probes to assess the presence or absence of cultural materials within the Project area. Determination of the presence of intact subsurface deposits is based on careful examination of stratigraphy observed in excavation units and rely on multiple lines of evidence. The majority of excavated soils were identified as disturbed fill layers. The study found that the Project area does not contain intact or significant cultural deposits, and that no further archaeological investigation would be warranted (Albion 2025).

Additionally, Albion conducted Native American outreach in 2024 and formal Assembly Bill 52 consultation in 2025, which was requested by one of the Tribal representatives, and several Tribes requested that subsurface work in the three areas be monitored by a qualified archaeologist and Tribal consultant. Based on this and the proximity of important cultural resources to the Project area, the extended Phase I study recommended that all initial ground-disturbing activities associated with construction activities in Areas 1, 2, and 3 be monitored by a qualified archaeologist and a representative from the local Native American community. The project activities that would occur in these three areas include culvert modification at the main entrance (Area 1), Transfer Station A (Area 2), and the equipment parking and storage area (Area 3).

In the event that previously unknown archaeological resources are encountered during Project-related ground disturbance, there could be a substantial adverse change in the significance of the archaeological resource from its demolition, destruction, relocation, or alteration (CEQA Guidelines, Section 15064.5[b][1]).

This potentially significant impact would be reduced to a less than significant level by complying with Santa Cruz County Code, Section 16.40.040, which identifies the necessary actions when Native American cultural sites or human remains are discovered during ground-disturbing activities, and by implementing Mitigation Measure CR-2a (Stop Work if Inadvertent Encounter of Undiscovered Archaeological Resources during Ground-Disturbing Activities) and Mitigation Measure CR-2b (Archaeologist and Native American Monitoring During Initial Ground-Disturbing Activities in Specific Areas).

In summary, the Project, including the primary components and optional improvements described above, as well as the associated General Plan/LCP Land Use Designation and Zoning Map Amendments, would not result in a substantial adverse change in the significance of an unknown archaeological resource with implementation of mitigation measures. Therefore, the impact to cultural resources from ground-disturbing activities during Project construction would be **Less than Significant with Mitigation** (Mitigation Measures CR-2a and CR-2b).

Mitigation Measure CR-2a: Stop Work if Inadvertent Encounter of Undiscovered Archaeological Resources during Ground-Disturbing Activities

In the event that archaeological resources are unexpectedly encountered during ground-disturbing construction activities, the construction contractor shall halt work within 200 feet of the find, and the County of Santa Cruz shall contact an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for Archaeology to immediately evaluate the find, if an

archaeological monitor is not already present. If the find is determined by the qualified archaeologist to be prehistoric and a Native American monitor is not already present, then the County of Santa Cruz shall contact a Native American representative to participate in the evaluation of the find.

If necessary, archaeological testing for CRHR eligibility shall be completed by the qualified archaeologist. If the discovery proves to be eligible for the California Register of Historical Resources, and if impacts to the resource cannot be avoided via project redesign, a qualified archaeologist shall prepare a data recovery plan tailored to the physical nature and characteristics of the deposit, per the requirements of California Public Resources Code, Section 15126.4(b)(3)(C). The data recovery plan shall identify data recovery excavation methods, measurable objectives, and data thresholds to reduce any significant impacts to cultural resources.

Pursuant to the data recovery plan, the qualified archaeologist and Native American representative, as appropriate, shall recover and document the scientifically consequential information that justifies the resource's significance. The County of Santa Cruz shall review and approve the treatment plan and archaeological testing as appropriate, and the resulting documentation shall be submitted to the regional repository of the California Historical Resources Information System, per California Public Resources Code, Section 15126.4(b)(3)(C).

Mitigation Measure CR-2b: Archaeologist and Native American Monitoring during Initial Ground-Disturbing Activities in Specific Areas

All initial ground-disturbing activities in the following specific areas shall be monitored by a qualified archaeologist and a representative from the local Native American community.

Main Landfill Entrance. The culvert modification with small wildlife crossing, located below the driveway at the Main Entrance, will be implemented as part of the Proposed Project.

Northeast Corner of Landfill Property. The undeveloped northeast corner of the landfill property, between Harkins Slough Road and the northern property line, will be developed as part of the Proposed Project (for Transfer Station A). Additionally, the Harkins Slough Road Drainage will be restored as part of the Proposed Project.

South of Rountree/Tierra Alta Intersection. The approximately 1-acre undeveloped area on the south side of the Rountree Lane/Tierra Alta Drive intersection will be developed with an equipment parking and storage area as part of the Proposed Project, if the County decides to implement this optional project feature.

The County of Santa Cruz shall retain a qualified archaeologist and a Native American monitor from a locally affiliated Tribe to monitor initial ground-disturbing activities. Archaeological monitoring shall be performed under the direction of an archaeologist meeting or exceeding the Secretary of the Interior's Professional Qualifications Standards for Archaeology. Either monitors shall have the authority to halt and redirect work should any archaeological resources be identified during monitoring. If archaeological resources are encountered during ground-disturbing activities, work in the immediate area shall halt, and Mitigation Measure CR-2a (Stop Work if Inadvertent Encounter of Undiscovered Archaeological Resources during Ground-Disturbing Activities) shall be implemented.

Archaeological monitoring may be reduced or halted at the discretion of the monitor, in consultation with the County environmental coordinator, as warranted by conditions such as encountering bedrock, sediments that are planned to be excavated are composed of fill, or negative findings during the first 50 percent of ground disturbance. If monitoring is reduced to spot-checking, spot-checking shall occur when

ground disturbance moves to a new location within the Project area and when ground disturbance will extend to depths not previously reached (unless those depths are within bedrock). Furthermore, monitoring may be terminated if it is determined that the soils within the Project area do not have the potential to contain cultural resources. The monitor shall submit a report within 30 days of completion of all ground-disturbing activities to the County to document compliance.

Threshold C:	Disturb any human remains, including those interred outside of formal cemeteries.

IMPACT CR-3 GROUND-DISTURBING ACTIVITIES DURING PROJECT CONSTRUCTION MAY DISTURB HUMAN REMAINS. (LESS THAN SIGNIFICANT IMPACT)

Project construction requires ground disturbance for the primary project components (transfer stations, organic diversion facility, and landfill closure) and the optional improvements (internal road improvements, scale house and recycling center upgrades, and equipment parking and storage area).

Based on the Phase I cultural resource inventory (Albion 2024) and extended Phase I archaeological assessment, no known human remains are located in the Project area (Albion 2025). However, it is possible that excavation activities could inadvertently disturb previously unidentified human remains.

In the event that human remains are unexpectedly encountered during ground disturbance, the County and their construction contractor are required to comply with existing state and local regulations that protect the remains from disturbance, vandalism, or destruction and that appropriate authorities and parties, including Native American representatives are notified.

The following procedures of conduct after the discovery of human remains are required by the California Health and Safety Code, Section 7050.5; PRC Section 5097.98; and CEQA Guidelines, Section 15064.5(e):

- If human remains are encountered at the site, all work within the immediate vicinity of the discovery shall cease, and the County Coroner shall be notified immediately.
- The coroner shall determine whether the remains are Native American. If the coroner determines the remains are Native American, the coroner shall notify the NAHC within 24 hours, which will, in turn, notify the person the NAHC identifies as the most likely descendant (MLD) in connection with any human remains. The MLD may make recommendations to the landowner or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains, and any associated grave goods as provided in PRC Section 5097.98.
- If the NAHC is unable to identify an MLD or the MLD does not make a recommendation within 24 hours after being notified by the commission, or the owner does not accept the recommendation of the MLD, and the mediation by the NAHC does not provide measures acceptable to the landowner, in accordance with PRC 5097.98(e), the owner shall, with appropriate dignity, reinter the remains in an area of the property secure from further disturbance (CEQA Guidelines, Section 15064.5[e][2]).

Consistent with state law, Santa Cruz County Code, Section 16.40.040 requires the following:

- Cease and desist from all further excavations and disturbances within 200 feet of the discovery.
- Arrange for staking completely around the area of discovery by visible stakes no more than 10 feet apart, forming a circle having a radius of no less than 100 feet from the point of discovery; provided, however, that such staking need not take place on adjoining property unless the owner of the adjoining property authorizes such staking.
- Notify the Sheriff-Coroner of the discovery if human remains have been discovered. Notify the Planning Director if the discovery contains no human remains.
- Grant all duly authorized representatives of the Coroner and the Planning Director permission to enter onto the property and to take all actions consistent with this chapter.

This potentially significant impact would be reduced to a less than significant level by complying with the existing state and local regulations and requirements to protect the remains and notify the appropriate authorities, and by implementing Mitigation Measure CR-2a (Stop Work if Inadvertent Encounter of Undiscovered Archaeological Resources during Ground-Disturbing Activities) and Mitigation Measure CR-2b (Archaeologist and Native American Monitoring During Initial Ground-Disturbing Activities in Specific Areas). Therefore, the impact of potential disturbance to human remains from ground-disturbing activities would be **Less than Significant with Mitigation** (Mitigation Measures CR-2a and CR-2b).

Mitigation Measure CR-2a: Stop Work if Inadvertent Encounter of Undiscovered Archaeological Resources during Ground-Disturbing Activities

Refer to the complete description under Impact CR-2 above.

Mitigation Measure CR-2b: Archaeologist and Native American Monitoring during Initial Ground-Disturbing Activities in Specific Areas

Refer to the complete description under Impact CR-2 above.

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3.6 Energy

This section describes existing energy use, outlines the regulatory framework applicable to energy, and evaluates impacts related to energy as a result of the Buena Vista Landfill Redevelopment Project (Project) construction and operation. **Table 3.6-1** presents a summary of potential impacts related to energy.

Table 3.6-1. Summary of Project Impacts Related to Energy

Impact	Significance before Mitigation	Mitigation	Significance after Mitigation
EN-1. The Project would not result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during Project construction or operation.	Less than Significant	None Required	Less than Significant
EN-2. The Project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency.	Less than Significant	None Required	Less than Significant

Note: The impact, significance determination, and mitigation apply to the Project as a whole, considering all Project components, unless otherwise noted.

3.6.1 Existing Conditions

California is the second largest total energy consumer among the states, with a total energy consumption of 6,882 trillion British thermal units (Btu). However, as a result of energy efficiency efforts, the state's per capita energy consumption is the fourth lowest in the nation. In 2023, California was the fourth largest energy producer in the nation of renewable resources, including hydroelectric power and small-scale solar power. Renewable resources supplied 54 percent of California's in-state electricity generation (EIA 2024). Regarding natural gas, California is the second largest consumer of natural gas, primarily for electricity generation and industrial processes (63 percent). Transportation accounts for 85 percent of petroleum use in the state, and the state is also the second largest consumer of refined petroleum in the nation (EIA 2024).

Regionally, Santa Cruz County consumers used approximately 1,157 million kilowatt hours (kWh) of electricity in 2022; and approximately 54 percent (625 million kWh) of energy consumption was for non-residential uses (CEC 2026a). Total natural gas consumption in 2022 was 52 million therms, approximately 39 percent (20 million therms) of which was for non-residential purposes (CEC 2026b). The County is in the service area for Central Coast Community Energy (3CE), which currently provides at least 35 percent of electricity from renewable resources to customers with a goal of providing 100 percent renewable energy to customers by 2030. A 3CE Prime option is available to customers that provides 100 percent of electricity from renewable resources (3CE 2023).

Buena Vista Landfill is an existing consumer of electricity, natural gas, and petroleum products. Electricity and natural gas are used to power existing waste processing equipment and facilities. Diesel and gasoline are consumed by off-road equipment, waste handling trucks, and personal vehicles. Additionally, landfill gas may be collected and used for electricity generation at the former Ameresco facility located on site below the Old Landfill, similar to the previous operation at the Ameresco facility which ended in 2026, if a new energy reuse partnership is established.

3.6.2 Regulatory Setting

This section describes the federal, state, regional, and local plans, policies, and laws relevant to energy for the Project.

Federal

Energy Policy and Conservation Act (Public Law 94-163)

In 1975, Congress enacted the Energy Policy and Conservation Act, which established the first fuel economy standards for on-road motor vehicles in the United States. Pursuant to the act, the National Highway Traffic Safety Administration is responsible for establishing additional vehicle standards. In 2010, fuel economy standards were set at 27.5 miles per gallon for new passenger cars and 23.5 miles per gallon for new light-duty trucks. Heavy-duty vehicles (i.e., vehicles and trucks over 8,500 pounds gross vehicle weight) were not subject to fuel economy standards in 2010. Passenger cars and light trucks used directly or indirectly associated with a project would be required to comply with the applicable fuel economy standards. Fuel economy is determined based on each manufacturer's average fuel economy for the fleet of vehicles available for sale in the United States.

Energy Independence and Security Act (Public Law 110-140)

The Energy Independence and Security Act of 2007 seeks to provide the nation with greater energy independence and security by increasing the production of clean renewable fuels, improving vehicle fuel economy, and increasing the efficiency of products, buildings, and vehicles. It also seeks to improve the energy performance of the federal government. The act sets increased Corporate Average Fuel Economy Standards, the Renewable Fuel Standard, appliance energy efficiency standards, building energy efficiency standards, and accelerated research and development tasks on renewable energy sources (e.g., solar energy, geothermal energy, and marine and hydrokinetic renewable energy technologies), carbon capture, and sequestration (USEPA 2024).

State

Assembly Bill 1007: State Alternative Fuels Plan

Assembly Bill (AB) 1007 requires the California Energy Commission to prepare a plan to increase the use of alternative fuels in California. The State Alternative Fuels Plan was prepared by the California Energy Commission with the California Air Resources Board (CARB) and in consultation with other federal, state, and local agencies to reduce petroleum consumption, increase use of alternative fuels (e.g., ethanol, natural gas, liquefied petroleum gas, electricity, and hydrogen), reduce greenhouse gas emissions, and increase in-state production of biofuels. The State Alternative Fuels Plan recommends a strategy that combines private capital investment, financial incentives, and advanced technology that will increase the use of alternative fuels, result in significant improvements in the energy efficiency of vehicles, and reduce trips and vehicle miles traveled through changes in travel habits and land management policies. The Alternative Fuels and Vehicle Technologies Funding Program legislation (AB 118, Statutes of 2007) proactively implements this plan.

California Building Standards Code (Title 24, Part 6)

California Code Title 24, Part 6 (also referred to as the California Energy Code) was promulgated by the California Energy Commission in 1978 in response to a legislative mandate to create uniform building

codes to reduce California's energy consumption. The California Energy Code provides energy efficiency standards for residential and non-residential buildings. California's building efficiency standards are updated on an approximately 3-year cycle. The standards are updated periodically to allow consideration and possible incorporation of new energy-efficient technologies and methods. California Code of Regulations, Title 24, Part 11: California Green Building Standards Code (CALGreen) is a comprehensive and uniform regulatory code for all residential, commercial, and school buildings that went in effect on August 1, 2009, and is administered by the California Building Standards Commission. CALGreen is updated on a regular basis, with the most recent approved update consisting of the 2022 California Green Building Code Standards that was effective on January 1, 2023**.**

Renewables Portfolio Standard

The California Renewables Portfolio Standard (RPS) program was established in 2002 under Senate Bills 1078 (Sher) and 107 (Simitian). The RPS program requires investor-owned utilities, electric service providers, and community choice aggregators to increase the use of eligible renewable energy resources to 33 percent of total procurement by 2020. Initially under the RPS, certain retail sellers of electricity were required to increase the amount of renewable energy each year by at least 1 percent to reach at least 20 percent by December 30, 2010. Executive Order S-14-08 was signed in November 2008, which expanded the state's Renewable Energy Standard to 33 percent renewable power by 2020. This standard was adopted by the legislature in 2011 (Senate Bill X1-2). Most recently in 2018, Senate Bill 100 was signed into law, which again increases the RPS to 60 percent by 2030 and requires all the state's electricity to come from carbon-free resources by 2045. By the end of 2022, all electricity providers generally met or exceeded serving 38.5 percent of energy load with RPS-eligible resources, and the three largest providers served 52 percent of their power with renewable sources (CPUC 2024).

Off-Road Diesel-Fueled Fleets Regulation

The CARB Off-Road Regulation became effective in 2008 and was most recently amended in 2022. The regulation limits vehicle idling and requires the phasing out of older vehicles and replacement with engines that meet increasingly stringent emissions standards. The purpose of the regulation is to reduce emissions of diesel particulate matter and nitrogen oxides. However, the replacement of older equipment with newer, more fuel-efficient or alternatively fueled models also reduces fuel use.

Local

Santa Cruz County Climate Action and Adaptation Plan

The County Climate Action and Adaptation Plan (CAAP), approved in 2022, strives to meet the Senate Bill 32 target of reducing greenhouse gas emissions by 40 percent below 1990 levels before 2030, while simultaneously establishing a policy framework to achieve the longer-term target of net-negative greenhouse gas emissions by 2045 (AB 1279). The CAAP includes 29 strategies in seven sectors to achieve these goals, including reducing energy use. Strategy 14 directly relates to Buena Vista Landfill and seeks to reduce the landfill's carbon footprint by eliminating fossil fuel use in new buildings. Other objectives to support the strategy include evaluating new energy-efficient equipment, incorporating electric vehicle and other alternative-energy solutions into landfill plans, and exploring waste-to-energy technologies (Santa Cruz County 2022).

Santa Cruz County General Plan/Local Coastal Program

The County General Plan/Local Coastal Program (LCP) includes objectives and policies that would reduce community energy use by encouraging reduced use of resources, including fuel and energy. For example, Built Environment Element Objective BE-4.2 is to encourage building and site designs that conserve energy. It is supported by Policy BE-4.2.7, Energy Conservation, which encourages development to enable passive solar heating and lighting through building location, orientation and massing wherever practicable. Further energy conservation is encouraged through energy-efficient building envelopes, lighting, heating, cooling, and ventilation systems, and renewable energy design components (Santa Cruz County 2024).

3.6.3 Methodology and Significance Thresholds

Methodology

The analysis of energy impacts follows the guidance and methodologies recommended in Appendix G of the California Environmental Quality Act (CEQA) Guidelines.

Significance Thresholds

The introduction in Chapter 3, Environmental Impact Analysis, states that the significance thresholds used in this analysis are based on Appendix G of the CEQA Guidelines, which provides a sample Initial Study checklist that includes a number of factual inquiries related to the subject of energy and the other environmental topics.

For the purposes of this EIR, a significant impact would occur if implementation of the Project would result in any of the following conditions:

A. Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during Project construction or operation.

B. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

3.6.4 Project Impact Analysis

For each impact, the discussion is separated into Project construction, Project operation, and Project components as needed to describe the potential impact. The overall conclusion or significance determination is presented at the end of the discussion, as well as in parentheses at the end of the numbered impact statement.

As described in Chapter 2, Project Description, the Project components include:

1. Transfer Stations (Transfer Station A and Transfer Station B)
2. Organics Diversion Facility (ODF Option 1 and ODF Option 2)
3. Landfill Closure and Revegetation
4. Optional Improvements: a) Internal Access Road Improvements, b) Scale House Upgrades, c) Recycling Center Upgrades, d) Equipment Parking and Storage Area
5. General Plan/Local Coastal Program Land Use Designation and Zoning Map Amendments

Threshold A:	Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during Project construction or operation.

Impact EN-1 THE PROJECT WOULD NOT RESULT IN POTENTIALLY SIGNIFICANT ENVIRONMENTAL IMPACT DUE TO WASTEFUL, INEFFICIENT, OR UNNECESSARY CONSUMPTION OF ENERGY RESOURCES, DURING PROJECT CONSTRUCTION OR OPERATION. (LESS THAN SIGNIFICANT IMPACT)

Project construction would involve energy usage. Energy use during construction would be primarily in the form of fuel consumption to operate heavy equipment, light-duty vehicles, machinery, generators for power tools, and truck trips for the import and export of material. Temporary grid power may also be provided to construction trailers or electric construction equipment, depending on the location and construction activity. The amount of energy required for construction would vary depending on which ODF option is selected and which optional Project elements are implemented. However, all Project components would require typical construction practices and would not include any components that would result in wasteful or inefficient use of energy during construction. The Project could not be implemented without the use of standard construction equipment and vehicle use and, therefore, energy use would not be unnecessary. Impacts from Project construction, including all components, would be Less than Significant.

Project operation would use energy as described below for the different components.

Transfer Stations (Transfer Station A and Transfer Station B)

Following construction, operation of the transfer stations would require electricity use for the operation of mechanical equipment and proposed office space in each transfer station. No new natural gas use would occur. Additional fuel use would be required for operation of the off-road equipment and transfer vehicles. As discussed in Section 3.17, Transportation, approximately 24 additional trucks would be required per day to transfer waste from Buena Vista Landfill to ReGen Monterey.

Building design would comply with applicable Title 24 building energy efficiency requirements, and the off-road equipment and truck fleet would be subject to increasingly stringent CARB emissions standards. The emissions standards generally result in more fuel-efficient equipment or use of alternative fuels such that use of petroleum fuels is also reduced. Additionally, as described in Section 2.3, Project Purpose and Objectives, the purpose of the Project is to provide an orderly landfill closure while serving the County's ongoing waste management needs. The transfer stations provide a local option for waste disposal, whereby waste can be consolidated into larger transfer vehicles to reduce the number of trips to a regional facility[1] that would otherwise occur with individual vehicles. Therefore, energy use from the transfer stations would not be wasteful, and energy use would be efficient and necessary to serve waste disposal needs. The impact would be Less than Significant**.**

Organics Diversion Facility (ODF Option 1 and ODF Option 2)

Similar to the transfer stations, operation of either ODF option would require the use of energy for operation of mechanical and off-road equipment. ODF Option 2 would result in additional energy demand compared to ODF Option 1 because additional equipment would be required for on-site composting, but would result in less transportation fuel use because less material would be transferred off site. Equipment would be required to comply with statewide energy and fuel

[1] As stated in Section 2.4, Project Components, the ReGen Monterey Landfill is a regional facility located 19 miles south in the City of Marina and is used for planning and analysis purposes based on capacity and relative proximity.

efficiency requirements. Additionally, both options replace the existing ODF. Replacement of existing facilities with upgraded materials and equipment would reduce the net increase in energy required for handling increased organics disposal. Therefore, energy use would not be wasteful or inefficient. As described in Section 2.3, the purpose of the ODF is to respond to state requirements for organics diversion. As such, energy use for ODF operation would not be unnecessary. The impact would be Less than Significant**.**

Landfill Closure and Revegetation

Following construction, the landfill closure and revegetation component would be passive and would not result in any net increase in energy use. Gas generated by the landfill may be used for electricity generation, similar to the former Ameresco facility located onsite, if a new energy reuse partnership is established. The impact would be Less than Significant**.**

Optional Improvements: a) Internal Access Road Improvements, b) Scale House Upgrades, c) Recycling Center Upgrades, d) Equipment Parking and Storage Area

Similar to the landfill closure, internal access road improvements would be passive following construction. These improvements would pave existing roads and would not result in additional vehicle trips to the site.

The scale house and recycling center upgrades would also make improvements to existing facilities that could result in additional electricity or fuel demand for additional equipment. However, the scale house upgrades are intended to improve operations and traffic flow, which would reduce wasteful fuel use from idling. Similar to the ODF, the recycling center improvements would improve the diversion of materials and thus landfill capacity to handle the increased volume of recyclable materials, consistent with statewide waste diversion requirements.

A new equipment parking and storage area would mostly be passive to serve existing storage needs, but may include a fueling station. The station would initially provide diesel fuel and potentially gasoline service. However, the station would serve fuel demand from other Project components as necessary, and it would not generate fuel demand. Also, on-site fueling would be more efficient compared to a need for off-site fueling. It is anticipated that the fueling station would eventually provide alternative fuels to support phasing out of diesel equipment and vehicles over time.

Therefore, energy use for the optional elements would be necessary to support ongoing solid waste diversion and landfill operation, and it would not be wasteful or inefficient. The impact would be Less than Significant**.**

In summary, construction and operation of the Project, including the primary components and optional improvements described above, as well as the associated General Plan/LCP land use designation and zoning map amendments, would not result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources. The impact would be **Less than Significant**. No mitigation is required.

Threshold B:	Conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

Impact EN-2 THE PROJECT WOULD NOT CONFLICT WITH OR OBSTRUCT A STATE OR LOCAL PLAN FOR RENEWABLE ENERGY OR ENERGY EFFICIENCY. (LESS THAN SIGNIFICANT IMPACT)

The County of Santa Cruz CAAP is the applicable local plan for renewable energy and energy efficiency. CAAP Strategy 14 directly relates to energy use at Buena Vista Landfill. This strategy seeks to reduce the landfill's carbon footprint, including eliminating fossil fuel use in new buildings, evaluating new energy-efficient equipment, incorporating electric vehicles and other alternative-energy solutions into landfill plans, and exploring waste-to-energy technologies. As discussed in Section 3.8, Greenhouse Gas Emissions, consistent with this strategy, no new natural gas use would occur as a result of Project implementation.

The Project does not include any components that would interfere with a transition to an alternatively fueled vehicle and equipment fleet. The optional improvement to construct a new parking and storage area would implement the CAAP strategy for installation of electric vehicle charging stations to support an alternatively fueled vehicle fleet.

Additionally, the new transfer stations and ODF equipment would meet current energy efficiency requirements and improve energy efficiency compared to existing equipment. The Project would not impact the potential future use of landfill gas for energy generation. Additionally, all new buildings would comply with, at a minimum, applicable California Building Energy Efficiency Standards (California Code of Regulations, Title 24, Part 6) and CARB vehicle and fleet emissions standards. As such, the Project would implement CAAP strategies related to landfill energy use.

Therefore, the Project, including the primary components and optional improvements described above, as well as the associated General Plan/LCP land use designation and zoning map amendments, would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. The impact would be **Less than Significant.** No mitigation is required.

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3.7 Geology and Soils

This section analyzes the potential impacts of the Buena Vista Landfill Redevelopment Project (Project) related to existing geologic, seismic, and soil conditions and paleontological resources are evaluated in this section. A summary of the potential impacts is presented in **Table 3.7-1**. Information in this section is based on subsurface investigations conducted by Geosyntec Consultants (**Appendices H1, H2, H3, and H4**). All figures are presented at the end of Section 3.7.

Table 3.7-1. Summary of Project Impacts on Geology and Soils

Impact	Significance before Mitigation	Mitigation	Significance after Mitigation
GEO-1. The Project would not cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault or strong seismic ground shaking.	Less than Significant	None Required	Less than Significant
GEO-2. ODF Option 2 could exacerbate exposure of the public to liquefaction or landslide hazards and may be located on a geological unit or soil that could become unstable as a result of lateral spreading, landslides, and liquefaction.	Potentially Significant	GEO-2	Less than Significant
GEO-3. The Project would not result in substantial soil erosion or loss of topsoil.	Less than Significant	None Required	Less than Significant
GEO-4. Transfer Station A and Transfer Station B could exacerbate the existing risk to life or property resulting from expansive soils.	Potentially Significant	GEO-4	Less than Significant
GEO-5. The Project would not have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems.	Less than Significant	None Required	Less than Significant
GEO-6. Ground-disturbing activities during Project construction would not directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.	Less than Significant	None Required	Less than Significant

Notes: The impact, significance determination, and mitigation apply to the Project as a whole, considering all Project components, unless otherwise noted.

ODF = organics diversion facility

3.7.1 Existing Conditions

Geologic Formations and Project Area Soils

Santa Cruz County (County) is located in the Coast Range Geomorphic Province. This province is characterized by parallel northwest-trending mountain ranges formed over the past 10 million years or less by active uplift, as a result of the complex tectonic s of the San Andreas Fault/plate boundary system (CGS 2002). The County is bounded to the north by San Mateo County, to the east by the crest of the Santa Cruz Mountains (Santa Clara County line), to the south by the Pajaro River (Monterey County line), and to the west by the Pacific Ocean (Monterey Bay). The existing geology and soils described below is based on information contained in geotechnical memoranda prepared for the Project (**Appendix H1**).

The Project area is underlain by at least 1,000 feet of a heterogeneous mixture of interbedded gravel, sand, silt, and clay. Surficial stream and terrace deposits overlie approximately 500 feet of fine sands of the Aromas formation. The Aromas formation in turn overlies the Purisima formation, which is approximately 500 feet thick and composed of semiconsolidated sand, silt, clay, and shale.

The Project area is in coastal Santa Cruz County which has step-like marine terraces of Pleistocene age that consist of weakly consolidated to semiconsolidated heterogeneous deposits of moderately to poorly sorted silt, silty clay, sand, and gravel. The Project area lies within a broad band of gently rolling hills of the Monterey Bay coastal plain. This gentle terrain has been incised by numerous small streams draining southward to the Pajaro River, including Harkins Slough to the east and Gallighan Slough to the southwest.

Portions of the area are underlain by recent fluvial terrace deposits consisting of poorly consolidated, heterogenous deposits of gravel, sand, and silts. The fluvial terrace is underlain by the Aromas formation, which consists of clean, course to medium grained sands. Underlying the Aromas Sand formation is the Tertiary Purisima formation, which is too deep to be relevant to site hydrogeologic conditions. Groundwater beneath the site occurs in the Aromas Sand formation, but also occurs in the overlying aeolian and terrace deposits. Perched groundwater zones occur in the aeolian and terrace deposits where the percolation of rainfall and irrigation is inhibited by low permeability horizons in near-surface deposits. Expansive soils are associated with clay-rich sediment deposits on alluvial floodplains.

Seismicity

Santa Cruz County is located in a seismically active region of California, between two major Holocene active faults, including the San Andreas Fault, located along the northeast county boundary, and the San Gregorio Fault, located along the northwest county coast. In addition, the Ben Lomond Fault, Zayante-Vergeles Fault, and Butano Fault are other major faults in the County. These faults are associated with Holocene activity (movement in the last 11,000 years) and are considered to be active (Santa Cruz County 2024). Locations of major regional faults are shown on **Figure 3.7-1**, Major Faults.

Southwest of the San Andreas Fault, the older sedimentary rocks in the California Coast Ranges are moderately to strongly deformed, with steep-limbed folds and several generations of faults associated with uplift of the Santa Cruz Mountains. Along the coast, the ongoing tectonic activity is most evident in the gradual uplift of the coastline as indicated by the series of uplifted marine terraces that have been cut along coastline (City of Santa Cruz 2011).

No known active faults are present in the Project area. The nearest faults are the Zayante-Vergeles Fault located approximately 3 miles to the north and the San Andreas Fault system located approximately 6 miles to the north. The County Local Hazard Mitigation Plan 2021–2026 states that, based on historical evidence, the entire County is vulnerable to ground shaking from earthquakes (Santa Cruz County 2021). The epicenter of the 1989 Loma Prieta earthquake, which was the most intense to strike Santa Cruz County and California since the 1906 San Francisco earthquake, was associated with the San Andreas Fault, approximately 13 miles to the north.

Liquefaction, Lateral Spreading, Landslides, and Subsidence

Unstable soils can result in liquefaction, lateral spreading, landslides, and subsidence.

Soil liquefaction occurs when ground shaking from an earthquake causes a sediment layer saturated with groundwater to lose strength and take on the characteristics of a fluid, thus becoming similar to quicksand. Lateral spreading can occur when a liquefied soil moves toward a free slope face during the

cyclic earthquake loading. Liquefaction-induced lateral spreading can also occur on mild slopes (flatter than 5 percent) underlain by loose sands and a shallow water table. If liquefaction occurs, the unsaturated overburden soil can slide as intact blocks over the lower, liquefied deposit, creating fissures and scarps. Liquefaction and lateral spreading potential in the County is high in lowland areas of Santa Cruz, the Soquel Valley, and the Pajaro River Valley (Santa Cruz County 2021).

Landslides and other forms of mass wasting, including mud flows, debris flows, soil slips, and rock falls, occur as soil or rock moves downslope under the influence of gravity. Intense rainfall or seismic shaking could trigger landslides. Areas subject to landslide hazards are widely dispersed across inland portions of the County (Santa Cruz County 2021). The most concentrated areas of past landslide activity in the County are the western foothills of Ben Lomond Mountain and the foothills that border the County, southeast of State Route 17 (Roberts et al. 1988). The Project area is not located in an area identified on the County landslide map (Santa Cruz County 2024).

The majority of the Project area is not mapped in a known liquefaction or landslide zone, the soils are dense, and no groundwater was encountered at the site. Therefore, there is a very low potential for liquefaction, lateral spreading, or landslides. However, areas along Gallighan Slough, which is located to the east of the Old Landfill, is potentially liquefiable (**Appendix H2**).

The County does not have areas with a high susceptibility to subsidence. The estimated potential for areas in the County that are low susceptibility to subsidence include the coastal areas of the County and inland areas toward the middle of the County (DWR 2014).

Paleontological Resources

Paleontological resources are contained within the geologic deposits or bedrock that underlie the soil layer. Paleontological resources are the fossilized remains, traces, and associated data of plants and animals, preserved in earth's crust, that are generally considered to be older than middle Holocene (approximately 5,000 radiocarbon years before present) (SVP 2010). Body fossils include bones, teeth, shells, leaves, and wood, while trace fossils include trails, trackways, footprints, and burrows. With the exception of fossils found in low-grade metasedimentary rocks, significant paleontological resources are found in sedimentary rock units that are old enough to preserve the remains or traces of plants and animals. The Project area is not located in an area of known paleontological resources within Santa Cruz County (Santa Cruz County 2024).

3.7.2 Regulatory Setting

This section describes the federal, state, and local plans, policies, and laws relevant to geology and soils for the Project.

Federal

Clean Water Act

Stormwater-related erosion is one major source of soil-related impacts. Stormwater discharges from construction activities (such as clearing, grading, excavating, and stockpiling) that disturb 1 or more acres, or smaller sites that are part of a larger common plan of development or sale, are regulated under the Clean Water Act through the National Pollutant Discharge Elimination System (NPDES) Stormwater Program. Prior to discharging stormwater, construction operators must obtain coverage under an NPDES permit. In California, the NPDES General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities (NPDES Construction

General Permit) is promulgated by the State Water Resources Control Board and administered through the local Regional Water Quality Control Board, which for this area, is the Central Coast Regional Water Quality Control Board.

The NPDES Construction General Permit requires the development and implementation of a Stormwater Pollution Prevention Plan (SWPPP). The SWPPP should contain a site map that shows the construction site perimeter, existing and proposed buildings, lots, roadways, stormwater collection and discharge points, general topography before and after construction, and drainage patterns across the Project area. The SWPPP must list best management practices (BMPs) the discharger will use to protect stormwater runoff and indicate the placement of those BMPs. Additionally, the SWPPP must contain a visual monitoring program, a chemical monitoring program for "non-visible" pollutants to be implemented if BMPs fail, and a sediment monitoring plan if the site discharges directly to a water body listed on the 303(d) list for sediment. Section A of the NPDES Construction General Permit describes the elements that must be contained in a SWPPP.

Seismic Design Guidance for Municipal Solid Waste Landfill Facilities

In October 1993 the U.S. Environmental Protection Agency issued the Seismic Design Guidance for Municipal Solid Waste Landfill Facilities. These regulations are applicable to landfills receiving municipal solid waste and establish minimum federal criteria for the siting, design, operation, and closure of municipal solid waste landfills. These regulations apply to the entire waste containment system, including liners, leachate collection systems, and surface water control systems. The document presents field and design procedures to satisfy the earthquake (or seismic) related criteria contained within the regulations.

State

Alquist-Priolo Earthquake Fault Zoning Act

The Alquist-Priolo Earthquake Fault Zoning Act (Alquist-Priolo Act) (PRC 2621 et seq.) is intended to reduce the risk to life and property from surface fault rupture during earthquakes. The Alquist-Priolo Act prohibits the location of most types of structures intended for human occupancy across the traces of active faults, and strictly regulates construction in the areas along active faults (i.e., earthquake fault zones). It also defines criteria for identifying active faults, giving legal weight to terms such as "active," and establishes a process for reviewing building proposals in and adjacent to earthquake fault zones. Under the Alquist-Priolo Act, faults are zoned, and construction along or across them is strictly regulated if they are "sufficiently active" and "well-defined." A fault is considered sufficiently active if one or more of its segments or strands show evidence of surface displacement during Holocene time (defined as within the last 11,000 years). A fault is considered well-defined if its trace can be clearly identified by a trained geologist using standard professional techniques, criteria, and judgment at the ground surface or in the shallow subsurface (CDMG 1997).

Seismic Hazards Mapping Act

Like the Alquist-Priolo Act, the Seismic Hazards Mapping Act of 1990 (PRC 2690–2699.6) is intended to reduce damage from earthquakes. While the Alquist-Priolo Act addresses surface fault rupture, the Seismic Hazards Mapping Act addresses other earthquake-related hazards, including strong ground shaking, liquefaction, and seismically induced landslides. Its provisions are similar in concept to those of the Alquist-Priolo Act: the state is charged with identifying and mapping areas at risk of

strong ground shaking, liquefaction, landslides, and other corollary hazards, and cities and counties are required to regulate development within mapped Seismic Hazard Zones.

California Coastal Act

The California Coastal Commission was established in 1972 and is responsible for protecting, conserving, and restoring water quality in coastal environments as detailed in Sections 30230 and 30231 of the California Coastal Act. The California Coastal Commission establishes policies that address shoreline public access and recreation, habitat protection, aesthetic resources, public works, and other uses. The California Coastal Act provides long-term protection of California's coastline for the benefit of the public. New development and redevelopment projects located in the Coastal Zone are required to apply for a Coastal Development Permit prior to construction. The Coastal Development Permit requires projects to demonstrate water quality protection, including minimization of erosion and soil loss, through the implementation of appropriate BMPs.

California Public Resources Code

Section 5097.5 of the California Public Resources Code states the following:

> No person shall knowingly and willfully excavate upon, or remove, destroy, injure or deface any historic or prehistoric ruins, burial grounds, archaeological or vertebrate paleontological site, including fossilized footprints, inscriptions made by human agency, or any other archaeological, paleontological or historical feature, situated on public lands, except with the express permission of the public agency having jurisdiction over such lands. Violation of this section is a misdemeanor.

Here "public lands" means those owned by or under the jurisdiction of the state or any city, county, district, authority, or public corporation or any agency thereof. Consequently, public agencies are required to comply with California Public Resources Code, Section 5097.5, for their own activities, including construction and maintenance, and for permit actions (e.g., encroachment permits)

Local

Santa Cruz County General Plan/Local Coastal Program

The Public Safety Element of the County General Plan/Local Coastal Program (LCP) contains goals and policies related to seismic hazards.

Goal 6.1 is to "reduce the potential for loss of life, injury, and property damage resulting from earthquakes by: regulating the siting and design of development in seismic hazard areas; encouraging open space, agricultural or low density land use in the fault zones; and increasing public information and awareness of seismic hazards."

Policies in the County General Plan to implement this objective include geological review for development in designated fault zones (Policy 6.1.1), site investigation regarding liquefaction hazard (Policy 6.1.4), and location of new development away from potentially hazardous areas (Policy 6.1.5).

The Agricultural, Natural Resources and Conservation Element of the County General Plan includes goals and policies related to paleontological resources. Specifically, the policies are designed to protect hydrological, geological, and paleontological resources that stand out as rare or unique and representative in Santa Cruz County because of their scarcity, scientific or educational value, aesthetic quality, or cultural significance. The following text is the relevant policy verbatim from page 5-95 of the Agricultural, Natural Resources and Conservation Element.

ARC-6.1.1 (LCP) Protection and Designation of Significant Resources. Protect significant geological features such as caves, large rock outcrops, inland cliffs and special formations of scenic or scientific value, hydrological features such as major waterfalls or springs, and paleontological features, through the environmental review process. Designate such sites on the General Plan and LCP [Local Coastal Program] Resources and Constraints Maps where identified. Currently identified sites of Significant Hydrological, Geological and Paleontological Features are as follows:

Bonny Doon Planning Area:

1. Majors Creek Canyon: The cliffs and exposed rocks of this canyon to the east of Highway 1 are outstanding geologic and scenic features.
2. Martin Road: East and west of Martin Road, encompassed in the botanical sites, are unusual sandhill outcroppings.
3. Wilder Creek: This area contains a concentration of limestone caves worth protecting.
4. Table Rock: Highly scenic coastal rock formations (sedimentary intrusive bodies) can be found in the vicinity of Table Rock and Yellow Bank Creek.

The Bonny Doon Planning Area is located approximately 24 miles to the northwest of the Project area.

Santa Cruz County Code

County Code, Chapter 16.10, sets forth regulations and review procedures for development and construction activities throughout the County and particularly within mapped geologic hazards areas and areas of special flood hazard. Chapter 16.22 is designed to prevent accelerated erosion. Under Section 16.22.040 of the County Code, no personnel shall allow the continued existence of accelerated erosion. Chapter 16.22 requires projects to have an Erosion Control Plan, runoff control, and land clearing approval.

Chapter 16.44 describes requirements for paleontological assessments and reports, permitting requirements for projects on the site of paleontological resources, and required actions when paleontological resources are discovered during excavation or other groundbreaking activities.

3.7.3 Methodology and Significance Thresholds

Methodology

This section describes the potential environmental impacts of the Project relevant to geology and soils, including paleontological resources. The impact analysis is based on an assessment of baseline conditions for the Project area, including topography, geologic formations, seismicity, soils, and soil conditions, as described in Section 3.7.1, Existing Conditions. This analysis identifies potential impacts based on the predicted interaction between the affected environment and construction and operation of the Project and identifies mitigation measures, when necessary, to avoid or minimize impacts.

Significance Thresholds

As described in the introduction in Chapter 3, Environmental Impact Analysis, the significance thresholds used in this analysis are based on Appendix G of the California Environmental Quality Act (CEQA) Guidelines, which is a sample Initial Study checklist that includes a number of factual inquiries related to the subject of geology and soils and other environmental topics. Thus, the

letters and thresholds presented below correspond with the questions in the Appendix G Initial Study checklist.

For the purposes of this Environmental Impact Report (EIR), a significant impact would occur if implementation of the Project would result in any of the following conditions:

A. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:
    1. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault. Refer to Division of Mines and Geology Special Publication 42.
    2. Strong seismic ground shaking.
    3. Seismic-related ground failure, including liquefaction.
    4. Landslides.
B. Result in substantial soil erosion or the loss of topsoil.
C. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the Project and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse.
D. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property.
E. Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water.
F. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

The potential for impacts to significant paleontological resources is based on the potential for ground disturbance to directly impact paleontologically sensitive geologic units. CEQA does not define "a unique paleontological resource or site." However, as stated above, the Society of Vertebrate Paleontology (SVP) broadly defines significant paleontological resources as follows (SVP 2010):

> Fossils and fossiliferous deposits, here defined as consisting of identifiable vertebrate fossils, large or small, uncommon invertebrate, plant, and trace fossils, and other data that provide taphonomic, taxonomic, phylogenetic, paleoecologic, stratigraphic, and/or biochronologic information. Paleontological resources are considered to be older than recorded human history and/or older than middle Holocene (i.e., older than about 5,000 radiocarbon years).

Therefore, the loss of paleontological resources that meet the criteria outlined above (i.e., considered a significant paleontological resource) would be considered a significant impact under CEQA.

3.7.4 Project Impact Analysis

For each impact, the discussion is separated into Project construction, Project operation, and Project components as needed to describe the potential impact. The overall conclusion or significance determination is presented at the end of the discussion, as well as in parentheses at the end of the numbered impact statement.

As described in Chapter 2, Project Description, the Project components include:

1. Transfer Stations (Transfer Station A and Transfer Station B)
2. Organics Diversion Facility (ODF Option 1 and ODF Option 2)

3. Landfill Closure and Revegetation
4. Optional Improvements: a) Internal Access Road Improvements, b) Scale House Upgrades, c) Recycling Center Upgrades, d) Equipment Parking and Storage Area
5. General Plan/Local Coastal Program Land Use Designation and Zoning Map Amendments

Threshold A.1:	Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault. Refer to Division of Mines and Geology Special Publication 42.
Threshold A.2:	Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking.

Impact GEO-1 THE PROJECT WOULD NOT CAUSE POTENTIAL SUBSTANTIAL ADVERSE EFFECTS, INCLUDING THE RISK OF LOSS, INJURY, OR DEATH INVOLVING RUPTURE OF A KNOWN EARTHQUAKE FAULT OR STRONG SEISMIC GROUND SHAKING. (LESS THAN SIGNIFICANT IMPACT)

The Project area is not zoned under the Alquist-Priolo Fault Rupture Zone Act. In addition, there are no known active faults located in the Project area. However, the Project area is located in a highly seismic region near several major fault zones. The nearest faults are the Zayante-Vergeles Fault located approximately 3.4 miles and the San Andreas Fault system located approximately 6.2 miles from the Project area. The Project area is also not located within a County Fault Zone.

Transfer Station A and Transfer Station B would be developed at the landfill site to implement transfer station operations for waste handling and transport. As stated in Section 2.6.2, structures would be designed and constructed in conformance with the most recently adopted California Building Code design parameters, which are specifically tailored to minimize the risk of structure failure due to seismic hazards.

ODF Option 1 would be a continuation of the existing operation located near the northern facility boundary, southwest of and near proposed Transfer Station A. A roof structure would be installed over the area receiving and preprocessing food waste. ODF Option 2 would be located on the "top deck" of the Old Landfill in the southwest portion of the Project area. All areas with organics materials would have a roof structure. All Project structures would be designed and constructed in conformance with the most recently adopted California Building Code design parameters, which are specifically tailored to minimize the risk of structure failure due to seismic hazards. Therefore, conformance with the California Building Code would ensure that impacts relating to ground shaking would be less than significant.

Once capacity of the current active landfill area is reached, the landfill closure and revegetation plan would be implemented. A landfill closure cover system, commonly called a cap, would be installed. It would consist of four layers: foundation, barrier, drainage, and vegetative. Section 20370(e) of Title 27 of the California Code of Regulations requires existing solid waste disposal units to comply with seismic design criteria. As part of the Preliminary Closure Plan, a seismic slope stability analysis was conducted to demonstrate that the final cover is stable. In addition, final cover design would be required to comply with the U.S. Environmental Protection Agency Seismic Design Guidance for Municipal Solid Waste Landfill Facilities requirements for design of landfills located in seismic impact zones.

Therefore, the Project, including the primary components and optional improvements described above, as well as the associated General Plan/LCP Land Use Designation and Zoning Map Amendments, would not exacerbate the existing risk of loss, injury, or death involving strong seismic ground shaking to workers or the public using landfill facilities. The impact would be **Less than Significant**. No mitigation is required.

Threshold A.3:	Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction.
Threshold A.4:	Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving landslides.
Threshold C:	Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the Project and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse.

IMPACT GEO-2 ODF OPTION 2 COULD EXACERBATE EXPOSURE OF THE PUBLIC TO LIQUEFACTION OR LANDSLIDE HAZARDS AND MAY BE LOCATED ON A GEOLOGICAL UNIT OR SOIL THAT COULD BECOME UNSTABLE AS A RESULT OF LATERAL SPREADING, LANDSLIDES, AND LIQUEFACTION. (LESS THAN SIGNIFICANT IMPACT WITH MITIGATION)

Transfer Stations (Transfer Station A and Transfer Station B)

Liquefaction tends to occur in loose, saturated, and fine-grained cohesionless sands, coarse silts, or clays with a low plasticity. For liquefaction to occur, there must be saturation of susceptible soil types and cyclic accelerations of sufficient magnitude to progressively increase the water pressures within the soil mass. Liquefaction-induced lateral spreading occurs when a liquefied soil mass fails toward an open slope face or fails on an inclined topographic slope. The near-surface soils encountered at the location of Transfer Station A and Transfer Station B are not considered susceptible to liquefaction due to such factors as depth to the groundwater table, soil density and grain-size distribution (**Appendix H2**). Because the soils are not susceptible to liquefaction, lateral spreading and seismic settling are not expected. In addition, Transfer Station A and Transfer Station B are not located in an area identified on the County landslide map (Santa Cruz County 2024). In addition, fill and cut slopes required for construction of the transfer stations would be designed as required by the California Building Code. Therefore, the impact for the Transfer Stations component of the Project would be **Less than Significant**, and no mitigation is required.

Organics Diversion Facility (ODF Option 1 and ODF Option 2)

ODF Option 1 would be continuation of the existing operation located near the northern facility boundary, southwest of and near proposed Transfer Station A. The near-surface soils located at ODF Option 1 are not considered susceptible to liquefaction, as described above for Transfer Stations A and B. Therefore, the impact for ODF Option 1 component of the Project would be less than significant, and no mitigation is required.

ODF Option 2 would be located on the "top deck" of the Old Landfill in the southwest portion of the Project area. Portions of the Old Landfill are underlain by terrace deposits and the Aromas **f**ormation; however, stream channel deposits are present along Gallighan Slough, which is located to the northeast and below the Old Landfill (**Appendix H3**). The area along Gallighan Slough,

including the Old Landfill site where ODF Option 2 would be located, is susceptible for liquefaction, which can induce lateral spreading and slope instability and could adversely affect the Old Landfill site and ODF Option 2 facilities, such as the mass-bed aerated static pile (MASP), also called covered aerated static pile compost facility (**Appendix H3**). Consequently, this could pose a risk to people as a result of the structures collapsing during a strong seismic event. Therefore, implementation of ODF Option 2 could cause potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction. This impact would be reduced by requiring a site stability evaluation of the Old Landfill during the final design process and incorporating any recommended measures.

Therefore, this impact of ODF Option 2 would be **Less than Significant with Mitigation** (Mitigation Measure GEO-2). Implementation of Mitigation Measure GEO-2, described below, would reduce the substantial adverse effects including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction.

Landfill Closure and Revegetation

Once capacity of the current active landfill area is reached, the landfill closure and revegetation plan would be implemented. A landfill closure cover system, commonly called a cap, is designed and installed to prevent water infiltration, control gas discharges, and make sure that the overall stability and safety of the landfill design is improved and maintained. The landfill cap would consist of four layers: foundation, barrier, drainage, and vegetative. The active landfill is not located in an area where the soils are susceptible to landslides and liquefaction. Therefore, lateral spreading and slope instability due to landslides and liquefaction are not expected. Therefore, the impact for the landfill closure and revegetation component of the Project would be **Less than Significant**, and no mitigation is required.

Optional Improvements: a) Internal Access Road Improvements, b) Scale House Upgrades, c) Recycling Center Upgrades, d) Equipment Parking and Storage Area

The Project could also include the following improvements and features to support the primary Project purpose and components: a) Internal Access Road Improvements, b) Scale House Upgrades, c) Recycling Center, d) Equipment Parking and Storage Area. The optional elements are not located in an area where soils are susceptible to landslides and liquefaction. The scale house and recycling center are existing uses in paved areas. Further, the scale house upgrades, recycling center upgrades, and equipment parking and storage area would be on flat areas that are paved or heavily disturbed and compacted. Similarly, the internal access roads are existing, compacted dirt roads, which have been used for years by landfill operation vehicles and are considered to be on stable soil, and paving would be implemented in accordance with County standards. Therefore, the Project's optional elements would not be located on soil that is unstable or would become unstable as a result of the project. The impact of the optional elements would be **Less than Significant**, and no mitigation is required.

In summary, ODF Option 2 would be located on the top deck of the Old Landfill, which is susceptible to liquefaction, posing a risk to people if there is a strong seismic event and structures collapse due to unstable soils. This impact would be reduced by requiring a site stability evaluation of the Old Landfill during the final design process and incorporating any recommended measures (Mitigation Measure GEO-2). The other Project components discussed above, as well as the associated General Plan/LCP land use designation and zoning map amendments, would not be located on soil that is

unstable or would become unstable as a result of the Project. Thus, it would not potentially result in slope instability (e.g., landslides, liquefaction, lateral spreading) that would have substantial adverse effects including risk of loss, injury or death. The overall Project impact would be **Less than Significant with Mitigation** (Mitigation Measure GEO-2).

Mitigation Measure GEO-2: Old Landfill Site Stability Evaluation for Organics Diversion Facility Option 2

Due to the high potential for liquefaction at the Old Landfill site where ODF Option 2 is under consideration, the County and qualified geotechnical engineer shall implement the following to evaluate the site stability of the Old Landfill:

1. Prior to design of the ODF Option 2, updated seismic hazard analysis shall be prepared to obtain up to date earthquake motions that address the requirements in the latest edition of the California Building Code and in Title 27 of the California Code of Regulations.
2. A Deformation Analysis shall be prepared to assess the potential movement of the ODF Option 2 and its associated infrastructure. The Deformation Analysis shall evaluate liquefaction and its potential consequences (e.g., sand boils, seismic settlement, lateral spreading, and slope instability) that could be caused by lateral spreading of the liquefiable layer under design earthquake conditions.
3. The ODF Option 2 and its associated infrastructure shall be designed and constructed to accommodate the anticipated deformation and settlement including items such as a mat slab foundation and flexible utility connections
4. Following a seismic event at the Project area that measures IV or greater on the Modified Mercalli scale, the Old Landfill final cover and the ODF Option 2 will be inspected and repaired as necessary to maintain the environmental and structural integrity of the landfill cap and all organic diversion facility infrastructure.

Threshold B:	Result in substantial soil erosion or the loss of topsoil.

IMPACT GEO-3 THE PROJECT WOULD NOT RESULT IN SUBSTANTIAL SOIL EROSION OR LOSS OF TOPSOIL. (LESS THAN SIGNIFICANT IMPACT)

Construction

Project construction activities associated with constructing Transfer Stations A and B, ODF Option 1 or 2, landfill closure and revegetation, and the optional elements (internal access road improvements, scale house and recycling center upgrades, and an equipment parking and storage area) could result in substantial soil erosion or loss of topsoil.

Construction could result in soil erosion or the loss of topsoil due to earthmoving activities such as excavation, filling, grading, utility location and relocation, placement of concrete retaining walls and foundations, installation of metal structures, and placement of crushed aggregate base and paved surface. As described in **Table 2-2**, Construction Estimates, in Chapter 2, the construction of Transfer Station A and B includes 25,000 cubic yards of cut (excavation) and 10,000 cubic yards of embankment (fill); construction of ODF Option 2 includes 3,000 cubic yards of cut (excavation) and no embankment (fill). ODF Option 1 does not include any cut or embankment. Landfill closure and revegetation with ODF Option 1 would include no cut (excavation) and 162,891 cubic yards of embankment (fill).

Landfill closure and revegetation with ODF Option 2 would include no cut (excavation) and 163,529 cubic yards of embankment (fill). Finally, the optional equipment parking and storage area includes 100 cubic yards of cut (excavation) and 350 cubic yards of embankment (fill). The other optional elements would not likely result in soil erosion because the upgrades would be in the paved area with no substantial excavation. During construction, runoff during a large storm has the potential to result in substantial amounts of erosion, resulting in off-site sediment transport via stormwater.

As stated in Section 2.6.2, because construction of the Project would disturb over 1 acre, it would be subject to the NPDES Construction General Permit (Order No. 2012-0006-DWQ) adopted by the State Water Resources Control Board. Compliance with the permit requires each qualifying development project to file a Notice of Intent with the State Water Resources Control Board. Permit conditions require development of a SWPPP, which must describe the site, the facility, erosion and sediment controls, runoff water quality monitoring, means of waste disposal, implementation of approved local plans, control of construction sediment and erosion control measures, maintenance responsibilities, and non-stormwater management controls. Additionally, inspection of construction sites before and after storms is required to identify stormwater discharge from the construction activity and to identify and implement erosion controls, where necessary. Compliance with the NPDES-required SWPPP would reduce the risk of soil erosion.

Further, the Project includes BMPs identified in Section 2.6.5, Best Management Practices, to minimize soil erosion and loss of topsoil and would be implemented during construction. These BMPs include, but are not limited to, the following:

- Erosion and sediment control measures shall be maintained continuously, repaired when and as necessary, and shall be inspected within 24 hours of each rainfall event. Seeded areas shall be checked regularly and shall be watered, fertilized, reseeded, and mulched as necessary to obtain a dense stand of grass.
- All drain inlets shall be protected from siltation. Ineffective protection devices shall be immediately replaced and the inlet cleaned. Flushing is not an acceptable method of cleaning.
- When the crushed stone construction entrance has been covered with soil or has been pushed into the soil by construction traffic, it shall be replaced with a depth of stone equal to that of original application.

Therefore, potential construction-related impacts for all Project components would be **Less than Significant,** and no mitigation is required.

Operation

Transfer Stations (Transfer Station A and Transfer Station B)

Two new waste transfer stations would be developed at the landfill site to implement transfer station operations for waste handling and transport. For Transfer Station A, stormwater surface runoff from new impervious surfaces would be collected at the low point on the back (north) side of the transfer station, directed toward the transfer station, and conveyed via storm pipe infrastructure into the landfills existing stormwater collection system. For Transfer Station B, stormwater surface runoff would be conveyed via curbing and v-ditches to a series of catch basins located within the paved area, similar to current conditions. Therefore, the impact of the transfer stations would be **Less than Significant,** and no mitigation is required.

Also refer to Section 3.10, Hydrology and Water Quality, which provides a comprehensive analysis of the existing and proposed hydrology and drainage features of the Project.

Organics Diversion Facility (ODF Option 1 and ODF Option 2)

The County would continue to divert organic materials (e.g., vegetation/yard waste, food waste) at the Buena Vista facility in compliance with state law organics diversion requirements. The County is considering the following two options for the ODF at the Buena Vista facility. ODF Option 1 would be continuation of the existing operation located near the northern facility boundary, southwest of and near proposed Transfer Station A. ODF Option 2 would relocate the organics diversion operation to the Old Landfill site and would include additional compost processing steps to produce finished compost on site (within the County-owned landfill property).

After construction, the Project would include stormwater management to meet state regulatory compliance requirements. For ODF Option 1, the existing operation area would be primarily paved with this area sloped to the north where the stormwater runoff would be directed by diversion berms into the larger existing stormwater conveyance channels. The area may also include stormwater check dams to slow down the runoff to minimize erosion.

For ODF Option 2, the Old Landfill area would be primarily paved to accommodate operations. Existing slopes lead to stormwater runoff conveying in a southeast direction into an existing bioswale extending along the southeast side, between the Old Landfill and the railroad tracks. The design for ODF Option 2 would maintain the existing grades wherever possible. This would mean using the existing bioswale located on the south portion of this landfill top deck. Paved stormwater berms may be used to direct the stormwater runoff into this bioswale. The swale would be improved and restored so it can convey stormwater as originally designed. The swale may also have erosion control matting and stone check dams to help minimize erosion. Therefore, the impact of ODF Option 1 and Option 2 would be **Less than Significant,** and no mitigation is required.

Also refer to Section 3.10, which provides a comprehensive analysis of the existing and proposed hydrology and drainage features of the Project.

Landfill Closure and Revegetation

Once the capacity of the current active landfill area is reached, the landfill closure and revegetation plan would be implemented. California and federal landfill closure regulations require a landfill cover system, commonly called a cap, to separate waste from the environment, to control erosion by conveying stormwater runoff at non-scouring flow rates, minimize rain infiltration into the waste to prevent the production of leachate, and control and contain landfill gas. As described in Section 2.4, Project Components, the cap includes four layers: foundation, barrier, drainage, and vegetative. The vegetative layer would be 2 inches thick to protect the landfill cap from erosion and support a mixture of grassland species. The proposed surface water management system would control flows on the landfill surface after the final cover has been placed; prevent infiltration, inundation, and ponding on the landfill final cover; minimize erosion of final cover; minimize erosion, slope failure, washout, and over-topping of associated surface water conveyances; and minimize sediments carried off-site. Therefore, the impact of landfill closure and revegetation would be **Less than Significant,** and no mitigation is required.

Also refer to Section 3.10 for additional information regarding drainage and stormwater runoff, including the location of discharge points.

Optional Improvements: a) Internal Access Road Improvements, b) Scale House Upgrades, c) Recycling Center Upgrades, d) Equipment Parking and Storage Area

The Project could also include the following improvements and features to support the primary Project purpose and components: a) Internal Access Road Improvements, b) Scale House Upgrades, c) Recycling Center Upgrades, d) Equipment Parking and Storage Area. The currently unpaved internal landfill roads would be examined to determine if improvements are necessary to support Project implementation. If determined necessary, the roads would be paved, However, similar to existing conditions, stormwater surface runoff from the roadway improvements would flow to the adjacent unpaved areas downslope to the existing drainage system, composed of perimeter and bench drainage ditches and culverts. As discussed in Section 3.10, with implementation of the proposed drainage facilities, impacts related to runoff and erosion would be less than significant level. Upgrades to the scale house and recycling center, which could include adding scales and expanding the recycling center to accommodate more materials, would occur on existing paved areas and would not result in substantial soil or erosion or loss of topsoil. If all or a portion of the recycling activities are relocated to the currently active landfill where the planned ODF Option 1 could be located, the recycling activities would occur in the area that would be paved for ODF Option 1 operations. As described above stormwater runoff would be directed by diversion berms into the larger existing stormwater conveyance channels. The area may also include stormwater check dams to slow down the runoff to minimize erosion.

A new parking and storage area for facility trucks and equipment could be located on the south side of the property on vacant, undeveloped land owned by the County. The site would be paved, sloping from north to south with surface runoff entering the existing drainage swale. Runoff from this location would be handled with a bioswale, underground recharge chambers, or with the use of a Stormceptor system to capture debris and oils while allowing stormwater to flow efficiently. As discussed in Section 3.10, with implementation of the proposed drainage facilities, impacts related to runoff and erosion would be reduced to a less than significant level.

In summary, the Project, including the primary components and optional improvements described above, as well as the associated General Plan/LCP land use designation and zoning map amendments, would not result in substantial soil erosion or loss of topsoil. The impact would be **Less than Significant**. No mitigation is required.

Threshold D:	Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property.

IMPACT GEO-4 TRANSFER STATION A AND TRANSFER STATION B COULD EXACERBATE THE EXISTING RISK TO LIFE OR PROPERTY RESULTING FROM EXPANSIVE SOILS. (LESS THAN SIGNIFICANT IMPACT WITH MITIGATION)

Expansive soils are associated with clay-rich sediment deposits on alluvial floodplains. Transfer Station A and B are underlain by potentially expansive soil (**Appendices H3 and H4**). No other project component is underlain by potentially expansive soil. Therefore, construction of Transfer Station A and Transfer Station B could exacerbate the existing risk to life or property resulting from expansive soils. According to the geotechnical studies (**Appendix H3**), building footings or other structures founded on or adjacent to these potentially expansive soils shall require design measures such as excavation and replacement with non-expansive soils, amendment of the expansive soils with lime or cement, construction of moisture barriers, grading of surfaces to drain away from the area, and restrictions on the use of irrigation and infiltration of stormwater into the subsurface to reduce potential impacts to

less than significant. Therefore, the potential impact for Transfer Station A and Transfer Station B would be **Less than Significant with Mitigation** (Mitigation Measure GEO-4).

The potential impact for the other Project components and optional improvements, as well as the associated General Plan/LCP land use designation and zoning map amendments, would be **Less than Significant**, and no mitigation is required.

In summary, the Project, including the primary components and optional improvements described above, as well as the associated General Plan/LCP land use designation and zoning map amendments, could exacerbate existing risk from construction on expansive soils. The impact would be **Less than Significant with Mitigation** (Mitigation Measure GEO-4).

Mitigation Measure GEO-4: Expansive Soils Design Measures for Specific Structures

Due to the presence of expansive soils where specific structures will be located, the County and their design consultant shall ensure that the final design for the following structures includes design measures for building footings or other structures on or adjacent to these potentially expansive soils, such as excavation and replacement with non-expansive soils, amendment of the expansive soils with lime or cement, construction of moisture barriers, grading of surfaces to drain away from the area, and/or restrictions on the use of irrigation and/or infiltration of stormwater into the subsurface.

Proposed Project: Transfer Stations A and B

Threshold E:	Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater.

IMPACT GEO-5 THE PROJECT WOULD NOT HAVE SOILS INCAPABLE OF ADEQUATELY SUPPORTING THE USE OF SEPTIC TANKS OR ALTERNATIVE WASTEWATER DISPOSAL SYSTEMS. (LESS THAN SIGNIFICANT IMPACT)

Wastewater would be generated at Transfer Stations A and B from the restrooms and the contact water internal to the transfer station operation, including the tipping floor where there may be contact water from waste on the floor or from washing the building interior with a pressure washer. Wastewater from Transfer Station A and Transfer Station B would be collected in a new underground wastewater holding tank adjacent to the office and pumped out and hauled to a wastewater treatment facility as needed. No septic tanks or alternative wastewater disposal tanks are required for any other Project component.

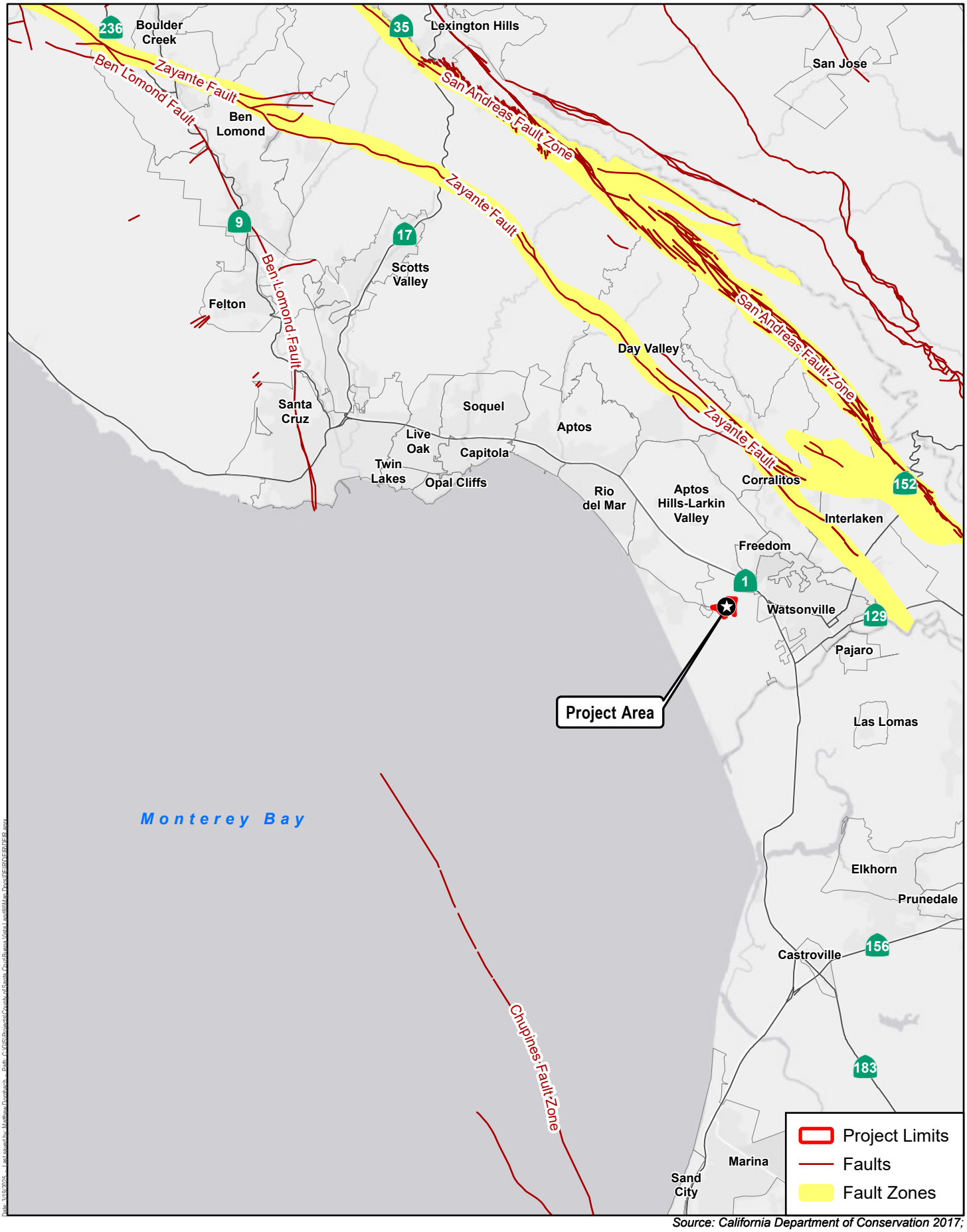
The other Project components would not require the use of septic tanks or alternative wastewater disposal systems.

Therefore, the Project, including the primary components and optional improvements described above, including the associated General Plan/LCP land use designation and zoning map amendments, would not result in a potential impact associated with soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems. The impact would be **Less than Significant.** No mitigation is required.

Threshold F:	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

IMPACT GEO-6 GROUND-DISTURBING ACTIVITIES DURING PROJECT CONSTRUCTION WOULD NOT DIRECTLY OR INDIRECTLY DESTROY A UNIQUE PALEONTOLOGICAL RESOURCE OR SITE OR UNIQUE GEOLOGIC FEATURE. (LESS THAN SIGNIFICANT IMPACT)

The Project area is not located in an area of known paleontological resources within Santa Cruz County (Santa Cruz County 2024). In addition, no unique paleontological resources or sites or unique geologic features are known to occur in the vicinity of the Project. Therefore, the Project, including the primary components and optional improvements described above, as well as the associated General Plan/LCP land use designation and zoning map amendments, would not directly or indirectly destroy a unique paleontological resource or site or unique geologic feature. The impact would be **Less than Significant**. No mitigation is required.



Source: California Department of Conservation 2017;

Harris & Associates

N

0 2.5 5

Miles

Figure 3.7-1

Location of Major Faults

Buena Vista Landfill Environmental Impact Report

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3.8 Greenhouse Gas Emissions

This section describes regional greenhouse gas (GHG) emission sources and inventories and the regulatory framework applicable to GHG emissions and evaluates impacts related to GHG emissions resulting from the Buena Vista Landfill Redevelopment Project (Project) construction and operation. **Table 3.8-1** summarizes identified Project impacts related to GHG emissions/climate change.

Table 3.8-1. Summary of Project Impacts Related to Greenhouse Gas Emissions

Impact	Significance before Mitigation	Mitigation	Significance after Mitigation
GHG-1. The Project would not result in GHG emissions that would have a significant impact on the environment.	Less than Significant	None Required	Less than Significant
GHG-2. The Project would result in tree removal that would be inconsistent with applicable GHG reduction plans.	Potentially Significant	BIO-14	Less than Significant
GHG-3. The Project would not expose people or structures to substantial risk of loss, injury, or death as a result of flooding from projected sea level rise and storms.	Less than Significant	None Required	Less than Significant

Note: The impact, significance determination, and mitigation apply to the Project as a whole, considering all Project components, unless otherwise noted.

GHG = greenhouse gas

3.8.1 Existing Conditions

Climate Change and Greenhouse Gases

Climate change is the observed increase in the average temperature of Earth's atmosphere and oceans, along with other substantial changes in climate (such as wind patterns, precipitation, and storms) over an extended period of time. The baseline against which these changes are measured originates in historical records identifying temperature changes that have occurred in the past, such as during previous ice ages. The global climate is continuously changing, as evidenced by repeated episodes of substantial warming and cooling documented in the geologic record. The rate of change has typically been incremental, with warming or cooling trends occurring over the course of thousands of years. The past 10,000 years have been marked by a period of incremental warming, as glaciers have steadily retreated across the globe. However, scientists have observed acceleration in the rate of warming during the past 150 years, and the prevailing scientific opinion on climate change is that most of the observed increase in global average temperatures since the mid-20th century is likely due to the observed increase in anthropogenic (human-induced) GHG concentrations (IPCC 2013).

Gases that absorb and re-emit infrared radiation in the atmosphere are called GHGs. They are present in the atmosphere naturally and are released by natural sources or formed from secondary reactions taking place in the atmosphere. The gases that are widely seen as the principal contributors to human-induced climate change include carbon dioxide (CO_2), methane (CH_4), nitrous oxides (N_2O), and fluorinated gases such as hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride (SF_6). Water vapor is excluded from the list of GHGs because it is short lived in the atmosphere and its atmospheric concentrations are largely determined by natural processes, such as oceanic evaporation. The following discusses the primary GHGs of concern.

Carbon Dioxide

The global carbon cycle is made up of large carbon flows and reservoirs. Billions of tons of carbon in the form of CO_2 are absorbed by oceans and living biomass (i.e., sinks) and are emitted to the atmosphere annually through natural processes (i.e., sources). When in equilibrium, carbon fluxes among these various reservoirs are roughly balanced (USEPA 2026). CO_2 was the first GHG demonstrated to be increasing in atmospheric concentration, with the first conclusive measurements being made in the last half of the 20th century. Currently, CO_2 represents an estimated 64 percent of total GHG emissions (USEPA 2024a). The largest source of CO_2 and of overall GHG emissions is fossil fuel combustion.

Methane

CH_4 is an effective absorber of radiation, although its atmospheric concentration is less than that of CO_2 and its lifetime in the atmosphere is limited to 10 to 12 years. Since 1750 (pre-industrial years), the concentration of CH_4 in the atmosphere has increased by 150 percent, although emissions have declined from 1990 levels (IPCC 2013). Anthropogenic sources of CH_4 include agricultural activities, waste management, energy use, and biomass burning (USEPA 2024a).

Nitrous Oxides

Concentrations of N_2O began to rise at the beginning of the industrial revolution and continue to increase at a relatively uniform growth rate (NOAA 2024). N_2O is produced by microbial processes in soil and water, including those reactions that occur in fertilizers that contain nitrogen, fossil fuel combustion, and other chemical processes. Use of these fertilizers has increased over the last century. Agricultural soil management and mobile source fossil fuel combustion are the major sources of N_2O emissions.

Fluorinated Gases

Fluorinated gases are powerful GHGs that are emitted from a variety of industrial processes. Fluorinated gases are used as substitutes for ozone-depleting substances such as chlorofluorocarbons, hydrochlorofluorocarbons, and halons, which have been regulated since the mid-1980s because of their ozone-destroying potential and were phased out under the Montreal Protocol (1987) and Clean Air Act Amendments of 1990. Electrical transmission and distribution systems account for most SF_6 emissions, while perfluorocarbon emissions result from semiconductor manufacturing and as a by-product of primary aluminum production. The Project does not propose any new sources of fluorinated gases, and these gases are not included in the analysis below.

Global Warming Potential

Different types of GHGs have varying global warming potential (GWP). The GWP of a GHG is the potential of a gas or aerosol to trap heat in the atmosphere over a specified timescale (generally, 100 years). The carbon dioxide equivalent (CO_2e) metric is a consistent methodology used for comparing GHG emissions, because it normalizes various GHG emissions to a consistent measure. CO_2e is the amount of a GHG emitted multiplied by its GWP. Carbon dioxide has a GWP of 1. By contrast, CH_4 has a GWP of 25, meaning its global warming effect is 25 times greater than carbon dioxide on a molecule-per-molecule basis. Therefore, 1 metric ton (MT) of CH_4 is equal to 25 MT CO_2e. The GWP of N_2O is approximately 298 times that of CO_2. Fluorinated gases are typically emitted in smaller quantities than CO_2, CH_4, and N_2O, but these compounds have much higher GWPs. SF_6 is the most potent GHG the

Intergovernmental Panel on Climate Change (IPCC) has evaluated, with a GWP of 23,500 (CAPCOA 2022). The total emissions of the pollutants of concern for the Project (CO_2, CH_4, and N_2O) are reported together using the CO_2e metric in the analysis in Section 3.8.3, Methodology and Significance Thresholds.

Greenhouse Gas Emissions Inventories

Worldwide anthropogenic emissions of GHG were approximately 49,000 million metric tons (MMT) CO_2e in 2010. CO_2 emissions from fossil fuel use accounts for 32,000 MMT. CO_2 emissions from all sources account for 76 percent of the total. CH_4 emissions account for 16 percent of GHGs, and N_2O emissions account for 6 percent (IPCC 2014).

Total U.S. GHG emissions were 6,343 MMT CO_2e in 2022. Emissions increased by 1 percent in 2022 compared to the previous year. The increase in total GHG emissions was driven largely by an increase in CO_2 emissions from fossil fuel combustion. This increase in fossil fuel consumption emissions was from increased energy use, due in part to the continued rebound in economic activity after the height of the COVID-19 pandemic. Relative to 2005, gross emissions in 2022 decreased by 17 percent. CO_2 emissions from fossil fuel combustion continue to be the largest source of U.S. GHG emissions, accounting for 80 percent of emissions in 2022. Transportation was the largest emitter of CO_2 in 2020 followed by electric power generation (USEPA 2024b).

Based on the California Air Resources Board (CARB) California Greenhouse Gas Inventory for 2000–2022, California produced 371.1 MMT CO_2e in 2022 (CARB 2024). Transportation is the major source of GHG in California, contributing approximately 38 percent of the state's total GHG emissions. Emissions from this sector decreased by 3.6 percent compared to 2021, primarily due to a greater share of fuels used for on-road transportation being produced from non-fossil resources. Industrial operations are the second largest source, contributing 20 percent of the state's GHG emissions. California's GHG emissions have followed a declining trend since 2007, with the exception trends from 2019 through 2021, due in large part to the impacts of the COVID-19 pandemic. Specifically, emissions from the electricity sector continue to decline due to growing zero GHG energy generation sources.

An inventory of GHG emissions in the County of Santa Cruz (County) was prepared as part of the County's Climate Action and Adaptation Plan (CAAP). In 2019, total emissions for community activities were approximately 691,262 MT CO_2e. The 2019 inventory indicates that 51 percent of the community emissions were generated by passenger vehicles (Santa Cruz County 2022). Residential natural gas was the second largest contributor, with approximately 16 percent of community emissions.

Potential Effects of Climate Change

Potential effects of climate change in California include sea level rise, loss of water supply and snowpack, more numerous large forest fires, damage to agriculture, public health impacts, and habitat destruction (OAG 2022). The Santa Cruz County Coastal Climate Change Vulnerability Reports was prepared for the County to provide greater detail on the risks to resources and assets from coastal climate change (Central Coast Wetlands Group 2017). The landfill is included in the report study area. Harkins Slough and Gallighan Slough, adjacent to the Project area, are identified as a potential risk area for sea level rise and coastal flooding. However, the landfill is located outside the hazard area.

3.8.2 Regulatory Setting

This section describes the international, federal, state, and local plans, policies, and laws relevant to GHG emissions/climate change for the Project.

International

Intergovernmental Panel on Climate Change

In 1988, the United Nations and the World Meteorological Organization established the IPCC to assess the scientific, technical, and socioeconomic information relevant to understanding the scientific basis for human-induced climate change, its potential impacts, and options for adaptation and mitigation. The most recent IPCC reports emphasized the scientific consensus that real and measurable changes to the climate are occurring, that they are caused by human activity, and that significant adverse impacts on the environment, the economy, and human health and welfare are unavoidable.

Federal

U.S. Environmental Protection Agency Endangerment Finding and Cause or Contribute Finding

In December 2009, the administrator of the U.S. Environmental Protection Agency (USEPA) signed the Endangerment Finding, which found that GHGs in the atmosphere threaten the public health and welfare of current and future generations. Although the Endangerment Finding does not place requirements on industry, it is an important step in the USEPA's process to develop regulations. This action was a prerequisite to finalizing the USEPA's proposed GHG emissions standards for light-duty vehicles. In the USEPA's Cause or Contribute Finding, the administrator found that the combined emissions of GHGs from new motor vehicles and new motor vehicle engines contribute to GHG pollution that threatens public health and welfare (NRDC 2017).

State

Executive Order S-3-05

On June 1, 2005, California's Governor announced, through Executive Order (EO) S-3-05, the following GHG emissions reduction targets:

- By 2010, California shall reduce GHG emissions to 2000 levels.
- By 2020, California shall reduce GHG emissions to 1990 levels.
- By 2050, California shall reduce GHG emissions to 80 percent below 1990 levels.

EO S-3-05 directed the Secretary of the California Environmental Protection Agency to coordinate efforts to meet the targets with the heads of other state agencies (the Secretary of the California Business, Transportation and Housing Agency; Secretary of the California Department of Food and Agriculture; Secretary of the California Resources Agency; Chairperson of CARB; Chairperson of the California Energy Commission; and the President of the California Public Utilities Commission). This group became the California Climate Action Team. In 2006, the state Legislature passed the California Global Warming Solutions Act of 2006 (Assembly Bill [AB] 32), which created a comprehensive, multiyear program to reduce GHG emissions in California, as described below. In 2016, the state Legislature passed Senate Bill (SB) 32, which codifies a 2030 GHG emissions reduction target of 40 percent below 1990 levels.

Assembly Bill 32, the California Global Warming Solutions Act of 2006

In September 2006, the state Legislature adopted AB 32, the California Global Warming Solutions Act of 2006. AB 32 focuses on reducing GHG emissions in California. GHGs as defined under AB 32 include CO_2, CH_4, N_2O, chlorofluorocarbons, hydrofluorocarbons, perfluorocarbons, and SF_6. Under AB 32, CARB has the primary responsibility for reducing GHG emissions and continues with the Climate Change Action Team to coordinate statewide efforts and promote strategies that can be undertaken by many other California agencies. AB 32 required CARB to adopt rules and regulations that would achieve GHG emissions equal to statewide levels in 1990 by 2020.

In general, AB 32 directed CARB to do the following:

- Prepare and approve a Scoping Plan for achieving the maximum technologically feasible and cost-effective reductions in GHG emissions from sources or categories of sources of GHGs by 2020 and update the Scoping Plan every 5 years
- Maintain and continue reductions in emissions of GHG beyond 2020
- Identify the statewide level of GHG emissions in 1990 to serve as the emissions limit to be achieved by 2020
- Identify and adopt regulations for discrete early actions that could be enforceable on or before January 1, 2010
- Adopt a regulation that establishes a system of market-based declining annual aggregate emission limits for sources or categories of sources that emit GHG emissions
- Convene an Environmental Justice Advisory Committee to advise CARB in developing and updating the Scoping Plan and any other pertinent matter in implementing AB 32
- Appoint an Economic and Technology Advancement Advisory Committee to provide recommendations for technologies, research, and GHG emissions reduction measures

Regarding the first bulleted item above, the initial 2008 Scoping Plan was approved by CARB on December 11, 2008, and included measures to address GHG emissions reduction strategies related to energy efficiency, water use, and recycling and solid waste, among other measures (CARB 2008).

The 2017 Scoping Plan was adopted in November 2017. The 2017 Scoping Plan incorporates the 2030 target set by EO B-30-15 and codified by SB 32. It identifies how the state can reach the 2030 climate target and substantially advance toward our 2050 climate goal to reduce GHG emissions by 80 percent below 1990 levels (CARB 2017).

The most recent update to the Scoping Plan, the 2022 Scoping Plan, was adopted by CARB in December 2022. The 2022 Scoping Plan assesses progress toward the statutory 2030 target and identifies a path to achieving carbon neutrality by 2045 (CARB 2022).

Executive Order B-55-18

In September 2018, Governor Brown signed EO B-55-18 to establish a statewide goal to achieve carbon neutrality as soon as possible, and no later than 2045, and to achieve and maintain net-negative emissions thereafter (CARB 2022). Policies and programs undertaken to achieve this goal include the following:

- Seek to improve air quality and support the health and economic resiliency of urban and rural communities, particularly low-income and disadvantaged communities.
- Be implemented in a manner that supports climate adaptation and biodiversity, including protection of the state's water supply, water quality, and native plants and animals.

As described above, the 2022 Scoping Plan has been prepared to identify and recommend measures to achieve the carbon neutrality goal.

Senate Bill 32

Effective January 1, 2017, SB 32 (Stats. 2016, Ch. 249) added a new Section 38566 to the California Health and Safety Code. It states that "in adopting rules and regulations to achieve the maximum technologically feasible and cost-effective greenhouse gas emissions reductions authorized by [Division 25.5 of the California Health and Safety Code], [CARB] shall ensure that statewide greenhouse gas emissions are reduced to at least 40 percent below the statewide greenhouse gas emissions limit no later than December 31, 2030." In other words, SB 32 requires California, by the year 2030, to reduce its statewide GHG emissions so that they are 40 percent below those that occurred in 1990.

Executive Order S-13-08

On November 14, 2008, the Governor issued EO S-13-08, the Climate Adaptation and Sea Level Rise Planning Directive that provides clear direction for how the state should plan for future climate impacts. EO S-13-08 identifies the following four key actions to reduce the vulnerability of California to climate change:

1. Initiate California's first statewide Climate Change Adaptation Strategy that will assess the state's expected climate change impacts, identify where California is most vulnerable, and recommend climate adaptation policies
2. Request the National Academy of Science establish an expert panel to report on sea level rise impacts in California in order to inform state planning and development efforts
3. Issue interim guidance to state agencies for how to plan for sea level rise in designated coastal and floodplain areas for new and existing projects
4. Initiate studies on critical infrastructure projects and land use policies vulnerable to sea level rise

In accordance with EO S-13-08, the Climate Change Adaptation Strategy was developed by the California Natural Resources Agency, in coordination with the California Environmental Protection Agency; Climate Change Action Team; the Business, Transportation, and Housing Agency; California Department of Public Health; and other key stakeholders. Adopted in 2009, the Climate Change Adaptation Strategy synthesizes the most up-to-date information on expected climate change impacts to California for policy makers and resource managers, provides strategies to promote resiliency to these impacts, and develops implementation plans for short- and long-term actions (CNRA 2009).

In 2021, the California Natural Resources Agency released an update to the Climate Change Adaptation Strategy. The update provides recommendations and a framework for policy initiatives in response to the impacts of climate change, with additional considerations for fully integrating equity into California's climate resilience programs (CNRA 2022).

Assembly Bill 1279

Enacted in September 2022, AB 1279, the California Climate Crisis Act, updates the goals of AB 32. The bill established a statewide goal to achieve net-zero GHG emissions by 2045 and achieve and maintain net-negative GHG emissions thereafter. Additionally, the bill established a specific target for statewide anthropogenic GHG emissions to be reduced to at least 85 percent below 1990 levels by 2045. The bill requires CARB to work with relevant state agencies to ensure that updates to the Scoping Plan identify and recommend measures to achieve these policy goals and to identify and implement a variety of

policies and strategies that enable CO_2 removal solutions and carbon capture, utilization, and storage technologies in California, as specified. The bill also requires CARB to submit an annual progress report. The 2022 Scoping Plan lays out a path to achieve targets for carbon neutrality and reduce anthropogenic GHG emissions by 85 percent below 1990 levels no later than 2045, as directed by AB 1279 (CARB 2022).

Local

Santa Cruz County Climate Action and Adaptation Plan

The County CAAP, approved in 2022, strives to meet the SB 32 target of reducing GHG emissions by 40 percent below 1990 levels before 2030, while simultaneously establishing a policy framework to achieve the longer-term target of net-negative GHG emissions by 2045 (AB 1279). The CAAP includes 29 strategies in seven sectors to achieve these goals, including strategies 14 through 16 related to waste management. Strategy 14 directly relates to Buena Vista Landfill and seeks to reduce the landfill's carbon footprint. The priority for this strategy is eliminating fossil fuel use in new buildings. Other objectives to support the strategy include evaluating new energy-efficient equipment, incorporating electric vehicle and other alternative-energy solutions into landfill plans, and exploring waste to energy technologies. Strategy 15 and 16 seek to increase diversion of waste from landfills and increase demand for organic waste products. Other relevant strategies include the natural and working lands strategies for conservation of natural habitat and increasing the urban canopy.

Santa Cruz County General Plan/Local Coastal Program

Several elements of the Santa Cruz County General Plan/Local Coastal Program (LCP) include objectives and policies that would reduce community GHG emissions by encouraging reduced use of resources, including fuel, energy, and water. As described in greater detail in Section 3.11, Land Use and Planning, the Santa Cruz County General Plan/LCP was updated as part of the County's Sustainability Update to make the County General Plan and County Code consistent with new state laws and new regional and local plans related to sustainable development. Objectives and policies pertinent to GHG emissions related to landfill operation are listed by element below (Santa Cruz County 2024).

BUILT ENVIRONMENT ELEMENT

- **Policy BE-4.2.9 – Construction Material Conservation.** Reduce the volume of construction waste going to landfills through promoting retention and reuse of existing structures, efficient design and construction techniques, use of recycled-content materials, and structure deconstruction instead of demolition.

PARKS, RECREATION AND PUBLIC FACILITIES ELEMENT

- **Policy PPF-4.5.1 Materials Recovery.** Establish, in conformance with state law, materials recovery through recycling, reuse, and composting, as the primary and fundamental strategy of solid waste management by the County, with landfill disposal as a secondary and essential component. Designate materials recovery and reuse projects as a funding priority in allocating capital expenditures for solid waste management.
- **Policy PPF-4.5.2 Zero Waste.** Take into account the whole materials management system to achieve a zero waste goal by focusing on reducing and eliminating materials from entering into the waste stream first and foremost; as a secondary strategy focus on reusing materials; and as a tertiary strategy recycling and composting all remaining materials for their highest and best use.

AGRICULTURE, NATURAL RESOURCES, AND CONSERVATION ELEMENT

- **Objective ARC-1.5 – Sustainable Agricultural Practices.** To support sustainable agricultural and land management practices on commercial and noncommercial agricultural lands, including efficient use of water and energy, reduction of agricultural waste entering landfills, and adaption to climate change.

3.8.3 Methodology and Significance Thresholds

Methodology

The Project's construction- and operation-related GHG emissions are estimated using the California Emissions Estimator Model (CalEEMod), Version 2022.1.1.12.

Construction modeling is based on construction assumptions summarized in Section 2.6, Project Construction, and consistent with the modeling assumptions described in Section 3.3, Air Quality. Detailed construction information is not available for the optional internal access road improvements, scale house upgrades, or recycling center upgrades. If implemented, these components would require additional use of off-road equipment and truck trips and thus would result in additional GHG emissions. Construction of these components would require less construction activity compared to the Project components that have been quantified, including the transfer stations, organics diversion facility (ODF), landfill closure, and optional equipment and parking storage area. The optional access road improvements would be similar to the roadway improvements included in construction of Transfer Station A. Installation of additional scales would not require earthwork, and the equipment fleet needed for installation would not exceed that assumed for more intense construction activities such as building construction and grading. Recycling center expansion or relocation would likely require construction activities similar to Transfer Station construction. Therefore, earthwork and paving emissions from Transfer Station A are assumed to represent access road improvements, and Transfer Station B emissions are assumed to represent scale house and recycling center upgrades.

For operation modeling, the Project's net increase in energy, solid waste, and water use demand are conservatively based on the default assumptions for the CalEEMod manufacturing land use, except where Project-specific information is available. Estimated energy demand for the new composting operation at ODF Option 2 was provided by SCS Engineers. Energy emissions conservatively assume CalEEMod default forecast (Year 2028) emissions factors for Central Coast Community Energy. The manufacturing land use was determined to be the most representative of Project operation, because it is intended to represent land uses where the primary activity is the conversion of raw materials into finished products, and generally also has office functions at the site. The Project would include operation of equipment to handle and process materials, and it includes supporting office uses at the transfer stations. If implemented, it is assumed that the optional equipment parking and storage facility would include up to four pump stations. No new natural gas use would occur as a result of Project implementation. New non-mobile materials handling equipment and heating, ventilation, and air conditioning systems would include electric-powered equipment. The analysis focuses on CO_2, CH_4, and N_2O because these represent most of the Project's GHG emissions. Detailed construction modeling assumptions are available in **Appendix F**, Air Quality and GHG Modeling Assumptions.

Disposal of waste in landfills is a typical source of CH_4 emissions. The Project addresses landfill operations, including transfer of waste to be landfilled, but Project operation does not generate the waste. The Project is designed to address the waste disposal needs of existing and future land uses in

the County. As such, CH_4 emissions resulting from disposal of solid waste generated by other land uses is not attributable to the Project and not calculated for this analysis.

Significance Thresholds

The introduction in Chapter 3, Environmental Impact Analysis, states that the significance thresholds used in this analysis are based on Appendix G of the California Environmental Quality Act (CEQA) Guidelines, which provides a sample Initial Study checklist that includes a number of factual inquiries related to the subject of GHG emissions and other environmental topics. The letters and thresholds presented below (A and B) correspond with the questions in the Appendix G of CEQA Guidelines Initial Study checklist.

The CEQA Guidelines do not quantify the amount of GHG emissions that would constitute a significant impact on the environment. Determination of the significance of GHG emissions is at the discretion of the lead agency, who may consider thresholds of significance previously adopted or recommended by other public agencies or recommended by experts (CEQA Guidelines, Sections 15064.4[a], 15064.7[c]).

In addition to the two thresholds (A and B) from the CEQA Guidelines Appendix G Initial Study checklist, this analysis includes a third threshold (C). Threshold C addresses the potential for the Project to expose people or structures to risks related to climate change, specifically flooding related to sea level rise or storms. Therefore, for the purposes of this Environmental Impact Report, a significant impact would occur if implementation of the Project would:

A. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.

B. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

C. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death as a result of flooding from projected sea level rise and storms.

Threshold A is focused on the generation of anthropogenic emissions. Neither the Monterey Bay Air Resources District nor the County has adopted an evidence-based numeric threshold consistent with the 2022 Scoping Plan and the state's long-term GHG reduction goals. The County has an adopted CAAP, but the plan does not include a threshold or Project-specific requirements for determining if Project emissions are cumulatively considerable. Therefore, it is not considered "qualified" for tiering to determine the significance of a Project according to CEQA Guidelines, Section 15183.5.

The Monterey Bay Air Resources District in the past has recommended use of the Bay Area Air Quality Management District (BAAQMD) adopted thresholds. The BAAQMD has recently released CEQA thresholds that address the state's long-term goal of carbon neutrality; however, the thresholds are specific to land use development projects and consist of Project-specific design features that do not apply to changes to existing municipal infrastructure operations (BAAQMD 2022). However, the overall strategy of the BAAQMD thresholds (building electrification, vehicle miles traveled (VMT) efficiency, and support for future alternatively fueled vehicles) are consistent with the GHG reduction strategies identified in the 2022 Scoping Plan and County CAAP. The CARB's 2022 Scoping Plan for Achieving Carbon Neutrality (2022 Scoping Plan) outlines a statewide path to achieving the net-zero statewide emissions goal of AB 1279. In the absence of an adopted local plan,

the 2022 Scoping Plan has been determined to be the appropriate tool to determine the significance of Project GHG emissions. The Project would result in a potentially significant impact related to GHG emissions under Threshold A if it conflicted with implementation of the 2022 Scoping Plan. As the applicable plan adopted for the purposes of reducing GHG emissions, 2022 Scoping Plan consistency is also the applicable threshold for Threshold B. As such, the discussions of significance for Threshold A and Threshold B are combined below. Additionally, although the CAAP is not qualified to determine the significance of GHG emissions, it is an applicable plan to reduce GHGs, and the Project is also evaluated for CAAP consistency.

3.8.4 Project Impact Analysis

For each impact, the discussion is separated into Project construction, Project operation, and Project components as needed to describe the potential impact. The overall conclusion or significance determination is presented at the end of the discussion, as well as in parentheses at the end of the numbered impact statement.

As described in Chapter 2, Project Description, the Project components include:

1. Transfer Stations (Transfer Station A and Transfer Station B)
2. Organics Diversion Facility (ODF Option 1 and ODF Option 2)
3. Landfill Closure and Revegetation
4. Optional Improvements: a) Internal Access Road Improvements, b) Scale House Upgrades, c) Recycling Center Upgrades, d) Equipment Parking and Storage Area
5. General Plan/Local Coastal Program Land Use Designation and Zoning Map Amendments

Threshold A:	Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.
Threshold B:	Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

Impact GHG-1 THE PROJECT WOULD NOT RESULT IN GHG EMISSIONS THAT WOULD HAVE A SIGNIFICANT IMPACT ON THE ENVIRONMENT. (LESS THAN SIGNIFICANT IMPACT)
Impact GHG-2 THE PROJECT WOULD RESULT IN TREE REMOVAL THAT WOULD BE INCONSISTENT WITH APPLICABLE GHG REDUCTION PLANS. (LESS THAN SIGNIFICANT IMPACT WITH MITIGATION)

Project construction and net change in operational GHG emissions are calculated below for informational purposes, followed by a comparison of the Project to the applicable GHG reduction strategies of the 2022 Scoping Plan and County CAAP.

Construction Emissions

Temporary impacts related to construction activities would result in the temporary generation of GHG emissions from operation of heavy construction equipment and generation of construction-related truck and vehicle trips. The total GHG emissions estimated for construction of the Project were estimated using CalEEMod, as described in the methodology above and presented in **Appendix F**. Construction conservatively assumes construction of ODF Option 2, which would require a greater construction effort than ODF Option 1, and implementation of the optional components. **Table 3.8-2** summarizes annual emissions for each construction year for all Project components, based on the

anticipated schedule outlined in Section 2.6. The estimated worst-case total emissions for all Project components are 3,515 MT CO_2e. Estimated worst-case emissions for a given construction year are approximately 1,181 MT CO_2e.

Table 3.8-2. Project Construction Greenhouse Gas Emissions

Construction Year	Project Components	Annual MT CO_2e
2027	Transfer Station A, ODF, Optional Equipment Parking and Storage Area	771
2028	Landfill Closure	1,181
2029	Landfill Closure, Transfer Station B	1,087
2030	Landfill Closure	34
Unknown	Optional access road, scale house, and recycling center improvements	442
Total		3,515

Source: Appendix F.

Notes: Worst-case emissions assume construction of ODF Option 2 and all optional project elements. Earthwork and paving emissions from Transfer Station A are assumed to represent access road improvements, and Transfer Station B emissions are assumed to represent scale house and recycling center upgrades.

MT CO_2e = metric tons carbon dioxide equivalent; ODF = organics diversion facility

For comparison with the estimated Project construction emissions of 1,181 MT CO_2e in any given year, the counties within the Association of Monterey Bay Area Governments (AMBAG) region emitted 4,749,617 MT CO_2e of GHGs in 2020 (AMBAG 2022b). The AMBAG region includes Santa Cruz County, Monterey County, and San Benito County. In 2019, the County of Santa Cruz community emissions were approximately 691,262 MT CO_2e (Santa Cruz County 2022).

Project construction would result in the temporary contribution of approximately 0.07 percent of the annual regional GHG emissions and 0.5 percent of annual County emissions, and emissions would cease following completion of construction. Additionally, construction of Project components would take place over several years; therefore, that actual proportion of a given year's GHG emissions would be even less. Worst-case annual emissions would be approximately 0.02 percent of the annual regional GHG emissions and 0.2 percent of annual County emissions.

Construction emissions are necessary to implement planned landfill improvements to provide solid waste disposal services for existing and future land uses. As such, construction of the Project would result in a nominal one-time contribution to regional GHG emissions. The significance of Project emissions is addressed through Plan Consistency below.

Operational Emissions

Compared to existing operational emissions, operation of the transfer stations would result in a net increase in GHG emissions from an increase in VMT from transfer truck trips, energy use at new facilities and operation of new equipment, and minor increase in water use and solid waste generation at Transfer Station offices. Operational emissions also conservatively assume operation of diesel off-road support equipment and 10 additional personal (employee) vehicles trips. However, it is likely that the project would not result in a net increase in off-road equipment because similar equipment is currently in use for landfill operation; and use of this equipment would cease as a result of the landfill closure. Additionally, the Project is not anticipated to result in a change in employment that would generate additional personal (employee) vehicle trips.

The Project is anticipated to result in 24 new transfer trucks per day to transfer waste to ReGen Monterey, compared to existing conditions (Section 3.17, Transportation, and **Appendix L**). These larger transfer trucks would consolidate local waste that would have been deposited at Buena Vista Landfill to minimize the number of trips that would otherwise be required to move waste (i.e., trips by individuals who would need to self-transport waste to ReGen Monterey). Truck trips to haul waste respond to waste generation demand and would be required regardless of Project implementation. Therefore, it is conservative to attribute these mobile GHG emissions to the Project. However, the additional truck trips are included in modeling because they are a net increase compared to existing conditions. Anticipated waste disposal operations and impacts without Project implementation are described for comparison in Chapter 5, Project Alternatives, under the No Project Alternative. **Table 3.8-3** summarizes the total net increase in GHG emissions from Project operation, including the optional components, based on this conservative assumption. Additionally, the analysis conservatively assumed ODF Option 2, which includes a net increase in energy use for new composting activities, compared to ODF Option 1 which would be the status quo. Annual emissions would be expected to decrease over time, as off-road equipment and vehicle fleet are replaced by equipment meeting stricter emissions standards and alternatively fueled equipment, and Central Coast Community Energy increases the amount of energy provided to all customers from 100 percent renewable sources.

Composting is also a potential source of GHG emissions, particularly CH_4, in addition to the GHG emissions from energy use. However, disposal of the same organic waste in a landfill (instead of being diverted for composting) would also have the potential to result in fugitive emissions of CH_4 and N_2O. At the proposed ODF Option 2, organic matter would be composted with a mass-bed aeration system that would aerate organic material to make compost, reducing anerobic conditions and reducing GHG emissions (Nordahl et al. 2023). The amount of organic material requiring disposal is beyond the control of the Project. Because organic material would require disposal regardless of Project implementation, GHG emissions from disposal would also occur whether or not the composting facility would be constructed. As such, GHG emissions from solid waste and organic material generation are not attributable to the Project. Implementation of a managed composting facility with an aeration facility for efficient breakdown of organic material would be expected to provide a net benefit for organic waste-related GHG emissions (Harrison et al. 2024).

Table 3.8-3. Project Operation Greenhouse Gas Emissions

Emissions Source	Annual MT CO_2e
Mobile	5
Area	1
Energy	104
Water	28
Solid Waste	27
Refrigerants	3
Off-road Equipment	224
Total	393

Source: Appendix F.

Notes: MT CO_2e = metric tons carbon dioxide equivalent

Plan Consistency

The 2022 Scoping Plan outlines a statewide path to achieve carbon neutrality (CARB 2022). The County CAAP, approved in 2022, strives to meet the SB 32 target of reducing GHG emissions by 40 percent below 1990 levels before 2030, while simultaneously establishing a policy framework to achieve the longer-term target of net-negative GHG emissions by 2045 (AB 1279). These plans are discussed below.

California Air Resources Board 2022 Scoping Plan

The CARB's 2022 Scoping Plan does not include recommendations for individual projects, but rather outlines a statewide strategy for achieving net-negative GHG emissions. The 2022 Scoping Plan strategies related to landfills and solid waste disposal focus on diversion of organic waste from landfill disposal, reducing CH_4 emissions through landfill gas collection and control systems, and increased monitoring to detect and repair landfill gas leaks.

Solid waste diversion strategies apply to a wide variety of recyclable materials, including the diversion of organic waste to reduce GHG production associated with landfill disposal of these materials. The Project would continue to support the County's organic waste diversion strategy in several ways. ODF Option 1 and 2 would provide an upgraded Organics Waste Diversion facility to handle the increase in diverted organic waste requiring processing. ODF Option 1 would continue to transport materials off site to create compost, whereas ODF Option 2 would provide facilities for on-site compositing.

As described in Section 2.4, Project Components, under Gas Monitoring, there are currently landfill gas controls at the landfill, including landfill gas well controls and gas collection and conveyance system. The Project includes ongoing gas control, collection and monitoring as part of the landfill closure plan, and both Transfer Stations A and B would have gas monitoring sensors installed, consistent with Scoping Plan recommendations. The Scoping Plan also considers the use of landfill gas for biogas to reduce emissions from energy use. The Project allows for future energy generation at the former Ameresco facility, if a new energy reuse partnership is established. The Project would not impact this potential energy production. Therefore, the Project would be consistent with the applicable solid waste-related portions of the 2022 Scoping Plan.

The 2022 Scoping Plan also prioritizes a statewide reduction in VMT, particularly from petroleum-fueled vehicles. As described above, the Project would result in approximately 24 new haul truck deliveries (48 one-way trips) to transfer waste from Buena Vista Landfill to ReGen Monterey. However, these trips respond to existing anticipated future waste disposal demand and would be required with or without Project implementation. The Project would potentially reduce truck VMT compared to conditions without the Project, because the proposed transfer stations continue to provide a disposal location for local haul trucks. Waste can then be consolidated into the larger transfer trucks to reduce the total truck VMT required for disposal, whereas without the transfer stations, there would be more individual truck trips by self-haulers and franchise haulers to ReGen Monterey (as described in Section 3.17, Transportation, under Impact T-2, and in Chapter 5 under Alternative 2. No Project).

The 2022 Scoping Plan carbon sequestration components include natural and working lands as part of achieving statewide carbon neutrality. As described in Section 2.4 under Environmental Enhancement and Habitat Restoration Features, the Project includes restoration of an existing drainage ditch that extends along the north side of Harkins Slough Road between Buena Vista Drive on the west and the Transfer Station A site on the east. A portion of the drainage would be restored by adding suitable riparian plant species, and replacing the eucalyptus trees with native vegetation, including coast live oak, willow, or other appropriate native tree species. Additionally, if ODF Option

2 is selected instead of ODF Option 1, a portion of the existing drainage along the south side of the old landfill would be improved to support native wetland and riparian vegetation. Trees removed as part of Transfer Station A construction and road realignment would also be replaced through implementation of Mitigation Measure BIO-14. Because trees would need to planted off-site and would require time to mature, this impact was determined to be significant and unavoidable for biological resources (refer to Section 3.4, Biological Resources). However, off-site and maturing trees would contribute to regional carbon sequestration. As such, the Project would be consistent with Scoping Plan strategies related to carbon sequestration with implementation of Mitigation Measure BIO-14 (Implement Tree Replacement Planting and Habitat Enhancement). Impacts related to Scoping Plan consistency would be **Less than Significant with Mitigation.**

County of Santa Cruz Climate Action and Adaptation Plan

The CAAP includes Strategy 14 that directly relates to Buena Vista Landfill and seeks to reduce the landfill's carbon footprint. The priority for this strategy is eliminating fossil fuel use in new buildings. Consistent with this strategy, no new natural gas use would occur as a result of Project implementation. New materials handling and heating, ventilation, and air conditioning systems would include electric-powered equipment. Other objectives to support the strategy include evaluating new energy-efficient equipment, incorporating electric vehicles and other alternative-energy solutions into landfill plans, and exploring additional waste to energy technologies. The Project does not include any components that would interfere with a transition to an alternatively fueled vehicle and equipment fleet. The optional improvement to construct a new parking and storage area would implement the CAAP strategy for installation of electric vehicle charging stations to support an alternatively fueled vehicle fleet. Additionally, the new transfer station and ODF equipment would meet current energy efficiency requirements and improve energy efficiency compared to existing equipment. As described above, the Project supports a County partnership to use landfill gas for energy generation, similar to the former Ameresco facility located onsite below the Old Landfill.

Strategies 15 and 16 are also related to waste management and seek to increase the diversion of waste from landfills and increase demand for organic waste products. As discussed above related to the Scoping Plan, solid waste diversion strategies apply to a wide variety of recyclable materials, including the diversion of organic waste to reduce GHG production associated with landfill disposal of these materials. The Project would continue to support the County's organic waste diversion strategy by providing an upgraded ODF, with the option to provide an upgraded recycling center as well, to handle the increase in diverted waste that requires processing.

Other relevant strategies include the natural and working lands strategies for conservation of natural habitat and increasing the urban canopy. Specifically, the CAAP includes Natural/Working Lands Strategies 17 and 18 that include enhancing carbon sequestration through conservation of natural habitats and increasing the urban tree canopy. As discussed above related to the Scoping Plan, the Project includes habitat restoration and tree replacement components with implementation of Mitigation Measure BIO-14 (Implement Tree Replacement Planting and Habitat Enhancement). As such the Project would be consistent with all applicable CAAP strategies with implementation of Mitigation Measure BIO-14. This impact would be Less than Significant with Mitigation.

In summary, the Project, including the primary components and optional improvements described above, as well as the associated General Plan/LCP Land Use Designation and Zoning Map Amendments, would be consistent with applicable plans to reduce GHG emissions, and as such

would not result in significant GHG emissions with implementation of Mitigation Measure BIO-14 related to tree removal. The impact would be Less than Significant with Mitigation.

Mitigation Measure BIO-14: Implement Tree Replacement Planting and Habitat Enhancement

Refer to the complete description in Section 3.4.4, Project Impact Analysis, under Impact BIO-14.

Threshold C:	Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death as a result of flooding from projected sea level rise and storms

Impact GHG-3 THE PROJECT WOULD NOT EXPOSE PEOPLE OR STRUCTURES TO SUBSTANTIAL RISK OF LOSS, INJURY, OR DEATH AS A RESULT OF FLOODING FROM PROJECTED SEA LEVEL RISE AND STORMS. (LESS THAN SIGNIFICANT IMPACT)

The climate change risks of concern at the Project area are risks related to sea level rise and storm flooding. The predicted area at risk from these hazards is based on data from the County's Coastal Climate Change Vulnerability Reports (Central Coast Wetlands Group 2017) and the California Coastal Commission's Our Coast Our Future hazard viewer mapping tool (CCC 2026). The predicted risks are mapped by the California Coastal Commission and are based on best available prediction tools and data. However, modeling cannot definitively predict the future effects of climate change. This analysis presents the most conservative (highest risk) prediction of the effects of climate change, but actual future sea level rise and storm flooding may differ from mapped conditions.

As previously described, the Coastal Climate Change Vulnerability Reports identifies Harkins Slough and Gallighan Slough, adjacent to the Project area, as a potential risk area for sea level rise and coastal flooding. However, the landfill is located outside the hazard area. The California Coastal Commission's Our Coast Our Future hazard viewer also identifies Harkins Slough and Gallighan Slough as potential flood areas, but the projected flood area does not extend into the project site under the worst-case project flood condition of 500 centimeters of sea level rise and a 100-year storm event. The maximum flood scenario for 500 centimeters of sea level rise and a 100-year storm event includes a small portion of the landfill along the Gallighan Sough drainage riparian area between Gallighan Slough and Buena Vista Drive. No new project components are proposed in the identified flood area. The potential maximum flood area does include a portion of the landfill entrance, but does not extend into the scale house area and ends at the edge of the recycling center, the two areas where optional upgrades are proposed at the landfill entrance.

Therefore, although the landfill could experience intermittent flooding, it would not expose people or structures to potential substantial adverse effects. The Project does not propose new critical infrastructure in a projected hazard area. Impacts related to sea level rise and storm flooding would be **Less than Significant**. No mitigation is required.

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3.9 Hazards and Hazardous Materials

This section describes existing hazards and hazardous materials, outlines the regulatory framework applicable to hazards and hazardous materials, and evaluates impacts related to hazards and hazardous materials as a result of the Buena Vista Landfill Redevelopment Project (Project) construction and operation. **Table 3.9-1** presents a summary of potential impacts related to hazards and hazardous materials.

Table 3.9-1. Summary of Project Impacts Related to Hazards and Hazardous Materials

Impact	Significance before Mitigation	Mitigation	Significance after Mitigation
HAZ-1. The Project would not create a significant hazard to the public or the environment through the routine transport, use, disposal, or release of hazardous materials.	Less than Significant	None Required	Less than Significant
HAZ-2. The Project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.	No Impact	None Required	No Impact
HAZ-3. The Project would not be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, create a significant hazard to the public or the environment.	No Impact	None Required	No Impact
HAZ-4. The Project would not result in a safety hazard or excessive noise for people residing or working in the Project area due to proximity of an airport.	Less than Significant	None Required	Less than Significant
HAZ-5. The Project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.	Less than Significant	None Required	Less than Significant
HAZ-6. The Project would not expose people or structures to a significant risk of loss, injury, or death involving wildfires.	Less than Significant	None Required	Less than Significant

Notes: The impact, significance determination, and mitigation apply to the Project as a whole, considering all Project components, unless otherwise noted.

3.9.1 Existing Conditions

Hazardous Waste

The U.S. Environmental Protection Agency (USEPA) defines a "hazardous waste" as a substance that (1) may cause or significantly contribute to an increase in mortality or an increase in serious, irreversible, or incapacitating reversible illness, and (2) poses a substantial present or potential future hazard to human health or the environment when it is improperly treated, stored, transported, disposed of, or otherwise managed (40 CFR 261.10). Hazardous waste is also defined as toxic, ignitable, corrosive, explosive, or reactive and is identified by the USEPA by its form: solids, semi-solids, liquids, and gases. Producers of such wastes include private businesses and federal, state, and local government agencies. A material may also be classified as hazardous if it contains

defined amounts of toxic chemicals. The USEPA regulates the production and distribution of commercial and industrial chemicals to protect human health and the environment. The USEPA also prepares and distributes information to inform the public about these chemicals and their effects and provides guidance to manufacturers in pollution prevention measures, such as more efficient manufacturing processes and recycling of used materials.

Santa Cruz County (County) Recycling & Solid Waste Services is responsible for the operation and administration of solid waste diversion and disposal services for the unincorporated area of the County; and operates the County's two solid waste facilities, the Buena Vista Landfill and the Ben Lomon Transfer Station. The County has developed and implemented a Waste Screening and Acceptance Program to assist in preventing hazardous and other prohibited wastes from entering the facility and to establish procedures and acceptance levels for special (nontraditional) solid wastes.

The Buena Vista Landfill only accepts non-hazardous special wastes that have been properly sampled, analyzed, and found to be acceptable for disposal at the landfill or for use as cover at the landfill. It does not accept waste that is defined as hazardous by the Resource Conservation and Recovery Act (RCRA) and/or California Code of Regulations (CCR), Title 22. Hazardous waste, asbestos (friable and non-friable), radioactive waste, and untreated medical waste (biohazardous or infectious waste) are not allowed for disposal at the Buena Vista Landfill.

Special wastes must be pre-approved prior to acceptance at the Buena Vista Landfill. The County requires the completion of a Generator Waste Profile, along with any required analytical results before pre-approval would be granted. It is the responsibility of the generator to certify that the materials for management at the Buena Vista Landfill are non-hazardous per CCR Title 22 Section 66260. For materials that require laboratory analysis, the generator must provide representative analysis. The County only accepts material represented by analytical results indicating concentrations below established threshold values.

Airport Hazards

The Project area is located approximately 1 mile southwest of the Watsonville Municipal Airport, which is owned and operated by the City of Watsonville. The Watsonville Municipal Airport updated its Airport Master Plan in 2023, which consists of a comprehensive and integrated package of improvements to airside and landside facilities at the airport. The Project area is located within the designated Airport Influence Area for the Watsonville Municipal Airport. Specifically, the Project area is located within the boundaries of the Safety Compatibility Zone 6 or the Traffic Pattern Zone (Santa Cruz County 2024a). The Project area is also located in the Overflight Zone. A portion of the Project area is located within the 55 decibel (dBA) Community Noise Equivalent Level (CNEL) noise contour for the airport. However, the Project area is not located within the 60 dBA CNEL contour, which is the normally compatible standard for sensitive receptors.

Emergency Response

The California Emergency Services Act provides the basic authority for conducting emergency operations following proclamations of emergencies by the Governor or other local authorities. All local emergency plans are extensions of the State of California Emergency Plan (CalOES 2017). Santa Cruz County is located in Mutual Aid Region II (the Coastal Region), which is one of six mutual aid regions that exist in California.

Fire Hazards

Wildfires are large-scale, unplanned, and uncontrolled fires that burn in a natural area with combustible vegetation, such as brush, grass, and forests. Wildfires can spread quickly and can affect adjacent developed areas. Wildfires are often caused by human activities and can result in loss of valuable wildlife habitat, soil erosion, and damage to life and property. Wildland fires are influenced by three factors: fuel, weather, and topography. Wildfire spread depends on the type of fuel involved (grass, brush, and trees). Weather influences wildland fire behavior with factors such as wind, relative humidity, temperature, fuel moisture, and possibly lightning. Several factors can modify the rate at which a fire will burn, while topography is the largest influence on fire severity (Santa Cruz County 2015).

The Project area is mapped by the California Department of Forestry and Fire Protection (CAL FIRE) as a Local Responsibility Area and is not in a State Responsible Area due to the lack of forest, watershed, and range lands useful for tree production, water sources, or foraging (CAL FIRE 2025). Refer to Section 3.20, Wildfire, for more information about CAL FIRE designations.

3.9.2 Regulatory Setting

This section describes the federal, state, regional, and local plans, policies, and laws relevant to hazards and hazardous materials for the Project.

Federal

U.S. Environmental Protection Agency

The USEPA is responsible for enforcement and implementation of federal laws and regulations pertaining to hazardous materials. Federal regulations are codified primarily in Title 40 of the Code of Federal Regulations. The primary legislation includes the RCRA and the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), as amended by the Superfund Amendments and Reauthorization Act and the Emergency Planning and Community Right-to-Know (SARA). These laws and associated regulations include specific requirements for facilities that generate, use, store, treat, transport, or dispose of hazardous materials.

The Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) of 1947 assigned responsibility for regulating pesticides to the U.S. Department of Agriculture, but the Federal Environmental Pesticide Control Act was passed in 1972 and transferred this responsibility to the USEPA. FIFRA has undergone several amendments to prohibit different formulas and mixtures to protect the environment and public health. FIFRA established registration requirements for pesticides and initiated a rigorous testing procedure that pesticides must undergo to be permitted for use. FIFRA ensures that the use of a permitted pesticide "will not generally cause unreasonable adverse effects on the environment." FIFRA defines the term 'unreasonable adverse effects on the environment' to, in part, mean "any unreasonable risk to man or the environment, taking into account the economic, social, and environmental costs and benefits of the use of any pesticide" (USEPA 2024).

U.S. Department of Transportation

The Hazardous Materials Transportation Act of 1975 is the major transportation-related statute regulating the transportation of hazardous cargo. As mentioned under Section 3.9.1, Existing Conditions, the act empowers the U.S. Department of Transportation with regulatory and enforcement authority to provide adequate protection against the risks to life and property

inherent in the transportation of hazardous materials in commerce. For materials designated as hazardous, specific requirements pertaining to the packaging, labeling, and transportation apply to any person or business transporting them. Title 49 of the Code of Federal Regulations governs the transportation and handling of hazardous materials.

The U.S. Department of Transportation Federal Aviation Administration (FAA) is responsible for ensuring the safety of civil aviation. This includes protecting aircraft and passengers from hazards associated with collisions between birds and aircraft (known as bird strikes), as described in the FAA's Advisory Circular 150/5200-33, Hazardous Wildlife Attractants on or Near Airports (FAA 2020). Section 2.2, Waste Disposal Operations, provides guidelines for municipal solid waste landfills which are known to attract large numbers of birds. For example, Section 2.2.4 states that enclosed trash transfer stations are generally compatible with safe airport operations. Section 2.2.5 states that composting operations that accept only yard waste generally do not attract hazardous wildlife, and composting operations including food waste should be at least 1,200 feet from aircraft operations.

State

California Environmental Protection Agency

The California Environmental Protection Agency (CalEPA) has broad jurisdiction over hazardous materials management in the state. Under CalEPA, the California Department of Toxic Substances Control (DTSC) has primary regulatory responsibility for hazardous waste management and cleanup. Along with the DTSC, the State Water Resources Control Board is responsible for implementing regulations pertaining to management of soil and groundwater investigation and cleanup. State Water Resources Control Board regulations are in CCR Title 27. CCR Title 22 contains additional state regulations applicable to hazardous materials. CCR Title 26 compiles those sections or titles of the CCR applicable to hazardous materials.

In January 1996, CalEPA adopted regulations implementing a Unified Hazardous Waste and Hazardous Materials Management Regulatory Program. The six program elements are hazardous waste generators and hazardous waste on-site treatment, underground storage tanks, aboveground storage tanks, hazardous materials release response plans and inventories, risk management and prevention program, and Uniform Fire Code Hazardous Materials Management Plans and inventories. The program is implemented locally by a local agency—the Certified Unified Program Agency (CUPA). The CUPA is responsible for consolidating the administration of the six program elements within its jurisdiction. The CUPA with jurisdiction over the Project area is Santa Cruz County Environmental Health Division.

The California Hazardous Materials Release Response Plans and Inventory Law, sometimes called the "Business Plan Act," aims to minimize the potential for accidents involving hazardous materials and to facilitate an appropriate response to possible hazardous materials emergencies. The law requires businesses that use hazardous materials to provide inventories of those materials to designated emergency response agencies, illustrate on a diagram where the materials are stored on site, prepare an emergency response plan, and train employees to use the materials safely.

California Department of Toxic Substances Control

DTSC regulates hazardous waste in California primarily under the authority of the federal RCRA and the California Health and Safety Code. Other laws that affect hazardous waste are specific to handling, storage, transportation, disposal, treatment, reduction, cleanup, and emergency planning. In addition, DTSC reviews and monitors legislation to ensure that state laws reflect DTSC's hazard

waste management goals. From these laws, the DTSC's major program areas develop regulations and consistent program policies and procedures. DTSC regulations spell out what those who handle hazardous waste must do to comply with the laws. DTSC has the authority under RCRA to implement permitting, inspection, compliance, and corrective action programs to ensure that people who manage hazardous waste follow state and federal requirements. As such, management of hazardous waste in the County is regulated by the DTSC and enforced by Santa Cruz County Environmental Health Division as the CUPA to ensure compliance with state and federal requirements pertaining to hazardous waste management.

California law provides the general framework for regulation of hazardous wastes by the Hazardous Waste Control Act, passed in 1972. The DTSC is the state's lead agency in implementing the act. The act provides for state regulation of existing hazardous waste facilities, which include "any structure, other appurtenances, and improvements on the land, used for treatment, transfer, storage, resource recovery, disposal, or recycling of hazardous wastes," and requires permits for, and inspections of, facilities involved in generation and/or treatment, storage, and disposal of hazardous wastes. Enforcement of regulations has been delegated to local jurisdictions that enter into agreements with DTSC for the generation, transport, and disposal of hazardous materials under the authority of the act.

A "Uniform Hazardous Waste Manifest" is required by the DTSC and must accompany most hazardous waste before any waste is transported off site. The manifest travels with the hazardous waste from the point of generation, through transportation, to the final treatment, storage, and disposal facility. If a discharge or spill of hazardous waste occurs during transportation, the transporter is required to take appropriate immediate action to protect human health and the environment (e.g., notify local authorities, dike the discharge area), and shall be responsible for the discharge/cleanup, pursuant to CCR Title 22, Sections 66263.30 and 66263.31. Transportation of hazardous materials in motor vehicles is additionally governed by CCR Title 13, Sections 1160 through 1167.

California Health and Safety Code, Section 25199, also known as the Tanner Act, was adopted in 1986 and governs the siting of hazardous waste facilities in the state. The Tanner Act also requires counties to prepare hazardous waste management plans for DTSC approval. Every county hazardous waste management plan must include provisions defining (1) the planning process for waste management, (2) the permit process for new and expanded hazardous waste management facilities, and (3) the appeal process to the state available for certain local decisions. The California Department of Conservation's California Geologic Energy Management Division oversees the drilling, operation, maintenance, and plugging and abandonment of oil, natural gas, and geothermal wells.

California Division of Occupational Safety and Health

The California Division of Occupational Safety and Health is responsible for developing and enforcing workplace safety standards and assuring worker safety in the handling and use of hazardous materials. Among other requirements, California Division of Occupational Safety and Health obligates many businesses to prepare Injury and Illness Prevention Plans and Chemical Hygiene Plans. The Hazard Communication Standard requires that workers be informed of the hazards associated with the materials they handle. For example, manufacturers are to appropriately label containers, Material Safety Datasheets are to be available in the workplace, and employers are to properly train workers. Workplace safety in relation to hazardous materials is governed pursuant to CCR Title 8, which includes standards in the workplace to reduce the potential for injury. Section 1529 and Section 1532.1 specifically govern construction work where an employee may be exposed to asbestos or lead, respectively.

California Office of Emergency Services

The California Office of Emergency Services oversees the California Accidental Release Prevention Program (CalARP) (19 CCR Division 2, Chapter 4.5), which covers certain businesses that store or handle more than a certain volume of specific regulated substances at their facilities. The CalARP program regulations became effective on January 1, 1997, and include the provisions of the Federal Accidental Release Prevention program (40 CFR Part 68) with certain additions specific to California pursuant to Article 2, Chapter 6.95, of the California Health and Safety Code.

The list of regulated substances is found in CCR Article 8, Section 2770.5, of the CalARP regulations. Businesses that use a regulated substance above the noted threshold quantity must implement an accidental release prevention program, and some may be required to complete a Risk Management Plan (RMP). An RMP is a detailed engineering analysis of the potential accident factors present at a business and the mitigation measures that can be implemented to reduce this accident potential. The purpose of an RMP is to decrease the risk of an off-site release of a regulated substance that might harm the surrounding environment and community. An RMP includes the following components: safety information, hazard review, operating procedures, training, maintenance, compliance audits, and incident investigation. The RMP must consider the proximity to sensitive populations located in schools, residential areas, general acute care hospitals, long-term healthcare facilities, and child daycare facilities, and must also consider external events, such as seismic activity. The CalARP is implemented at the local government level by Certified Unified Program Agencies.

California Department of Pesticide Regulation

The California Department of Pesticide Regulation monitors the use of pesticides through evaluation and registration of pesticide products before sale or use in California. The department also evaluates health impacts of pesticides through risk assessment and illness surveillance and conducts comprehensive assessments of pesticide risks to all populations from exposure via air, water, and food, and in the home and workplace. All reported pesticide-related illnesses are investigated, and California Department of Pesticide Regulation uses this data to evaluate its regulatory program and to refine applicable safety rules. The department additionally monitors potential health and environmental impacts of previously registered pesticides, helping find ways to prevent future contamination.

California Fire and Building Code

The 2022 California Fire and Building Code establishes the minimum requirements consistent with nationally recognized good practices to safeguard the public health, safety, and general welfare for the hazards of fire, explosion, or dangerous conditions in new and existing buildings, structures, and premises, and to provide safety and assistance to firefighters and emergency responders during emergency operations. The provisions of this code apply to the construction, alteration, movement, enlargement, replacement, repair, equipment, use and occupancy, location, maintenance, removal, and demolition of every building or structure or any appurtenance connected or attached to such building structures throughout the State of California.

Assembly Bill 332

Assembly Bill 332 was approved by the California Legislature in August 2021. This bill statutorily incorporated the former Alternative Management Standards for Treated Wood Waste, which allows preservative treated wood waste to be disposed in the composite lined portion of an approved solid waste landfill.

Regional

Monterey Bay Air Resources District

Monterey Bay Air Resources District Rule 424 implements the federal National Emission Standards for Hazardous Air Pollutants as they relate to handling asbestos. Rule 424 incorporates and amends provisions of Parts 61 and 63, Chapter I, Title 40, of the Code of Federal Regulations. Rule 424 regulates all aspects related to the handling of asbestos-containing materials, from discovery and removal to transportation and disposal. This includes thorough inspection of materials that will be demolished or renovated and subsequent sampling. Similarly, Monterey Bay Air Resources District Rule 439 specifically governs building removal to prevent visible emissions, such as those from asbestos-containing materials.

Local

Santa Cruz County General Plan/Local Coastal Program

The Santa Cruz County General Plan Public Safety Element contains objectives and policies related to hazardous and toxic materials, hazardous waste management, and fire hazards. Objective 6.5 and Policies 6.5.7 and 6.5.8 require that adequate fire detection and suppression are available for all facilities. Objective 6.6 and Policy 6.6.1 note the continuation of the County's Hazardous Materials Ordinance to minimize discharge and release of hazardous and toxic materials and waste. These policies are listed below (Santa Cruz County 2024a):

- **Policy 6.5.7, Certification of Adequate Fire Protection Prior to Permit Approval**. Require all land divisions, multi-unit residential complexes, commercial and industrial complexes, public facilities, and critical utilities to obtain certification from the appropriate fire protection agency that adequate fire protection is available, prior to permit approval.
- **Policy 6.5.8, Public Facilities within Critical Fire Hazard Areas.** Discourage location of public facilities and critical utilities in Critical Fire Hazard Areas. When unavoidable, special precautions shall be taken to ensure the safety and uninterrupted operation of these facilities.
- **Policy 6.6.1, Hazardous Materials Ordinance**. Maintain the County's Hazardous Materials Ordinance, placing on users of hazardous and toxic materials the obligation to eliminate or minimize the use of such materials wherever possible, and in all cases to minimize the release, emission, or discharge of hazardous materials to the environment, and properly to handle all hazardous materials and to disclose their whereabouts. Further, maintain the County's ordinance relating to ozone-depleting compounds. Ensure that any amendment of existing ordinance provisions is based on a finding that the amendments will provide protection to the environment and the community against toxic hazards that is equal to or stronger than the existing provisions.

Santa Cruz County Code

Chapter 7.100 of the County Code regulates hazardous materials, hazardous waste, and underground storage tanks in the County. The ordinance is intended to protect human health, safety, and the environment by promoting best available industrial processes and best available practical control technology to minimize or eliminate the use of hazardous materials in the County and minimize or eliminate potential contamination by hazardous materials. The ordinance requires that any permitted use of hazardous materials is obligated to strictly control discharges and

releases. The ordinance further requires that hazardous materials users monitor any discharges into the environment and keep records on the effectiveness of their hazardous materials management practices as a means of enforcing the obligations established by this chapter. Santa Cruz County Environmental Health Division is the CUPA responsible for enforcing the Hazardous Materials-Hazardous Waste − Underground Storage Tanks Ordinance, along with state and federal regulations.

Santa Cruz County Environmental Health Division

Santa Cruz County Environmental Health Division is designated by CalEPA as the CUPA within the geographic boundaries of the County and is responsible for enforcing the local ordinance and state laws pertaining to use and storage of hazardous materials, including the issuance and administration of Hazardous Materials Management Plans (Santa Cruz County 2022).

Operational Area Emergency Management Plan

The Office of Response, Recovery and Resilience updated the Operational Area Emergency Operations Plan in September 2024. The Santa Cruz County Operational Area Emergency Operations Plan seeks to ensure a coordinated and effective response to any emergency, disaster, or event that impacts or may impact County and/or Operational Area operations.

County staff, community partners, and stakeholders from diverse and vulnerable groups were actively included in the plan's development to foster a collaborative, community centered approach. By focusing on those at the margins, the plan strives for a holistic understanding and consideration of all community members' needs throughout all phases of emergency management. The County Emergency Management Team and the Readiness Working Group are codified in this plan. Membership composition, organizational structures, and procedures require work for these groups to achieve their full intended purpose. The effort to embed the County Emergency Management Team and Readiness Working Group into County and community culture will be led by the Office of Response, Recovery and Resilience. Collaborative work is also required by the entirety of the Santa Cruz County Emergency Management Community to maximize effectiveness.

3.9.3 Methodology and Significance Thresholds

Methodology

The analysis of hazards and hazardous materials impacts follows the guidance and methodologies recommended in Appendix G of the California Environmental Quality Act (CEQA) Guidelines.

Significance Thresholds

The introduction in Chapter 3, Environmental Impact Analysis, states that the significance thresholds used in this analysis are based on Appendix G of the CEQA Guidelines, which provides a sample Initial Study checklist that includes a number of factual inquiries related to the subject of hazards and hazardous materials and the other environmental topics.

For the purposes of this Environmental Impact Report, a significant impact would occur if implementation of the Project would result in any of the following conditions:

A. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.
B. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.

C. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.

D. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, create a significant hazard to the public or the environment.

E. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, result in a safety hazard or excessive noise for people residing or working in the project area.

F. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

G. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires.

3.9.4 Project Impact Analysis

For each impact, the discussion is separated into Project construction, Project operation, and Project components as needed to describe the potential impact. The overall conclusion or significance determination is presented at the end of the discussion, as well as in parentheses at the end of the numbered impact statement.

As described in Chapter 2, Project Description, the Project components include:

1. Transfer Stations (Transfer Station A and Transfer Station B)
2. Organics Diversion Facility (ODF Option 1 and ODF Option 2)
3. Landfill Closure and Revegetation
4. Optional Elements: a) Internal Access Road Improvements, b) Scale House Upgrades, c) Recycling Center Upgrades, d) Equipment Parking and Storage Area
5. General Plan/Local Coastal Program Land Use Designation and Zoning Map Amendments

Threshold A:	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.
Threshold B:	Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.

Impact HAZ-1 THE PROJECT WOULD NOT CREATE A SIGNIFICANT HAZARD TO THE PUBLIC OR THE ENVIRONMENT THROUGH THE ROUTINE TRANSPORT, USE, DISPOSAL, OR RELEASE OF HAZARDOUS MATERIALS. (LESS THAN SIGNIFICANT IMPACT)

Construction

Project construction activities associated with constructing Transfer Stations A and B, ODF Option 1 or 2, and the optional elements (internal access road improvements, scale house and recycling center upgrades, equipment parking and storage area), as well as implementing the landfill closure and revegetation plan, would require the operation of heavy equipment (e.g., dump, trucks, loaders, bulldozers, concrete trucks, concrete pump trucks, cranes, and smooth or sheepsfoot compactors). The equipment would be fueled and maintained by petroleum-based substances such as diesel fuel,

gasoline, oil, and hydraulic fluid, which are considered hazardous if improperly stored or handled. In addition, materials such as paints, adhesives, solvents, and other substances typically used in building construction would be located in the Project area during construction.

Improper use, storage, or transportation of hazardous materials can result in accidental releases or spills. However, the use, transport, and disposal of hazardous materials would be subject to federal, state, and local regulations pertaining to the transport, use, storage, and disposal of hazardous materials. The Toxic Substances Control Act, RCRA, and Hazardous Waste Control Act would minimize risks associated with the storage, disposal, and transport of hazardous materials. The U.S. Department of Transportation, Pipeline and Hazardous Materials Safety Administration, regulates the transportation of hazardous materials, as described in the Code of Federal Regulations, Title 49, and CCR Title 13. This provides additional regulation for the transportation of hazardous materials by designating appropriate hazard label shipping preparation, vehicle loading, and hazardous materials registration, among other requirements. Documentation of compliance with hazardous materials regulations codified in CCR Titles 8, 22, and 26 is required for all hazardous materials and hazardous waste transport. Additionally, the California Building and Fire Code requirements detail standards for the safe management of materials that present a moderate explosion hazard, high fire or physical hazard, or health hazards. Compliance with all applicable federal, state, and local requirements related to the routine transport, use, or disposal of hazardous materials would maximize containment through safe handling and storage practices and provide for prompt and effective cleanup if an accidental release occurs. Therefore, the potential for the accidental release or upset of hazardous materials during construction would be minimal, and the impact would be less than significant.

Operation

Transfer Stations (Transfer Station A and Transfer Station B)

Two new waste transfer stations would be developed at the landfill site to implement transfer station operations for waste handling and transport. Transfer Station A would serve self-haulers (residents and businesses), and Transfer Station B would serve franchise haulers and larger commercial vehicles. After recyclables and organics are separated, transfer trucks would transport solid waste to a regional waste facility for disposal.

Consistent with current operations, both transfer stations would accept the following waste:

- Household and/or commercial garbage, upholstered furniture, painted wood, treated wood waste, large non-recyclable metal items, rancid waste, and waste that requires special handling as determined by landfill staff.
- Recyclable materials (source separated for recycling) including metals, glass bottles and jars, presorted plastic containers, bagged stretchy (film) plastic, books/paper, cardboard.
- Organic waste (source separated for composting) including clean sorted wood and yard waste (no dirt, treated or painted lumber, poison oak, pampas grass, yucca, palm, root balls) food waste (no raw meat, grease, or liquids), sheetrock/gypsum board, and pallets.
- Construction and demolition debris (source separated), including clean concrete, clean asphalt, baserock, brick, tile, and porcelain.
- Large recyclables, including appliances, mattresses, box springs, clean carpet and foam padding (6’ wide or less, rolled separately), electronic waste (TVs, computers, printers, small appliances), tires, and 1-5 gallon empty propane tanks, agricultural plastics.

Also consistent with current operations, the Buena Vista facility would continue to accept Household Hazardous Waste at its Household Hazardous Waste facility for recycling and off-site disposal (e.g., cleaning products, automotive products, batteries), but does not accept waste that is defined as hazardous by RCRA and/or CCR Title 22. Hazardous waste, asbestos (friable and non-friable), radioactive waste, and untreated medical waste (biohazardous or infectious waste) are not currently allowed and would not be allowed for disposal with Project implementation. Additionally, although current operations accept dead animals and soil that meets screening requirements, neither transfer station would accept dead animals nor soil of any kind (Santa Cruz County 2024b).

Operation of the transfer stations would require routine cleaning and maintenance equipment using common hazardous materials, including cleaning fluids, detergents, solvents, adhesives, sealers, paints, fuels/lubricants and fertilizers and/or pesticides. Routine equipment cleaning and maintenance currently occurs at the Transfer Station B site where the maintenance building is located. Once Transfer Stations A and B are operating, the use of these common hazardous materials for cleaning and maintenance would not be at levels that would result in substantial hazardous emissions or waste. These materials would be contained, stored, and used on site in accordance with manufacturers' instructions, applicable standards and federal, state and local regulations. Compliance with applicable regulations would serve to protect against a significant and irreversible environmental change that could result from the accidental release of hazardous materials. Therefore, the impact would be less than significant.

Additionally, subsurface landfill gas (a natural byproduct of anaerobic decomposition of materials buried in landfills) could migrate underground from the landfill to the transfer station structures. Landfills primarily generate two main gases, methane and carbon dioxide, which can be harmful to humans. As described in Section 2.4, Project Components, both Transfer Station A and B would include gas monitoring sensors to ensure gas levels do not exceed CalRecycle's standard of 5 percent. Landfill gas migration is controlled by the landfill gas well controls and the landfill gas collection and conveyance system. The potential release of harmful gases into the area surrounding the landfill is controlled, monitored, and reduced to acceptable levels. Therefore, the Project would not create a significant hazard to the public. The impact would be less than significant.

Organics Diversion Facility (ODF Option 1 and ODF Option 2)

The County would continue to divert organic materials (e.g., vegetation/yard waste, food waste, unpainted and untreated lumber, sheetrock) at the Buena Vista facility in compliance with state law organics diversion requirements. The County is considering the following two options for continued organics diversion at the Buena Vista facility. No hazardous materials would be accepted under either option.

ODF Option 1 would be a continuation of the existing operation located in the northern portion of the landfill, southwest of and near proposed Transfer Station A. The organics diversion operation would continue preprocessing organic materials for off-site composting at the Monterey Bay Regional Waste Management District and other sites located in the Monterey Bay region. Preprocessing may include de-packaging food waste, trash and contaminant removal, chipping/grinding wood waste, stockpiling green waste, and other organic feedstock preprocessing tasks.

Under ODF Option 2, the organics diversion operation would be relocated and, in addition to preprocessing, include composting and post-processing steps to produce finished compost on site (within the County-owned landfill property). Preprocessing would include depackaging of food waste, grinding of yard waste, and mixing of food waste with yard waste. Food and green waste would be mixed in an estimated volumetric ratio to achieve an appropriate moisture content and

carbon to nitrogen ratio. The mixed feedstocks would then be composted in a mass-bed aeration system (mass-bed aerated static pile). After the mass-bed aerated static pile process is complete, material is removed and stockpiled at a curing pile location for 4 weeks before being screened and then hauled off site to the end user market. Finished compost is typically produced between 2 to 3 months, depending on temperature, moisture, and aeration of the pile, which are carefully monitored during the composting process.

Both ODF Options 1 and 2 would require the use of heavy equipment for operations, which may include wheeled front loaders, skid steer loaders, material handler excavators, water truck, grinders/chippers, depackagers, and trommel screens. The equipment may be fueled and maintained by alternative fuels or by petroleum-based substances such as diesel fuel, gasoline, oil, and hydraulic fluid, which are considered hazardous if improperly stored or handled. Operations would be required to comply with all applicable federal, state, and local laws and regulations regarding the transport, use, and storage of hazardous related materials.

In addition, operation of ODF Options 1 and 2 would entail routine cleaning and maintenance activities using common hazardous materials, such as paints, fuels, and lubricants. However, the types and amounts of potentially hazardous materials used and stored for operation of the Project would be limited and below reportable quantities and would be handled in compliance with applicable federal, state, and local regulations pertaining to their transport, use, or disposal.

Therefore, whether ODF Option 1 or 2 is implemented, compliance with applicable regulations would serve to protect against a significant and irreversible environmental change that could result from the accidental release of hazardous materials. Therefore, the impact would be less than significant.

Landfill Closure and Revegetation

Upon implementation of landfill closure and revegetation, the landfill would no longer receive waste for on-site disposal. As described in Section 2.4, the landfill closure cover system, commonly called a cap, would be installed and consist of four layers: foundation, barrier, drainage, and vegetative. Like other portions of the landfill that have been closed and capped, the existing environmental monitoring and control systems would continue to monitor and control groundwater, stormwater, surface water, leachate, condensate, and landfill gas. The monitoring and control systems would not involve the use of hazardous materials.

For further slope protection and erosion control, the final site face would be hydroseeded annually in the fall prior to the rainy season for a few years until grasses are established. There would be no irrigation system. Water trucks could be used during the germination period if necessary, during drought or low rain years while the grasses are establishing. No use of pesticides would occur.

Therefore, the Project would not create a significant hazard to the public or the environment through the routine transport, storage, use, or disposal of hazardous materials or wastes or through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. The impact would be less than significant.

Overall, none of the Project components would create a significant hazard to the public or the environment through the routine transport, use, disposal, or release of hazardous materials. The impact would be **Less than Significant**, and no mitigation is required.

Threshold C:	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.

Impact HAZ-2 THE PROJECT WOULD NOT EMIT HAZARDOUS EMISSIONS OR HANDLE HAZARDOUS OR ACUTELY HAZARDOUS MATERIALS, SUBSTANCES, OR WASTE WITHIN ONE-QUARTER MILE OF AN EXISTING OR PROPOSED SCHOOL. (NO IMPACT)

No existing or proposed schools are located within 0.25 mile of the Project area. The nearest school to the Project area is Pajaro Valley High School located approximately 1 mile east. Therefore, implementation of the Project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school. There would be **No Impact**.

Threshold D:	Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, create a significant hazard to the public or the environment.

Impact HAZ-3 THE PROJECT WOULD NOT BE LOCATED ON A SITE WHICH IS INCLUDED ON A LIST OF HAZARDOUS MATERIALS SITES COMPILED PURSUANT TO GOVERNMENT CODE SECTION 65962.5 AND, AS A RESULT, CREATE A SIGNIFICANT HAZARD TO THE PUBLIC OR THE ENVIRONMENT. (NO IMPACT)

The Hazardous Waste and Substances Sites (Cortese) List is a planning document used by the state, local agencies, and developers to comply with the CEQA requirements by providing information about the location of hazardous materials release sites. Based on a review of the Cortese List, no sites listed on the Cortese List are located on or within 100 feet of the Project area. Therefore, construction associated with the Project would not encounter hazardous sites pursuant to California Government Code, Section 65962.5, and as a result, would not create a significant hazard to the public or the environment. There would be **No Impact**.

Threshold E:	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, result in a safety hazard or excessive noise for people residing or working in the project area.

Impact HAZ-4 THE PROJECT WOULD NOT RESULT IN A SAFETY HAZARD OR EXCESSIVE NOISE FOR PEOPLE RESIDING OR WORKING IN THE PROJECT AREA DUE TO PROXIMITY OF AN AIRPORT. (LESS THAN SIGNIFICANT IMPACT)

The Watsonville Municipal Airport is located approximately 1 mile northeast of the Buena Vista Landfill. The airport is owned and operated by the City of Watsonville. The Watsonville Municipal Airport updated its Airport Master Plan in 2023, which consists of a comprehensive and integrated package of improvements to airside and landside facilities at the airport.

Noise. The Project area is located within the designated Airport Influence Area for the Watsonville Municipal Airport. Specifically, the Project area is located in Safety Compatibility Zone 6 or the Traffic Pattern Zone, as well as the Overflight Zone. A portion of the Project area is located within the 55 dBA CNEL noise contour for the airport. However, the Project area is not located within 60 dBA CNEL contour, which is the normally compatible standard for sensitive receptors. Therefore, the Project would not result in any new receptors within an area with the potential to be exposed to airport noise in excess of the normally compatible standard for sensitive receptors. Additionally, the Project is not a sensitive receptor and does not include any components that would have the

potential to change air traffic patterns or introduce new sources of aircraft noise. Also refer to Section 3.13, Noise.

Elevation. The maximum allowable elevation or height of the landfill, in accordance with the permits and the restrictions of the Overflight Zone, is 200 feet. The elevation for the various Project components and associated structures would be as follows, which would be below the 200-foot limit:

- Transfer Station A would be located north of the current active landfill area (to be closed and revegetated), and the tallest structure would be approximately 40 feet in height. The location where Transfer Station A would be constructed is approximately 110 feet above mean sea level, and Transfer Station A would be approximately 150 feet above mean sea level.
- Transfer Station B would be located on the southern side of the current active landfill in the current maintenance area, and the tallest structure would be 40 feet above ground level. The current maintenance building is 24 feet. Transfer Station B would be constructed in an area that is approximately 110 feet above mean sea level. The proposed overall height of Transfer Station B would be approximately 150 feet above mean sea level.
- ODF Option 1 would be the continuation of the existing operation located on the northern portion of the current active landfill, southwest of and near proposed Transfer Station A. ODF Option 1 would be at approximately 140 foot elevation, with stockpiles of 12–14 feet tall. The highest structure at ODF Option 1 would be the roof structure that would not exceed 40 feet in height. Added to the proposed final ground surface elevation, the ODF Option 1 facility would not exceed 180 feet above mean sea level.
- ODF Option 2 would be located on the "top deck" of the old landfill site in the southwest portion of the Project area. ODF Option 2 on the old landfill would be at approximately 90-100-foot elevation. The proposed mass-bed aeration facility would be approximately 40 feet tall, and the stockpiles would be up to 15 feet tall. The roof structure(s) would be the highest structure at the ODF Option 2 facility. Final ODF Option 2 facility elevation would not exceed 140 feet above mean sea level. ODF Option 2 on the old landfill would have a lower elevation than the current landfill, so it would also be below the maximum allowable height.
- The optional improvements to internal roads, which ascend portions of the landfill, would not be adding structures/elevation. In addition, the optional improvements to the scale house and recycling center would be near the main entrance at lower elevation below the permitted elevation. If the recycling center is relocated to the ODF Option 1 site, the height of the recycling facilities would not exceed 40 feet. Thus, like ODF Option 1, the facility would not exceed 180 feet above mean sea level. Finally, the optional, equipment parking and storage area southeast of the landfill would be surface/ground level with no tall structures. The site elevation is approximately 110 feet above mean sea level and although no buildings are proposed for this location, aboveground storage tank(s) may be used for diesel fueling, which would not exceed 20 feet in height, for a maximum facility height of approximately 130 feet above mean sea level.
- The final closure and revegetation would not include any structures and, thus, would not exceed the allowable height of 200 feet.

The elevation for the various Project components and associated structures would be below the 200-foot limit. This finding is supported by the Federal Aviation Administration (FAA) Determination of No Hazard to Air Navigation, dated September 9, 2024 (**Appendix I**).

Bird Hazards. The landfill will be closing and no longer accepting solid waste, which would substantially reduce the number of birds attracted to the Buena Vista site. The transfer stations would be enclosed. Although the organics diversion facilities (ODF) would accept yard waste and

food waste, they are over 1,200 feet away from the closest edge of the airport runway. With ODF Option 1, the ODF would be located over 5,000 feet from the runway edge, and the organic waste would be taken offsite in covered trucks for composting. With ODF Option 2, although the waste would be composted onsite, the ODF would be located approximately 7,500 feet from the runway edge, and the organic waste would be in storage areas covered by tarps prior to composting. Therefore, with project implementation, bird attraction and the risk of bird strikes would be substantially reduced compared to existing conditions.

In summary, the Project would not result in a safety hazard or excessive noise for people working in the Project area during construction activities or operational maintenance activities. The impact would be **Less than Significant,** and no mitigation is required.

Threshold F:	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

Impact HAZ-5 THE PROJECT WOULD NOT IMPAIR IMPLEMENTATION OF OR PHYSICALLY INTERFERE WITH AN ADOPTED EMERGENCY RESPONSE PLAN OR EMERGENCY EVACUATION PLAN. (LESS THAN SIGNIFICANT IMPACT)

The County Operational Area Emergency Management Plan addresses the planned response to large-scale emergencies affecting the unincorporated area of the County (Santa Cruz County 2015). Santa Cruz County is the lead agency for the County operational area and would prepare for, respond to, and recover from emergencies in coordination with other local jurisdictions within the operational area. The plan does not identify a specific evacuation plan or specific routes.

Construction and operation of Transfer Station A and Transfer Station B requires the realignment of Harkins Slough Road to accommodate existing traffic, routing public traffic outside landfill operations, and contain all solid waste operational traffic on internal roadways. Harkins Slough Road is currently located between the proposed Transfer Station A site and the active landfill area. To separate landfill facility operation traffic from local traffic using Harkins Slough Road to access the Buena Vista Migrant Center (farmworker housing and childcare facility), Tierra Alta affordable housing complex, and Rountree Medium (Jail) Facility, Harkins Slough Road would be realigned to the northeast perimeter of the Project area, adjacent to the north and east property lines (**Figure 2-1**, Project Overview). This realignment would keep the general public on Harkins Slough Road, outside the facility fence. The only transfer station related traffic on Harkins Slough Road would mirror existing conditions of staff arriving/departing from work. The road realignment is intended to improve traffic flow and minimize interference between waste hauling trucks and passenger vehicles not accessing the site and would not interfere with emergency access in and out of this area, nor with an Emergency Response Plan or Emergency Evacuation Plan.

During construction, the existing Harkins Slough Road would remain in use while the realigned Harkins Slough Road is being constructed around the northern side of Transfer Station A. Although there could be temporary lane closures during construction, there would be no planned road closures. Emergency access and general access to the landfill, Rountree Medium (Jail) Facility, Buena Vista Migrant Center (farmworker housing and childcare facility), Tierra Alta affordable housing complex, and other facilities would be retained throughout construction with traffic controls. All other construction related activities would occur within the landfill boundary.

Therefore, the Project would not impair implementation of, or physically interfere with, an Emergency Response Plan or Emergency Evacuation Plan adopted by the County. The impact would be **Less than Significant**, and no mitigation is required.

Threshold G:	Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires.

Impact HAZ-6 THE PROJECT WOULD NOT EXPOSE PEOPLE OR STRUCTURES, EITHER DIRECTLY OR INDIRECTLY, TO A SIGNIFICANT RISK OF LOSS, INJURY OR DEATH INVOLVING WILDLAND FIRES. (LESS THAN SIGNIFICANT IMPACT)

The Project area is not located in a CAL FIRE State Responsibility Area. However, portions of the Project area are located in the County's Local Responsibility Area, with the eastern portion in a Very High Fire Severity Zone and the western portion in a High Fire Severity Zone (CAL FIRE 2025). The Project would introduce new structures to the site with the construction of Transfer Station A, which would be located on an undeveloped site in the northeastern corner, and Transfer Station B, which would be located on a developed site replacing the existing office and maintenance buildings (refer to **Figure 2-1**). Both new transfer stations could require protection during a fire. The buildings would include fire detection and fire suppression systems in accordance with the California Fire Code.

With landfill closure and revegetation, grasses would be planted on the soils above the landfill cap to promote long-term erosion control and to protect the final cover system. The revegetation would require selective weed removal to eliminate competition between the weeds and the established native vegetation. Weed control measures, including annual or twice yearly weed whacking to maintain low dry grass height, would also limit combustible underbrush near facilities and structures, including Transfer Stations A and B. The existing perimeter road would continue to be maintained as both an access road and as a fire break between the closed landfill and adjacent properties. The potential for on-site fire to spread to adjacent grasslands is reduced by stored water, stockpiled soil, and equipment on the site that can be used to extinguish or contain small fires, as well as the maintenance of fire breaks.

As discussed under Impact HAZ-1, landfills primarily generate two main gases, methane and carbon dioxide, natural byproducts of anaerobic decomposition of materials buried in landfills. Methane is highly combustible and prone to migration. Fires and explosions could result from excessive methane production. As described in Section 2.4 under Gas Monitoring, landfill gas migration is controlled by the landfill gas well controls and the landfill gas collection and conveyance system. These landfill gas controls work to a) collect and beneficially reuse gas to produce energy (at the on-site Ameresco facility) and b) collect and flare the gas on site to ensure landfill gas does not migrate away from the landfill boundary to cause a hazard in the surrounding area or structures.

In summary, with on-site controls in place (weed control, stored water, stockpiled soil, extinguishing equipment, gas monitoring), the Project, including the primary components and optional improvements described previously, as well as the associated General Plan/Local Coastal Program Land Use Designation and Zoning Map Amendments, would not expose people or structures to a significant risk of loss, injury, or death involving wildland fires. This impact would be **Less than Significant**, and no mitigation is required.

3.10 Hydrology and Water Quality

This section evaluates potential impacts relating to hydrology and water quality on and around the Project area as a result of the Buena Vista Landfill Redevelopment Project (Project) construction and operation. This analysis includes a review of surface water, runoff patterns, groundwater, flooding, and water quality. Information in this section is based on the Drainage Report prepared by SCS Consultants (**Appendix J**). Water supply and wastewater conveyance and treatment are discussed in Section 3.19, Utilities and Service Systems. Potential impacts to wetlands and waters of the United States are discussed in Section 3.4, Biological Resources. **Table 3.10-1** presents a summary of potential impacts related to hydrology and water quality. All figures presented at the end of Section 3.10.

Table 3.10-1. Summary of Project Impacts Related to Hydrology and Water Quality

Impact	Significance before Mitigation	Mitigation	Significance after Mitigation
HYD-1. The Project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality or conflict with a Water Quality Control Plan.	Less than Significant	None Required	Less than Significant
HYD-2. The Project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge.	Less than Significant	None Required	Less than Significant
HYD-3. The Project would not substantially alter drainage patterns within the Project area or vicinity.	Less than Significant	None Required	Less than Significant
HYD-4. The Project would not risk release of pollutants due to Project inundation in flood hazard, tsunami, or seiche zones.	No Impact	None Required	No Impact

Note: The impact, significance determination, and mitigation apply to the Project as a whole, considering all Project components, unless otherwise noted.

3.10.1 Existing Conditions

Water Quality

The California Department of Water Resources (DWR) divides surface watersheds in California into 10 hydrologic regions. The Project area is located in the Central Coast Hydrologic Region. This region covers approximately 7.25 million acres and includes all of Santa Cruz, Monterey, San Luis Obispo, and Santa Barbara Counties, as well as parts of San Benito, San Mateo, Santa Clara, and Ventura Counties. Major geographic features that define the region include the Pajaro, Salinas, Carmel, Santa Maria, Santa Ynez, and Cuyama Valleys; the coastal plain of Santa Barbara; and the California Coast Ranges. The region is largely defined by the northwest-trending Southern California Coast Ranges, with a climate generally classified as Mediterranean. The region depends heavily on groundwater, which makes up the majority of available water supply, but recycled water is becoming a more plentiful supplemental source for agricultural and other non-potable uses (DWR 2009).

The DWR subdivides hydrologic regions into hydrologic units that are commonly known as watersheds. In the Central Coast Hydrologic Region, the Project area is located in the Pajaro River Hydrologic Unit. The Central Coast Regional Water Quality Control Board (CCRWQCB) governs basin

planning and water quality in the Pajaro River Hydrologic Unit (CCRWQCB 2019). The DWR further subdivides hydrologic units into hydrologic areas and hydrologic sub-areas. The Project area is located in the Pajaro River Subbasin and the Watsonville Slough Watershed.

The Watsonville Slough Watershed comprises Harkins, Gallighan, Hanson, and Struve Sloughs. The sloughs receive runoff from a 13,000-acre watershed area, which includes a mix of urban, industrial, rural residential, agricultural, and open space areas (CCRWQCB 2019). The Project area is adjacent to Harkins Slough and Gallighan Slough, with a portion of Gallighan Slough extending through the area (**Figure 3.10-1,** Watsonville Slough Watershed).

The CCRWQCB regulates water quality in the Pajaro River Hydrologic Unit and establishes water quality objectives and requirements for the quality of point and nonpoint sources of discharge through the Central Coast Water Quality Control Plan (Basin Plan). A point source of discharge is defined as waste emanating from a single, identifiable point, such as a wastewater treatment plant. A nonpoint source of discharge results from the drainage and percolation of agricultural and urban stormwater runoff.

The Basin Plan defines beneficial uses of waterbodies adjacent to the Project area. The beneficial uses for those waterbodies are listed in **Table 3.10-2**. Based on the established beneficial uses listed below, the CCRWQCB established water quality standards and the level of treatment necessary to maintain the standards and ensure the continuance of the beneficial uses.

Table 3.10-2. Beneficial Uses of Waterbodies in the Project Area

	Waterbodies	
Beneficial Uses	**Harkins Slough**	**Galligan Slough**
Municipal and Domestic Supply		
Agricultural Supply		
Industrial Process Supply		
Industrial Service Supply		
Groundwater Recharge		
Water Contact Recreation	X	X
Non-Contact Water Recreation	X	X
Wildlife Habitat	X	X
Cold Fresh Water Habitat		
Warm Fresh Water Habitat	X	X
Migration of Aquatic Organisms		X
Spawning, Reproduction, and/or Early Development	X	X
Preservation of Biological Habitats of Special Significance	X	
Rare, Threatened, or Endangered Species	X	X
Estuarine Habitat	X	X
Fresh Water Replenishment		
Commercial and Sport Fishing	X	X
Shellfish Harvesting		
Navigation		

Source: CCRWQCB 2019.

Watsonville Slough is listed on the California 303d list under the federal Clean Water Act (CWA) as being impaired due to "sedimentation/siltation." Accordingly, the CCRWQCB is required to develop and implement a Total Maximum Daily Load (TMDL) specification for sediment. The slough complex has also been listed as impaired for bacteria and nutrients. In addition, Gallighan Slough is listed as impaired by indictor bacteria, and Harkins Slough is impaired by dissolved oxygen, chlorophyll-a, and indicator bacteria. The Project is expected to improve this condition because there would be less birds and associated excrement with solid waste being handled within the transfer stations.

Drainage Patterns

This section describes the existing surface conditions and drainage patterns in the Project area, including the Buena Vista Landfill site and specific sites proposed for redevelopment.

The Buena Vista Landfill site includes three areas: the County's closed landfill, referred to as the Old Landfill; the closed portion of the County's active landfill area, referred to as the South Landfill; and the County's Current Active Landfill area, also referred to as the North Landfill. On **Figure 2-1**, the Old Landfill is shown with a blue dashed line labeled Closed (Old) Landfill; the South Landfill is shown with a green dashed line labeled Current Cap Area; and the North Landfill is shown with a pink dashed line labeled Current Active Landfill.

In addition to these three areas, the Project area also includes developed areas with structures for landfill operations at the main entrance from Buena Vista Drive and the employee entrance from Rountree Lane, as well as undeveloped areas northeast of the North Landfill and south of Rountree Lane. These areas include heavily disturbed paved areas and unpaved areas composed of compacted dirt, gravel, and grass. The Project area also includes Gallighan Slough, which extends between the Old Landfill and South Landfill.

The specific sites proposed for redevelopment in the Project area are shown on **Figure 2-1** and described below. As described in Section 2.4, Project Components, the Project includes: (1) two new transfer stations for waste handling and transport; (2) organics diversion facility (ODF) options; (3) landfill closure and revegetation, as well as enhancement and restoration features for biological resources, once capacity of the current active landfill area is reached; and (4) optional internal access road improvements, scale house and recycling center upgrades, and a new equipment parking and storage area. The existing drainage patterns for these areas are described below and shown in **Appendix J**.

Transfer Station A

The Transfer Station A site is a primarily undeveloped site in the northeastern corner of the property. The site is composed of pervious grassland cover with some trees and shrubs, a disturbed area with unpaved roadway extending from Harkins Slough Road to the eastern portion of the site to an equipment storage area with metal bins/containers, and the impervious paved Harkins Slough Road curving along the southern side of the site.

Existing drainage patterns at the Transfer Station A site indicate a small portion of stormwater from the top portion of the site drains east into open space toward Harkins Slough, while the vast majority drains west via the ditch extending along the northern side. This ditch also collects runoff from the northern neighboring agricultural property. This linear ditch (identified as Transfer Station A Ditch in Section 3.4.1, Aquatic/Riverine section) extends from the northeastern corner of the site, downslope and westward, through a culvert under a second unpaved roadway to the confluence with the Harkins Slough Road Drainage. The Harkins Slough Road Drainage continues along the

northern side of Harkins Slough Road to the intersection of Harkins Slough Road and Buena Vista Drive, where it enters a culvert under Harkins Slough Road into the Buena Vista Drive Tributary, which ultimately outfalls into Channelized Gallighan Slough.

Transfer Station B

The Transfer Station B site is the current site of the maintenance building and landfill office in the south portion of the Project area. The majority of the drainage in this location comes from the portion of the landfill that is capped and closed and consists of vegetative ground cover. The stormwater currently drains from north to south to the existing stormwater infrastructure. This consists of three drainage inlets and stormwater piping that outfalls to a concrete drainage ditch, moving in the east direction toward the Harkins Slough Road and Rountree Lane intersection.

Organics Diversion Facility Option 1

The ODF Option 1 site is the existing organics operation at the northern portion of the landfill. It is unpaved, graded, and heavily disturbed with organics storage, trucks, and other landfill operations. Stormwater surface flows to the existing perimeter swales and culverts.

Organics Diversion Facility Option 2

The ODF Option 2 site is on the top deck of the Old Landfill in the southern portion of the Project area. The top deck of the Old Landfill is approximately 10 acres in size and is composed of a gravel/dirt final cover. This area has two current drainage patterns. A small portion of the site drains to the northwest, and the remainder drains south to a seasonal wetland swale, which leads to Gallighan Slough.

Landfill Closure and Revegetation

Surface stormwater flow is currently controlled at the landfill through perimeter and bench drainage ditches and down drainage, which routes stormwater to an existing water quality unit located at the northern end of the entrance facility. Outer landfill slopes and temporary excavation cut slopes that do not drain to the water quality unit are hydroseeded annually as needed. Stormwater flows from these areas are conveyed directly to the perimeter ditch, which discharges to roadside drainage facilities. Run-off from surrounding roads is also intercepted by these perimeter drainage facilities.

The perimeter drainage facility on the west side of the landfill, between the landfill property and Buena Vista Drive, is called the Buena Vista Drive Tributary for purposes of this Environmental Impact Report (EIR). This tributary accumulates sediment from upstream agricultural runoff that causes localized flooding on Buena Vista Drive during storm events. The County is planning several improvements to reduce localized flooding, including improvements within the Buena Vista Drive Tributary (as part of the Buena Vista Drive Rehabilitation Project) and increasing the size of the culvert downstream in Channelized Gallighan Slough (as part of the Landfill Redevelopment Project).

Internal Access Roads

Existing internal roadways (identified in blue shading on **Figure 2-1**) are currently unpaved dirt roads used for landfill operations, and stormwater surface flows to the adjacent unpaved areas downslope to the existing drainage system described in the previous paragraph.

Scale House and Recycling Center

The scale house and recycling center sites are located on heavily disturbed paved areas near the main entrance, where stormwater surface flows downslope to the existing roadside drainage facilities.

Equipment Parking and Storage Area Site

A new parking and storage area for facility trucks and equipment could be located on the southern side of the property on vacant, undeveloped land owned by the County (refer to **Figure 2-1**, blue shading labeled "4d"). The site is relatively flat with a gentle north-to-south slope such that stormwater currently flows south toward an existing drainage swale and wastewater treatment ponds.

Groundwater

The Project overlies the Pajaro Valley Groundwater Subbasin. The Pajaro Valley Groundwater Subbasin is located at the end of the Pajaro River Watershed, which as previously mentioned, drains approximately 1,300 square miles of Monterey, Santa Cruz, Santa Clara, and San Benito Counties. The Pajaro Valley Groundwater Subbasin is bordered by the Monterey Bay to the west and the San Andreas Fault to the east. It is adjacent to the Santa Cruz Mid-County Basin and Purisima Highlands Subbasin to the northwest and the Salinas Valley 180/400-Foot Aquifer and Langley Area Subbasins to the south.

The Pajaro Valley Subbasin is a critically over-drafted, high-priority basin as defined by the DWR (PV Water 2022). Nearly 95 percent of water supplies for agricultural and municipal use within the Pajaro Valley come from groundwater sources (County of Santa Cruz 2020), with the remaining from recycled water used for irrigation. The Pajaro Valley Subbasin is experiencing seawater intrusion along the coast.

The County designates the areas where major groundwater recharge or infiltration is known to occur as primary groundwater recharge areas on General Plan/Local Coastal Program (LCP) Resource Constraints Maps and County geographic information system (GIS). These areas are locations where local soil conditions and underlying geologic formations allow for infiltration and percolation of rainfall and runoff into groundwater basins. Land divisions and density are regulated by County policy in primary groundwater recharge areas.

Portions of the Project area are located in a designated groundwater recharge area.

Hazards

Federal Emergency Management Agency Flood Hazard Zones

The Federal Emergency Management Agency (FEMA) establishes base flood heights for the 100-Year Flood Zone and the 500-Year Flood Zone. The 100-Year Flood Zone is defined as the area that could be inundated by a flood that has a 1 percent probability of occurring in any given year, or once every 100 years. The 500-Year Flood Zone is defined as the area that could be inundated by a flood that has a 0.2 percent probability of occurring in any given year, or once in 500 years.

The Project area is not located in any Special Flood Hazard Areas.

Seiche and Tsunami

A seiche is a standing wave oscillating in a body of water and may occur in any enclosed or semi-enclosed bodies of water, such as bays and lakes. Seiches are typically caused by strong wind and rapid changes in atmospheric pressure. They can also form along ocean shelves and harbors due to earthquakes, tsunamis, or severe storm fronts. The Project area is not located near an enclosed body of water.

A tsunami is a series of waves generated by an impulsive disturbance in the ocean or in a small, connected body of water. Tsunamis are produced when movement occurs on faults in the ocean floor, usually during very large earthquakes. Sudden vertical ocean floor movement when fault movement occurs can displace the overlying water column, creating a wave that travels outward from the earthquake source.

The Project is not located in a Tsunami Inundation Zone.

3.10.2 Regulatory Setting

This section describes the federal, state, regional, and local plans, policies, and laws relevant to hydrology and water quality for the Project.

Federal

Federal Clean Water Act

In 1972, Congress passed the federal Water Pollution Control Act, commonly known as the Clean Water Act or CWA, with the goal of "restor[ing] and maintain[ing] the chemical, physical, and biological integrity of the Nation's waters" (33 USC 1251[a]). The CWA directs states to establish water quality standards for all waters of the United States and to review such standards on a triennial basis and consider updating them. Section 319 mandates specific actions for the control of pollution from nonpoint sources. The U.S. Environmental Protection Agency (USEPA) has delegated responsibility for implementation of portions of the CWA, including water quality control planning and control programs, such as the National Pollutant Discharge Elimination System (NPDES) Program, to the State Water Resources Control Board (SWRCB) and the Regional Water Quality Control Boards (RWQCBs).

Section 303(c)(2)(b) of the CWA requires states to adopt water quality standards for all surface waters of the United States based on the water body's designated beneficial use. Water quality standards are typically numeric, although narrative criteria based on biomonitoring methods may be employed where numerical standards cannot be established or where they are needed to supplement numerical standards. Water quality standards applicable to the Project are provided in the Basin Plan (CCRWQCB 2019).

Section 303(d) of the CWA bridges the technology-based and water quality-based approaches for managing water quality. Section 303(d) requires that states make a list of waters that are not attaining standards after the technology-based limits are put into place. For waters on this list and where the USEPA administrator deems they are appropriate, states are to develop TMDLs, which set pollution reduction goals to improve the quality of impaired waters. TMDLs are established at the level necessary to implement the applicable water quality standards. A TMDL must account for all sources of the pollutants that caused the water to be listed as impaired.

Section 402 of the CWA established the NPDES. The goal of the NPDES nonpoint source regulations is to improve the quality of stormwater discharged to receiving waters to the "maximum extent practicable" through the use of best management practices (BMPs). The NPDES permit system was established in the CWA to regulate point source discharges (a municipal or industrial discharge at a specific location or pipe) and certain types of diffuse discharges, including urban stormwater and construction site runoff.

The SWRCB permits all regulated construction activities under NPDES General Permit for Stormwater Discharges Associated with Construction Activity (adopted September 2, 2009), known as the "Construction General Permit." Every construction project that disturbs one or more acres of land surface or that is part of a common plan of development or sale that disturbs more than one acre of land surface would require coverage under this Construction General Permit. To obtain coverage under this Construction General Permit, the landowner or other applicable entity must file permit registration documents before the start of construction activity and mail the appropriate permit fee to the SWRCB. The permit registration documents include a Notice of Intent, a Stormwater Pollution Prevention Plan (SWPPP), and other documents required by the Construction General Permit. Since the Project would disturb more than one acre, construction of the Project would be subject to these Construction General Permit requirements.

Construction activities subject to the Construction General Permit include clearing, grading, and disturbances to the ground, such as stockpiling or excavation, that result in soil disturbances of at least one acre of total land area. The SWPPP has two major objectives: (1) to help identify the sources of sediment and other pollutants that affect the quality of stormwater discharges, and (2) to describe and ensure the implementation of BMPs to reduce or eliminate sediment and other pollutants in stormwater and non-stormwater discharges. BMPs are intended to reduce impacts to the maximum extent practicable.

Section 404 of the CWA, the U.S. Army Corps of Engineers is responsible for regulating the discharge of fill material into waters of the U.S. The term "waters" includes wetlands and other waters that meet specific criteria as defined in the Code of Federal Regulations (CFR) (EPA, 40 CFR 230.3, and CE, 33 CFR 328.3). It authorizes the U.S. Army Corps of Engineers to issue permits for and to regulate the discharge of dredged or fill materials into wetlands or other waters of the United States. Under the CWA and its implementing regulations, "waters of the United States" are broadly defined to consist of rivers, creeks, streams, and lakes extending to their headwaters, including adjacent wetlands.

Federal Emergency Management Agency

FEMA formed in 1979 as an independent agency and became part of the U.S. Department of Homeland Security in March 2003. The agency is tasked with responding to, planning for, recovering from, and mitigating against disasters. FEMA is responsible for determining flood elevations and floodplain boundaries based on U.S. Army Corps of Engineers studies and approved agency studies, as well as for coordinating the federal response to floods, earthquakes, hurricanes, and other natural or human-made disasters. FEMA also provides disaster assistance to states, communities, and individuals.

FEMA distributes Flood Insurance Rate Maps that identify the locations of Special Flood Hazard Areas, including the 100-Year Flood Zone. Executive Order 11988 (Flood Plain Management) links the need to protect lives and property with the need to restore and preserve natural and beneficial floodplain values. Specifically, federal agencies are directed to avoid conducting, allowing, or supporting actions on the base floodplain unless the agency finds that the base floodplain is the only

practicable alternative location. Similarly, U.S. Department of Transportation Order 5650.2 implements Executive Order 11988 and was issued pursuant to the National Environmental Policy Act of 1969, the National Flood Insurance Act of 1968, and the Flood Disaster Protection Act of 1973. The order prescribes policies and procedures for ensuring that proper consideration is given to avoidance and mitigation of adverse floodplain impacts in agency actions, planning programs, and budget requests.

State

Porter-Cologne Water Quality Act

The Porter-Cologne Water Quality Control Act (Porter-Cologne Act) e) assigns overall responsibility for water quality protection to the SWRCB and directs nine statewide Regional Boards, who are tasked to develop and enforce water quality standards within their boundaries through regional Basin Plans.

The Project is located within the CCRWQCB. It has the authority to implement water quality protection standards through the issuance of permits for discharges to waters in its jurisdiction. As described previously, water quality objectives for receiving waters in the County are specified in the Basin Plan prepared by the CCRWQCB, in compliance with the federal CWA and the Porter-Cologne Act. The principal elements of the Basin Plan are a statement of beneficial water uses protected under the plan, water quality objectives necessary to protect the designated beneficial water uses, and strategies and time schedules for achieving the water quality objectives. Together, narrative and numerical objectives define the level of water quality that shall be maintained in the region. The water quality objectives are achieved primarily through the establishment and enforcement of waste discharge requirements (WDRs).

The RWQCBs have primary responsibility for issuing WDRs. The RWQCBs may issue individual WDRs to cover individual discharges or general WDRs to cover a category of discharges. WDRs may include effluent limitations or other requirements designed to implement applicable water quality control plans, including designated beneficial uses and the water quality objectives established to protect those uses and prevent the creation of nuisance conditions. Violations of WDRs may be addressed by issuing Cleanup and Abatement Orders or Cease and Desist Orders, assessing administrative civil liability, or seeking imposition of judicial civil liability or judicial injunctive relief.

California Coastal Act

The California Coastal Commission was established in 1972 and is responsible for protecting, conserving, and restoring water quality in coastal environments as detailed in the California Coastal Act (California Public Resources Code, Sections 30230 and 30231). The California Coastal Commission establishes policies that address shoreline public access and recreation, habitat protection, aesthetic resources, public works, and other uses. The act provides long-term protection of California's coastline for the benefit of the public. To meet the requirements of Sections 30230 and 30231, the California Coastal Commission requires site design, source control, and treatment BMPs. New development and redevelopment projects located in a Coastal Zone are required to apply for a Coastal Development Permit before construction. The Coastal Development Permit requires projects to demonstrate water quality protection by implementing appropriate BMPs.

The California Coastal Act includes specific policy language protecting wetlands, which are defined as all areas meeting at least one wetland parameter. California Public Resources Code, Section 30233, limits permissible uses within wetlands to a handful of authorized uses, including "nature

study" and "similar resource-dependent activities." Even these limited activities are only permitted "where feasible mitigation measures have been provided to minimize adverse environmental effects" and "where there is no feasible less environmentally damaging alternative."

Industrial General Permit (Order No. 2014-0057-DWQ, as Amended)

The Statewide General Permit for Stormwater Discharges Associated with Industrial Activities, Order 2014-0057-DWQ (Industrial General Permit) regulates stormwater and authorized non-stormwater discharges from industrial facilities to minimize water pollution. The Industrial General Permit regulates discharges associated with 9 federally defined categories of industrial activities such as manufacturers, landfills, mining, steam generating electricity, hazardous waste facilities, transportation with vehicle maintenance, larger sewage and wastewater plants, recycling facilities, and oil and gas facilities. It requires facilities to implement a SWPPP, including BMPs to control pollutants.

Construction General Permit (SWRCB Order No. 2009-0009-DWQ, as Amended)

For stormwater discharges associated with construction activity in the State of California, the SWRCB has adopted and administers the NPDES General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit) to avoid and minimize water quality impacts attributable to such activities. The Construction General Permit applies to all projects in which construction activity disturbs one acre or more of soil. Construction activity subject to this permit includes clearing, grading, and disturbances to the ground, such as stockpiling and excavation. The Construction General Permit requires development and implementation of a SWPPP, which would specify water quality BMPs designed to reduce or eliminate pollutants in stormwater discharges and authorized non-stormwater discharges from the construction site. Routine inspection of all BMPs is required under the provisions of the Construction General Permit, and the SWPPP must be prepared and implemented by qualified individuals as defined by the SWRCB.

To receive coverage under the Construction General Permit, the Project proponent must submit a Notice of Intent and permit registration documents to the SWRCB and applicable RWQCB. Permit registration documents include completing a construction site risk assessment to determine the appropriate coverage level; detailed site maps showing disturbance area, drainage area, and BMP types/locations; the SWPPP; and, where applicable, post-construction water balance calculations and active treatment systems design documentation.

Sustainable Groundwater Management Act

In 2014, California enacted the "Sustainable Groundwater Management Act" (California Water Code, Sections 10720–10737.8 et seq.) to bring the state's groundwater basins into a more sustainable regime of pumping and recharge. The legislation provides for the sustainable management of groundwater through the formation of local groundwater sustainability agencies and the development and implementation of Groundwater Sustainability Plans (GSPs). GSPs or Alternatives were required to be submitted to the DWR by January 31, 2020, for all basins subject to critical conditions of overdraft. The GSPs are required to set objectives and implement projects and programs to achieve sustainability within 20 years of plan implementation, report data to the DWR, mitigate overdraft, and address groundwater dependent ecosystems. The Project site is located within the Pajaro Valley Groundwater Basin managed by the Pajaro Valley Water Management Agency (PV Water). PV Water submitted its Basin Management Plan as an Alternative to a GSP in 2017 and submitted an update in 2022.

Regional

Central Coast Water Quality Control Plan

Each RWQCB is required to adopt a Water Quality Control Plan or Basin Plan that recognizes and reflects the regional differences in existing water quality, the beneficial uses of the region's ground and surface water, and local water quality conditions and problems.

The Project area is located in the Central Coast Basin, Region 3. The Central Coast Water Quality Control Plan was adopted in 1971 and last revised in 2019. The Basin Plan provides direction on the beneficial uses of state waters in Region 3, describes the water quality that must be maintained to support such uses, and provides programs, projects, and other actions necessary to achieve the standards established in the plan.

Local

Santa Cruz County General Plan/Local Coastal Program

The County General Plan/LCP (Santa Cruz County 2024) provides the following policies to protect surface water quality and groundwater:

- **ARC-4.1.1 (LCP) Protecting the Monterey Bay National Marine Sanctuary from Adverse Impacts.** Prohibit activities that could adversely impact sensitive habitats of the Monterey Bay National Marine Sanctuary, including the discharge of wastes, plastics, litter, and hazardous materials. The main sources of concern are wastewater discharge, urban runoff, toxic agricultural drainage water, including that originating outside of Santa Cruz County, and the accidental release of oil or other hazardous material from coastal tanker traffic.
- **ARC-4.1.14 (LCP) Water Pollution from Urban Runoff**. Review proposed development projects for their potential to contribute to water pollution via increased storm water runoff. Require all development and redevelopment projects to be designed to minimize the generation, transport, and discharge of stormwater pollutants by maintaining natural discharge and groundwater recharge rates. Design strategies shall include minimization of impervious areas, pollution prevention strategies, retention and percolation of stormwater, filtration or treatment of stormwater, or other appropriate stormwater best management practices.
- **ARC-4.2.12 (LCP) Drainage Design**. Require retention of stormwater runoff from impervious surfaces for all new development and redevelopment.
- **ARC-4.4.1 (LCP) Impacts from New Development on Water Quality**. Do not approve new development adjacent to marshes, streams, and bodies of water if such development would cause adverse impacts on water quality that cannot be fully mitigated.
- **ARC-4.4.3 (LCP) Erosion Control for Stream and Lagoon Protection**. For all new and existing development and land disturbances, require the installation and maintenance of sediment basins, and/or other strict erosion control measures, as needed to prevent siltation of streams and coastal lagoons.
- **ARC-4.4.4 (LCP) Protecting Riparian Corridors and Coastal Lagoons**. Require drainage facilities to infiltrate, filter, or treat stormwater runoff as needed to protect water quality for all new development within 1,000 feet of riparian corridors or coastal lagoons. Encourage vegetative-based treatments where feasible.
- **ARC-4.5.1 (LCP) Primary Groundwater Recharge Area Designation**. Maintain designations on the General Plan/LCP Resource and Constraints Maps and County GIS system identifying areas

where local soil conditions and underlying geologic formations allow for infiltration and percolation of rainfall and runoff into groundwater basins.

- **ARC-4.5.3 (LCP) Uses in Primary Groundwater Recharge Areas**. Prohibit any land use in a Primary Groundwater Recharge Area that would allow the percolation of pollutants into the groundwater system.

Santa Cruz County Code

The County Environmental Health Department monitors surface and beach water quality in the County. The department also works with the RWQCB and the local cities to regulate and enforce when water quality violations occur.

Chapter 7.79 of the County Code provides regulations for runoff control, including compliance with NPDES stormwater discharge permits.

Chapter 16.20 of the County Code provides grading regulations to safeguard health, safety, and public welfare; to minimize erosion and the extent of grading; to protect fish and wildlife; to protect the watersheds; to ensure the natural appearance of grading projects; and to otherwise protect the natural environment of the County.

Chapter 16.22 of the County Code includes policies to eliminate and prevent conditions of accelerated erosion that have led to, or could lead to, degradation of water quality, loss of fish habitat, damage to property, loss of topsoil and vegetation cover, disruption of water supply, and increased danger from flooding, and to implement LCP land use policies.

Chapter 16.24 of the County Code includes policies for protecting water quality regarding increases in turbidity and settleable solids.

Local Hazard Mitigation Plan

The County of Santa Cruz Local Hazard Mitigation Plan (LHMP) 2021–2026 was prepared in accordance with FEMA requirements. FEMA reviews and approves LHMPs and requires an update on a 5-year cycle.

The County LHMP identifies potential hazards in the County, including floods and coastal storms, earthquake and liquefaction, wildfires, drought, tsunami, coastal erosion, dam failure, landslide, expansive soils, and climate change. The plan describes the potential hazards within the County and provides hazard mitigation strategies that serve as guidelines to reduce loss of assets. The LHMP proposes high, medium, and low hazard mitigation action items to reduce vulnerability and risk from hazards or reduce the severity of the effects of hazards on people and property. Mitigation actions include both short-term and long-term activities that reduce the impacts of, exposure to, or effects of hazards through various means, including preparedness, response, and recovery measures. Effective mitigation actions also reduce the adverse impacts and cost of future disasters.

3.10.3 Methodology and Significance Thresholds

Methodology

The impact analysis in Section 3.10.4 is based on an assessment of baseline conditions for the Project area (including water quality, drainage patterns, groundwater, and hazards/floodplains), and the potential changes to these conditions that would be caused by Project construction and operation in light of relevant regulations and policies.

Significance Thresholds

The introduction in Chapter 3, Environmental Impact Analysis, states that the significance thresholds used in this analysis are based on Appendix G of the California Environmental Quality Act (CEQA) Guidelines, which provides a sample Initial Study checklist that includes a number of factual inquiries related to the subject of hydrology and water quality, as well as the other environmental topics. Thus, the letters and thresholds presented below correspond with the questions in the Appendix G Initial Study checklist.

For the purposes of this EIR, a significant impact would occur if implementation of the Project would result in any of the following conditions:

A. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality.
B. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the Project may impede sustainable groundwater management of the basin.
C. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:
    1. Result in substantial erosion or siltation on- or off-site.
    2. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite.
    a. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff.
    3. Impede or redirect flood flows.
D. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to Project inundation.
E. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.

3.10.4 Project Impact Analysis

For each impact, the discussion is separated into Project construction, Project operation, and Project components as needed to describe the potential impact. The overall conclusion or significance determination is presented at the end of the discussion, as well as in parentheses at the end of the numbered impact statement.

As described in Chapter 2, Project Description, the Project components include:

1. Transfer Stations (Transfer Station A and Transfer Station B)
2. Organics Diversion Facility (ODF Option 1 and ODF Option 2)
3. Landfill Closure and Revegetation
4. Optional Improvements: a) Internal Access Road Improvements, b) Scale House Upgrades, c) Recycling Center Upgrades, d) Equipment Parking and Storage Area
5. General Plan/Local Coastal Program Land Use Designation and Zoning Map Amendments

Threshold A:	Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality.
Threshold E:	Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.

Impact HYD-1 THE PROJECT WOULD NOT VIOLATE ANY WATER QUALITY STANDARDS OR WASTE DISCHARGE REQUIREMENTS OR OTHERWISE SUBSTANTIALLY DEGRADE SURFACE OR GROUNDWATER QUALITY OR CONFLICT WITH A WATER QUALITY CONTROL PLAN. (LESS THAN SIGNIFICANT IMPACT)

Construction

Project construction activities associated with constructing the Project components could result in soil erosion or the loss of topsoil due to earthmoving activities such as excavation, filling, grading, utility location and relocation, placement of concrete retaining walls and foundations, installation of metal structures, and placement of crushed aggregate base and paved surface. During construction, runoff during a large storm has the potential to result in substantial amounts of erosion, resulting in off-site sediment transport via stormwater. The types of pollutants contained in runoff from construction sites could include sediments and contaminants such as oils and fuels from construction equipment.

Construction of the Project could also potentially result in the accidental release of hazardous materials such as diesel fuel, gasoline, lubricant oils, hydraulic fluid, antifreeze, transmission fluid, cement slurry, and other fluids required for the operation of construction vehicles or equipment. Motorized equipment used at the Project area during construction could also leak the previously described hazardous fluids due to inadequate or improper maintenance, unnoticed or unrepaired damage, improper refueling, or operator error. These accidentally released or leaked hazardous materials could directly or indirectly impact water quality during a subsequent storm event, when the spilled material could come in contact with or be washed into flowing water and eventually enter a nearby drainage. Similarly, groundwater could be contaminated through direct or indirect contact with potentially harmful or hazardous materials.

As stated in Section 2.6.2, General Methodology, because construction of the Project would disturb over one acre, the Project would be subject to the NPDES Construction General Permit (Order No. 2012-0006-DWQ) adopted by the SWRCB. Compliance with the permit requires each qualifying development project to file a Notice of Intent with the SWRCB. Permit conditions require the development of a SWPPP, which must describe the site, the facility, erosion and sediment controls, runoff water quality monitoring, means of waste disposal, implementation of approved local plans, control of construction sediment and erosion control measures, maintenance responsibilities, and non-stormwater management controls. Additionally, inspection of construction sites before and after storms is required to identify stormwater discharge from the construction activity and to identify and implement erosion controls, where necessary. Compliance with the NPDES-required SWPPP would reduce the risk of soil erosion.

Further, the Project includes BMPs identified in Section 2.6.5, Best Management Practices, to be implemented during construction. These BMPs include but are not limited to the following:

1. Limit vehicle speeds on unpaved roads to a maximum of 25 miles per hour.
2. Limit fugitive dust by watering exposed dirt surfaces in construction areas twice daily, keeping all trenches dry to protect their integrity.

3. Apply soil stabilizers on inactive construction areas (disturbed lands unused for four consecutive days) and cover inactive storage piles.
4. Apply native hydroseed or non-toxic binders to exposed areas after cut/fill operations.
5. Install perimeter protection (e.g., silt fence, fiber rolls) for construction near drainages and open space, including Transfer Station A (including Harkins Slough Road realignment), ODF Option 2, and culvert and roadway improvements near drainages to prevent contaminated construction runoff from leaving the construction site.
6. Minimize removal or disturbance of existing vegetation outside the footprint of Project construction activities.
7. Limit site access and parking, equipment storage, and stationary construction activities to the designated staging areas to the maximum extent feasible.
8. Store, maintain, and refuel all equipment and materials in designated portions of the staging areas in accordance with permit requirements. As such, no staging would occur in areas with sensitive biological resources.
9. Prior to staging equipment on site, clean all equipment caked with mud, soils, or debris from off-site sources to avoid introducing or spreading invasive exotic plant species.
10. Position all stationary equipment, such as motors, pumps, generators, and/or compressors, over drip pans.
11. Erosion and sediment control measures shall be maintained continuously, repaired when and as necessary and shall be inspected within 24 hours of each rainfall event. Seeded areas shall be checked regularly and shall be watered, fertilized, reseeded and mulched as necessary to obtain a dense stand of grass.
12. All drain inlets shall be protected from siltation (e.g., inlet filters, fiber rolls, gravel bags). Ineffective protection devices shall be immediately replaced and the inlet cleaned. Flushing is not an acceptable method of cleaning.
13. When the crushed stone construction entrance has been covered with soil or has been pushed into the soil by construction traffic, it shall be replaced with a depth of stone equal to that of original application.

Implementation of the BMPs and compliance with the NPDES-required SWPPP and County's grading regulations would reduce the risk of water degradation on and off site from soil erosion, and other pollutants related to construction activities would not obstruct or conflict with the implementation of the Basin Plan. Therefore, this construction-related impact of the Project would be **Less than Significant**. No mitigation is required.

Operation

The Project would have the potential to generate operational pollutants that could degrade the surface water quality of downstream receiving waters. Pollutant sources could include trash and debris, chemicals from cleaners, pathogens, and oil and grease from vehicles. These pollutants could potentially discharge into surface waters and result in degradation of water quality.

The Basin Plan stormwater program objectives include identification and elimination of pollutant contact with stormwater by implementation of BMPs. The Project would implement Stormwater BMPs in compliance with Santa Cruz County Code, Section 7.79.110, that would reduce the amount of pollutants transported to receiving waters. The following is a discussion of stormwater BMPs that could reduce the amount of pollutants transported to receiving waters from operation of Project components.

Transfer Stations (Transfer Station A and Transfer Station B)

Two new waste transfer stations would be developed at the landfill site to implement transfer station operations for waste handling and transport.

Stormwater surface runoff at Transfer Station A from new impervious surfaces built would be collected at the low point on the back (northern) side of the transfer station, directed toward the transfer station, and conveyed via storm pipe infrastructure into the landfill's existing stormwater channel. Filtration measures would be taken to prevent unwanted solid waste or contaminated stormwater from entering the stormwater system, including Stormceptors or filtration inlet bags. Contact water from inside Transfer Station A would be collected and held in a storage tank for pump and haul removal.

Stormwater surface runoff at Transfer Station B would be conveyed via curbing and V-ditches to a series of catch basins located within the paved area, similar to current conditions. The ultimate outfall would be the existing outfall located east of the facility into the perimeter ditch. Improvements would be made to this outfall to ensure it is adequate to handle any increase in flow, if needed. Contact water from inside Transfer Station B would be collected and held in a storage tank for pump and haul removal.

Therefore, the impact of the Transfer Stations would be **Less than Significant**. No mitigation is required.

Organics Diversion Facility (ODF Option 1 and ODF Option 2)

The County would continue to divert organic materials (e.g., vegetation/yard waste, food waste) at the Buena Vista facility in compliance with state law organics diversion requirements. The County is considering the following two options for the ODF at the Buena Vista facility. ODF Option 1 would be continuation of the existing operation located near the northern facility boundary, southwest of and near proposed Transfer Station A. ODF Option 2 would relocate the organics diversion operation to the top deck of the Old Landfill site and would include additional compost processing steps to produce finished compost on site (within the County-owned landfill property).

ODF Option 1 facility would be paved and would include a roof structure for the receiving and preprocessing of organic materials to limit stormwater contact and to control runoff from the facility. Straw wattles and hay bales would be used around perimeter of stockpile storage area. Stormwater runoff would be directed by diversion berms into larger stormwater conveyance channels. The area may also include stormwater check dams to slow down the runoff to minimize erosion. The ODF Option 1 facility would also include contact water management BMPs to include segregated collection of water that contacts food waste and transfer of contact water to the landfill leachate management system.

ODF Option 2 would be designed to maintain the existing grade sloping southeast towards the existing seasonal wetland and drainage located on the south portion of the landfill top deck. To accommodate increased stormwater runoff from the newly paved area, a new drainage ditch would be installed parallel to the existing seasonal wetland. Paved stormwater berms may be used to direct the stormwater runoff into the new drainage ditch. The new drainage ditch would include an outlet structure at the downgradient end to tie into the existing seasonal wetland. Additionally, if Option 2 is approved, the seasonal wetland would be improved and restored so it can convey stormwater as originally designed (as described in Section 2.4). The new parallel drainage ditch may also have erosion control matting and stone check dams to help minimize erosion. Contact water generated from ODF operation at this location would primarily be located within the mass-bed aerated static piles. This water would be contained in the concrete bunkers via a system of drains,

where it would be collected. The water would get recirculated in the composting cycle or would evaporate out from the bunkers. Similarly, BMPs would be maintained regularly to ensure proper and effective functionality. If necessary, corrective actions, including repairs and maintenance of BMPs, would be implemented as soon as practicable.

For both ODF Options 1 and 2, the County would implement stormwater management practices to meet State regulatory compliance requirements. These include roof drains and catch basin inlet filters, which would be monitored and maintained. All paved impermeable surface areas would be swept three times a week during the wet season and once a week during dry season. Additionally, in accordance with the County's existing Industrial Activities SWPPP for the Buena Vista Landfill, stormwater samples would be collected at designated sampling locations and analyzed. When samples are collected further visual observations would assess the quality of the discharged stormwater and adjust management practices as needed.

Therefore, the impact of the ODF Option 1 or ODF Option 2 would be **Less than Significant**. No mitigation is required.

Landfill Closure and Revegetation

Once the capacity of the current active landfill area is reached, the landfill closure and revegetation plan would be implemented. California and federal landfill closure regulations require a landfill cover system, commonly called a cap, to separate waste from the environment, to control erosion by conveying stormwater runoff at non-scouring flow rates, minimize rain infiltration into the waste to prevent the production of leachate, and control and contain landfill gas. As described in Section 2.4, the cap includes four layers: foundation, barrier, drainage, and vegetative.

The drainage layer would include 6 inches of high permeability sand or gravel or a geocomposite drainage layer, where flow calculations indicate that a drainage layer is required for slope stability or to prevent raveling. A collection piping network would also be necessary. A drainage layer is used to stabilize the required vegetative layer and maintain the integrity of the barrier layer. The vegetative layer would be 2 inches thick to protect the landfill cap from erosion and support a mixture of grassland species.

The proposed surface water management system would control flows on the landfill surface after the final cover has been placed; prevent infiltration, inundation, and ponding on the landfill final cover; minimize erosion of final cover; minimize erosion, slope failure, washout, and over-topping of associated surface water conveyances; and minimize sediments carried off site. Stormwater is currently managed by routing drainage within the landfill area to a water quality unit using ditches and channels. A water quality unit was installed as part of Module 5 construction to replace the former sedimentation basin that used to occupy the Module 5 area. As the landfill starts to approach final grades, additional water quality units may be installed, as necessary, to manage stormwater. The water quality units would be sized as part of the site's final closure. The water quality units would be part of the ongoing monitoring program already approved by the CCRWQCB in compliance with the CCRWQCB General Waste Discharge Requirements Order No. R3-2020-0001. The units would be routinely cleaned out to maintain full functionality.

Therefore, the impact of the landfill closure and revegetation would be **Less than Significant**. No mitigation is required.

Optional Improvements: a) Internal Access Road Improvements, b) Scale House Upgrades, c) Recycling Center Upgrades, d) Equipment Parking and Storage Area

The Project could also include the following improvements and features to support the primary Project purpose and components: a) Internal Access Road Improvements, b) Scale House Upgrades, c) Recycling Center Upgrades, d) Equipment Parking and Storage Area.

The currently unpaved internal landfill roads identified on **Figure 2-1** would be examined to determine if improvements are necessary to support Project implementation. If determined necessary, the roads would be paved, creating new impervious surface and increasing stormwater surface flow without altering the drainage patterns. Similar to existing conditions, stormwater surface runoff from roadway improvements would flow to the adjacent unpaved areas downslope to the existing drainage system, composed of perimeter and bench drainage ditches and culverts, which routes stormwater to an existing water quality unit located at the north end of the entrance facility. The existing drainage system has the capacity to accommodate increased flows created by paving these roadways.

Upgrades to the scale house and recycling center, which could include adding scales and expanding the recycling center to accommodate more materials, would occur on existing paved areas and would not increase the amount of impervious surface and stormwater runoff. If all or a portion of the recycling activities are relocated to the currently active landfill where the planned ODF (Option 1) could be located, the recycling activities would occur in the area that would be paved for ODF Option 1 operations and would not contribute additional impervious surface.

The equipment parking and storage area would be primarily paved, creating an increase in impervious surface and stormwater runoff. As described in Section 2.4, Project design would maintain the existing grade, which slopes gently from north to south, and capture stormwater runoff with a bioswale, underground recharge chambers, gravel disconnect areas, level spreaders, or check dams to dissipate the runoff to a non-erosive flow. In addition, a Stormceptor system would be used to capture debris and oils while allowing stormwater to flow efficiently.

In summary, the inclusion of stormwater drainage features and treatment devices described previously would reduce the risk of water degradation on and off site from soil erosion and other pollutants related to operational activities, would minimize the potential for water quality degradation, and would comply with the objectives in the Central Coast Water Quality Control Plan and pathogen TMDL requirements.

Therefore, construction and operation of the Project, including the primary components and optional improvements described previously, as well as the associated General Plan/LCP Land Use Designation and Zoning Map Amendments, would not violate any water quality standards or WDRs or otherwise substantially degrade surface or groundwater quality or conflict with a Water Quality Control Plan. The impact would be **Less than Significant**. No mitigation is required.

Threshold B:	Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the Project may impede sustainable groundwater management of the basin.
Threshold E:	Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.

Impact HYD-2 THE PROJECT WOULD NOT SUBSTANTIALLY DECREASE GROUNDWATER SUPPLIES OR INTERFERE SUBSTANTIALLY WITH GROUNDWATER RECHARGE. (LESS THAN SIGNIFICANT IMPACT)

The Project would not decrease groundwater supplies or interfere substantially with groundwater recharge such that the Project may impede sustainable groundwater management of the basin.

Construction and operation of the Project, including all the Project components, would be similar to existing landfill and site dust control operations that would be phased out as the Project becomes operational. The Project would not use additional groundwater and therefore would not deplete groundwater resources as compared to existing conditions. The existing landfill is designed to prevent groundwater infiltration that could mobilize materials disposed in the waste body and contaminate groundwater. While implementation of the Project would introduce additional paved surfaces, most of those paved areas would be constructed on top of the lined or capped landfill areas that are designed to prevent groundwater recharge or on already paved areas. Project components proposed for areas that already prevent groundwater recharge include ODF 1, ODF 2, and Transfer Station B, thus construction and operation of these Project components would not interfere substantially with groundwater recharge. Project components proposed for areas that are outside the landfill boundary or on land that is currently mostly unpaved include portions of Transfer Station A, the optional equipment parking and storage area, and optional paved internal roadways totaling approximately 3.3 acres of new impervious surfaces. However, the relatively small amount of new impervious surface area that the Project would introduce relative to the total surface area of the groundwater basin should not impact groundwater recharge in this area. Therefore, the dispersed nature of the new impervious surfaces would ensure that the infiltration capacity would not be substantially altered compared to existing conditions, consistent with the goals to protect groundwater levels and prevent groundwater overdraft.

The new impervious surfaces from the Project, including the primary components and optional improvements described above, would occupy a relatively small percentage of the surface area of underlying groundwater basins and would not substantially alter the infiltration capacity of those basins as compared to the existing landfill. Therefore, the impact would be **Less than Significant**. No mitigation is required.

Threshold C:	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would (1) result in substantial erosion or siltation on- or off-site, (2) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite, (3) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff, or (4) impede or redirect flood flows.

Impact HYD-3 THE PROJECT WOULD NOT SUBSTANTIALLY ALTER DRAINAGE PATTERNS WITHIN THE PROJECT AREA OR VICINITY. (LESS THAN SIGNIFICANT IMPACT)

Construction and operation of the Project would not result in alterations of the course of a stream or river. As described below, although there would be new impervious surfaces, the existing and proposed drainage facilities would accommodate increases in stormwater runoff, so existing drainage patterns would not be substantially altered, compared to existing conditions.

Construction

Land-disturbing construction activities associated with implementation of the Project, such as vegetation clearing, grading, and excavation at various locations in the Project area, could result in the temporary alteration of localized drainage patterns and a temporary increase in erosion and sedimentation in the construction area. The potential erosion and sedimentation impact of increased runoff are discussed above under Impact HYD-1. With compliance with the NPDES-required SWPPP, which would include the implementation of erosion and sediment control BMPs, any short-term impacts resulting from alterations of drainage and hydrology during construction would be **Less than Significant**.

Operation

Transfer Stations (Transfer Station A and Transfer Station B)

Two new waste transfer stations would be developed at the landfill site to implement transfer station operations for waste handling and transport: Transfer Station A, located in the undeveloped northeastern corner of the County's landfill property, and Transfer Station B, located at the current maintenance building site in the southern portion of the site.

Transfer Station A, including the realignment of Harkins Slough Road, would result in 131,700 square feet of new impervious surfaces (as stated in **Table 2-2** in Section 2.6, Project Construction), which would alter on-site drainage patterns. As described in Section 2.4 and the discussion under Impact HYD-1, stormwater runoff would be collected at the low point on the back (northern) side of the transfer station, directed toward the transfer station, and conveyed via storm pipe infrastructure into the landfill's existing stormwater channel. Contact water from inside the transfer station would be collected and held in a storage tank for pump and haul removal.

Harkins Slough Road would be realigned to extend around the northern side of Transfer Station A, effectively relocating the existing impervious paved roadway from one side of the site to the other. The portion of Harkins Slough Road extending along the northeastern perimeter would be sited to avoid the existing drainage ditch along the northern perimeter (both the Transfer Station A Ditch and Harkins Slough Road Drainage). The realigned Harkins Slough Road would drain in the direction

of Transfer Station A to prevent an increase in stormwater runoff to the existing ditch to the north and to open space to the east. Stormwater would be conveyed from the new road to the facility via sheet flow, storm pipe, or a combination of both to the proposed stormwater conveyance systems located adjacent to Transfer Station A.

As described in Section 2.4 under Environmental Enhancement and Habitat Restoration Features, the Project would restore approximately 350 linear feet of the existing Harkins Slough Road Drainage along the north side of Harkins Slough Road, between Buena Vista Drive on the west and the Transfer Station A site on the east, to (1) retain the seasonal creek functions of the feature and (2) accommodate increased stormwater runoff from new impervious surfaces at the Transfer Station A. Restoration would include grading the unvegetated channel to an elevation profile designed to repair existing incision, transport sediment without deposition, and restore ecological functions and values. This would have a beneficial effect on on-site drainage patterns.

Transfer Station B would be constructed on the existing impervious paved area where the existing office and maintenance buildings are located. However, the additional development associated with Transfer Station B is anticipated to increase the volume of stormwater runoff (**Appendix J**). As described in Section 2.4, stormwater surface runoff at Transfer Station B would be conveyed via curbing and V-ditches to a series of catch basins located within the paved area, similar to current conditions. The ultimate outfall would be the existing outfall located east of the facility into the perimeter ditch. The anticipated increase in runoff volume can be conveyed effectively through the existing or replaced stormwater pipe (**Appendix J**). Therefore, there would be no substantial alterations to the existing drainage pattern.

Organics Diversion Facility (ODF Option 1 and ODF Option 2)

The County would continue to divert organic materials (e.g., vegetation/yard waste, food waste) at the Buena Vista facility in compliance with state law organics diversion requirements. The County is considering the following two options for the ODF at the Buena Vista facility. ODF Option 1 would be a continuation of the existing operation located in the northern portion of the landfill, southwest of and near proposed Transfer Station A. ODF Option 2 would relocate the organics diversion operation to the top deck of the Old Landfill site and would include additional compost processing steps to produce finished compost on site (within the County-owned landfill property).

Under ODF Option 1, current organics diversion operations would continue on the northern portion of the landfill. However, the operations would be moved to a higher elevation to allow the landfill to use more landfilling airspace. The new elevation would be 30 to 40 feet higher. In moving to a higher elevation, the landfill would have additional stormwater conveyance systems in place, such as stormwater benches, as described in Section 2.4. The ODF Option 1 area would be paved to facilitate vehicular operations and limit stormwater infiltration into the waste mass. Stormwater runoff would flow north and be directed by diversion berms into larger stormwater conveyance channels. To prevent overflows in the downstream channels, modifications may also include stone check dams, supplemental grassed channels, and erosion control matting to slow runoff and minimize erosion. In addition, any stormwater that would come in contact with certain organics, such as food waste, would be kept under a roof structure to prevent contaminants in stormwater runoff. These modifications would have minor alterations to on-site drainage patterns.

Under ODF 2, the top deck of the Old Landfill site would be primarily paved where ODF operations would occur to accommodate operations, which would result in approximately 460,000 square feet of new impervious surfaces (**Table 2-2** in Section 2.6) and increases in surface runoff compared to existing conditions. As described in the discussion for Impact HYD-1, the existing grade of the top deck

slopes primarily southeast, conveying stormwater runoff into an existing seasonal wetland and drainage located between the Old Landfill and railroad tracks and leads to Gallighan Slough. To accommodate increased stormwater from the newly paved area, a new drainage ditch would be installed parallel to the existing seasonal wetland. Paved stormwater berms may be used to direct the stormwater runoff into the new drainage ditch. The new drainage ditch would include an outlet structure at the downgradient end to tie into the existing seasonal wetland. Additionally, the seasonal wetland would be improved and restored so it can convey stormwater as originally designed and accommodate increased stormwater runoff from new impervious surfaces at the ODF Option 2 site. The new parallel drainage ditch may also have erosion control matting and stone check dams as needed to reduce velocity and minimize erosion. Any contact water would be contained in the concrete bunkers via a system of drains, where it would be collected and reused in the composting process. These modifications would have minor alterations to on-site drainage patterns.

Landfill Closure and Revegetation

Once the capacity of the current active landfill area is reached, the landfill closure and revegetation plan would be implemented. As described in the Preliminary Landfill Closure Plan (**Appendix D**), post closure, a surface water management system would be implemented after the final cover has been placed which would control flows on the surface of the landfill cap to prevent infiltration, inundation, and ponding on the landfill final cover; minimize erosion of final cover; minimize erosion, slope failure, washout, and over-topping of associated surface water conveyances; and minimize sediments carried off site.

The final grading plan generally provides for a minimum 15 ft (4.6 meters) wide bench for approximately every 50 vertical ft (15 vertical meters). Benches collect drainage from the slopes and provide access for maintenance and repair activities. Rainfall, which lands on the slopes, would be collected at the inside edge of the benches at bench drains. The benches are sloped to drain inward to the toe of the slope to the bench drains, which drain laterally along the toe of the slope toward the downdrain system. A number of culverts would be used to convey surface water runoff from the top deck drains, to collect runoff from the bench drains, and convey surface water through road crossings (**Appendix D**).

The storm drains traversing down the surface of the landfill slopes would be composed of lined ditches and/or pipe networks. An inlet apron would be constructed of resistant materials (e.g., sand bags, concrete) around each inlet to serve as a non-erodible approach for deck and bench runoff. The deck areas would be graded to allow for sheet flow away from the center of the deck area to the edges of the deck. A drainage swale and berm would be constructed along the edges to intercept the flow and direct the surface water into the downdrains placed along the top of the slope. The downdrains would convey storm flow from the top deck and bench drains into a perimeter drainage channel. The downdrains would be constructed on the exterior face of the finished slopes. The drainage swale and berms would reduce the possibility of surface water runoff breaching the top edge of the slopes, thereby mitigating erosion. These modifications would alter drainage patterns on the landfill, but they are requirements of the landfill closure process to protect water quality (**Appendix D**)[1] and are not substantially different than existing drainage patterns at the landfill.

[1] Based on the Preliminary Landfill Closure Plan the regulatory requirements are as follows: The design of the SWMS will comply with the applicable federal, state and County requirements. Federal regulatory requirements pertaining to surface water drainage, contained in Part 258 of Subtitle D, present operating criteria for MSW landfills. State of California regulatory requirements for precipitation and drainage controls are contained in Sections 20365, 21090(b)(l), and 21150 of Title 27 of the California Code of Regulations.

Optional Improvements: a) Internal Access Road Improvements, b) Scale House Upgrades, c) Recycling Center Upgrades, d) Equipment Parking and Storage Area

As discussed for Impact HYD-1, some of the internal unpaved roads could be paved creating new impervious surface and increasing stormwater runoff, which would result in minor changes but overall be similar to the existing drainage patterns. Scale house and recycling center upgrades would not contribute additional impervious surface or otherwise result in changes to drainage patterns.

The equipment parking and storage area is currently primarily unpaved and would be primarily paved, creating an increase in impervious surface and stormwater runoff. As described in Section 2.4, Project design would maintain the existing grade, which slopes gently from north to south with surface runoff entering the existing drainage swale. Project design would maintain the existing grade and capture stormwater runoff with a bioswale, underground recharger chambers, or use of a Stormceptor system to capture debris and oils while allowing stormwater to flow efficiently. Other measures that may be implemented include gravel disconnect areas, level spreaders, or check dams to dissipate the runoff to a non-erosive flow. None of these measures would substantially alter existing drainage patterns. The County would continue to monitor system capacity and conditions downstream near the wastewater treatment ponds for the housing complex, and upgrade facilities as needed.

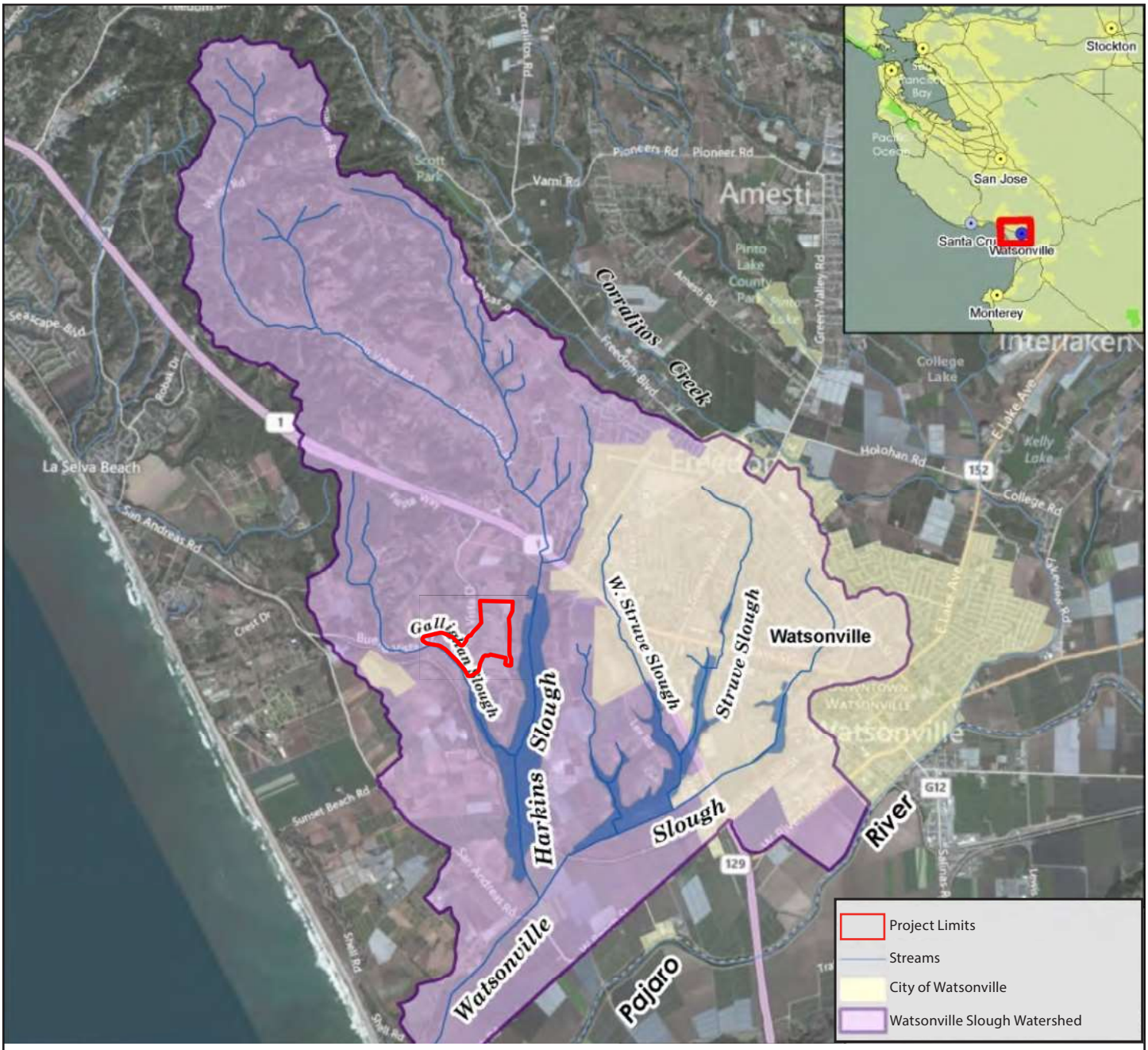
In summary, construction and operation of the Project, including the primary components and optional improvements described above, as well as the associated General Plan/LCP Land Use Designation and Zoning Map Amendments, would not substantially alter existing drainage patterns within the Project area or vicinity in a manner that would result in flooding on or off site, create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems, or provide substantial additional sources of polluted runoff, compared to existing conditions. Further, the planned culvert replacement beneath the road to the Old Landfill, where it crosses the Channelized Gallighan Slough (Figure 2-4), would improve the existing drainage patterns on the west side of the landfill and reduce flooding that currently occurs on Buena Vista Drive during storm events, compared to existing conditions. Therefore, the impact would be **Less than Significant.** No mitigation is required.

Threshold D:	In flood hazard, tsunami, or seiche zones, risk release of pollutants due to Project inundation.

Impact HYD-4 THE PROJECT WOULD NOT RISK RELEASE OF POLLUTANTS DUE TO PROJECT INUNDATION IN FLOOD HAZARD, TSUNAMI, OR SEICHE ZONES. (NO IMPACT)

The Project area is not located in any FEMA-designated Special Flood Hazard Areas. In addition, a seiche is a phenomenon typically associated with land-locked bodies of water, none of which occur near the Project components. The Project area is not located in a tsunami inundation zone.

Implementation of the Project, including the primary components and optional improvements described above, as well as the General Plan/LCP land use designation and zoning map amendments, would not release pollutants due to inundation caused by a flood hazard, tsunami, or seiche. Therefore, there would be No Impact. No mitigation is required.



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Source: Santa Cruz Resource Conservation District. 2014.

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Figure 3.10-1

Watsonville Slough Watershed

Buena Vista Landfill Redevelopment Project

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3.11 Land Use and Planning

This section describes existing land use, outlines the regulatory framework applicable to land use and planning, and evaluates impacts related to land use and planning as a result of the Buena Vista Landfill Redevelopment Project (Project) construction and operation. **Table 3.11-1** presents a summary of potential impacts related to land use and planning. All figures are presented at the end of Section 3.11.

Table 3.11-1. Summary of Impacts on Land Use and Planning

Impact	Significance before Mitigation	Mitigation	Significance after Mitigation
LUP-1. The Project would not physically divide an established community.	Less than Significant	None Required	Less than Significant
LUP-2. The Project would not conflict with applicable land use plans, policies, or regulations adopted for the purpose of avoiding or mitigating an environmental effect.	Less than Significant	None Required	Less than Significant

Notes: The impact, significance determination, and mitigation apply to the Project as a whole, considering all Project components, unless otherwise noted.

3.11.1 Existing Conditions

Regional Setting

Santa Cruz County (County) occupies approximately 600 square miles of urban and rural lands bordered by beaches and coastal bluffs along Monterey Bay and backed by coastal mountains and valleys to the east. The County supports a diverse range of habitats and land uses that include redwood forests in the mountains in the northern portion of the County, urban and residential development in the central portion, and agricultural land uses in the northwestern and southern portions. Most of the population in the County is centrally located in urban and residential development.

Land uses in the County are predominately open space (including agriculture), which accounts for approximately 64 percent of the land uses (169,600 acres). This is followed by lands designated for residential uses (65,152 acres, or 24.5 percent), public and institutional lands (24,252 acres, or 9.1 percent), and commercial and industrial lands (6,431 acres, or 2.4 percent) (Santa Cruz County 2024).

The Project area is situated in a generally rural area of south County, and it is on the west side of State Route 1 (Highway 1) in the Coastal Zone.

The dominant land uses in the unincorporated south County region are low density and rural residential; open space including public beaches, trails, the Watsonville sloughs; and agriculture. The southern part of Santa Cruz County, where Buena Vista Landfill is located, is the most productive agricultural region in the County. Commercial Agriculture (CA) is the most common zoning designation in this region. Other zoning designations include Public and Community Facilities (PF); Parks, Recreation and Open Space (PR); Residential Agriculture (RA); and Special Use (SU). The Project area and surrounding parcels are located within safety zones of the Watsonville Municipal Airport and are therefore included in the Airport Combining Zone (AIA).

Project Area Setting

The Project area is the Buena Vista Landfill site, located southeast of the Buena Vista Drive/Harkins Slough Road intersection in unincorporated southern Santa Cruz County (**Figure 2-1**, Project Overview). The existing land uses surrounding the Project area include agricultural uses (row crops, greenhouses, horse stables, fallow lands) to the northwest, north and northeast of the landfill site. There is a federally owned ecological reserve managed by the U.S. Fish and Wildlife Service and Harkins Slough located east of Harkins Slough Road (**Figure 2-2**, Landfill Parcels and Current Zoning).

Public facilities are located to the southeast, south, and southwest of the landfill site. The County's Buena Vista Migrant Center (farmworker housing and childcare facility), a publicly owned farmworker housing development and childcare center, and the Tierra Alta affordable housing complex, are located southeast of the landfill on Tierra Alta Drive. The County's Rountree Medium (Jail) Facility is located south of the landfill site on Rountree Lane. The City of Watsonville's landfill is located southwest of the County's "Old Landfill" and is accessed from San Andreas Road. The City of Watsonville landfill is used only by Watsonville city operated refuse collection trucks. The Santa Cruz Branch Rail Line extends between the County's Old Landfill and the Watsonville landfill.

Existing land uses within the Project area include the landfill, portions of which are actively collecting solid waste and portions that are closed and capped. The active landfill boundary is shown on **Figure 2-1** with the red dashed boundary line. Within the active landfill area, unshaded area is already closed and capped; and the area in green shading would be closed and revegetated. Within the landfill, there is a recycling center, household hazardous waste collection area, and scale house near the main entrance off Buena Vista Drive; organics diversion and preprocessing area in the north portion of the active landfill area; and a maintenance shop and office building south of the active landfill area that is accessible for County employees from Rountree Lane. Some portions of the Project area are vacant, including the Transfer Station A site north of the landfill and the equipment parking and storage site south of the landfill, both on County-owned property.

3.11.2 Regulatory Setting

This section describes the federal, state, regional, and local plans, policies, and laws relevant to land use for the Project.

Federal

Coastal Zone Management Act

The Coastal Zone Management Act was passed by Congress in 1972. It provides for management of coastal resources and aims to protect, restore, and enhance coastal resources through three programs administered by the National Oceanic and Atmospheric Administration in partnership with coastal states. In California, the Coastal Zone Management Act is administered in partnership with the California Coastal Commission (CCC). In partnership with coastal cities and counties, it plans and regulates the use of land and water in the Coastal Zone. Development activities, which are broadly defined by the Coastal Zone Management Act to include construction of buildings, divisions of land, and activities that change the intensity of use of land or public access to coastal waters (among other activities), generally require a coastal permit from either the CCC or the local government. The National Coastal Zone Management Program balances competing land and water issues. Programs under the Coastal Zone Management Act include the National Estuarine Research Reserve System, which protects estuaries for use as field laboratories that improve understanding of estuaries, and

the Coastal and Estuarine Land Conservation Program, which assists with acquisition of coastal property or easements for conservation purposes.

State

California Coastal Act

The California Coastal Act of 1976 establishes procedures for the review of proposed developments in the Coastal Zone and policies for the protection of coastal resources and public access to the coastline. There are a number of Coastal Act regulations in the California Public Resources Code that pertain to land use and planning. These include articles that protect the coastal lands and natural resources that they support while providing public access to the greatest extent possible. There are also provisions for providing the appropriate number and distribution of public facilities as California's population grows. These include recreational opportunities such as trails, access facilities, and public restrooms. There are also provisions to protect the rights of private landowners and land uses on private properties that neighbor public access and coastal areas.

Regional

Watsonville Municipal Airport Land Use Compatibility Plan

The basic function of airport land use compatibility plan in Santa Cruz County is to promote compatibility between the Watsonville Municipal Airport and existing and future land uses in the unincorporated areas of the County that surround it, to recognize the extent to which these areas may already be developed with incompatible uses, and to comply with State of California statutes, regulations, and other laws governing land uses surrounding the airport. Santa Cruz County does not need to form an airport land use commission provided the County incorporates the height, use, noise, safety, and density criteria that are compatible with airport operations as established by the California Airport Land Use Planning Handbook (Handbook), and any applicable federal aviation regulations, The County must adopt the Handbook's criteria and incorporate the criteria as part of its General Plan.

Both the County's existing Land Use Element and the proposed Built Environmental (BE) Element of the General Plan address airport land use compatibility. The airport compatibility requirements are applicable to the Airport Influence Area (AIA), which is the area or areas in which current or future airport-related noise, overflight, safety, or airspace protection factors may significantly affect land uses or necessitate restrictions on land use. According to California Public Utilities Code (PUC), Section 21675.1(b), the AIA must encompass that land within 2 miles of the boundaries of the Watsonville Municipal Airport.

Local

Santa Cruz County General Plan/Local Coastal Program

The purpose of the County General Plan/Local Coastal Program (LCP) is to guide and regulate land use and development in unincorporated Santa Cruz County, including lands within the Coastal Zone. The County updated the General Plan/LCP (also called the Sustainability Update), and it was adopted by the County Board of Supervisors on November 15, 2022. The CCC reviewed the LCP amendments, provided initial approval with suggested modifications in December 2023, and certified the LCP amendments in March 2024 after the County accepted the modifications. The

following guiding principles have been incorporated throughout the elements of the Santa Cruz County General Plan/LCP (Santa Cruz County 2024):

- Focused Development. New development should be compact, located primarily within existing urban areas, and should feature a mixture of uses and development intensities that support transportation choices.
- Transportation Choices. Develop safe, reliable, and efficient transportation choices to improve air quality, reduce GHG emissions, promote public health, and enhance quality of life.
- Open Space and Resource Preservation. Preserve the County's unique natural resources and habitats by carefully managing new development outside the urban and rural services line.
- Unique Community Character. Enhance the unique characteristics of communities by investing in healthy, safe, attractive, and walkable neighborhoods and efficient transportation choices.
- Economic Vitality. Support locally owned businesses that bind the community together and new businesses that generate jobs and local economic prosperity. Encourage businesses that generate tax revenue and support efforts to train residents to occupy locally available jobs.
- Housing Options. Expand housing choices for people of all ages and incomes to lower the combined cost of housing and transportation and to promote diversity in terms of age, income, and family size throughout the County.
- Equity and Inclusive Decision-Making. Encourage a broad range of community and stakeholder involvement representing all communities in the County to ensure equitable land use planning and decision-making.
- Governmental Coordination. Align policies and funding among local, County, regional, and State governmental agencies. Remove barriers to collaboration, leverage funding, improve local control over local resources.
- Fiscal Sustainability. Recognize that there is a significant gap between the level of revenue that is generated by the existing land use pattern. Promote development patterns that generate revenues to provide the infrastructure and services necessary for thriving communities.

The County General Plan includes elements required by the state by including Built Environment (land use); Access and Mobility; Housing; Agriculture, Natural Resources, and Conservation; Public Safety; Parks, Recreation, and Public Facilities; and Noise (Santa Cruz County 2024). The Project was analyzed for consistency with policies and objectives of the County General Plan, including those in the Agriculture, Natural Resources, and Conservation; Built Environment; and Parks, Recreation, and Public Facilities elements. These elements address the provision of public facilities in the County and provide policies related to the operation and closure of Buena Vista Landfill.

In the Built Environment Element, County General Plan land use designations define the physical uses and intensity of development for each land use designation. The Project area is within the Public Facility/Institutional (P) and Agriculture (AG) land use designations and is surrounded by other P and AG land uses. County General Plan land use designations are shown on **Figure 3.11-1**, County of Santa Cruz General Plan Land Use Designations, located at the end of this section.

Santa Cruz County Zoning Ordinance, Title 13

The County Zoning Ordinance (Chapter 13.9) implements the policies of the County General Plan and LCP by classifying and regulating the uses of land in the County. The County Zoning Ordinance identifies specific zoning districts in the County and development standards that apply to each district. Zoning designations in and adjacent to the Project area are shown on **Figure 2-2**.

The Project area is currently zoned as Public Facilities-Airport Influence Area (PF-AIA), and Commercial Agriculture-Airport Influence Area (CA-AIA) and is immediately surrounded by other Public and Community Facilities and Commercial Agriculture zoning districts. The Project area and surrounding parcels are included in the Airport Combining Zone (AIA). These zoning designations are defined below:

- **Commercial Agriculture (CA):** The purposes are to preserve the commercial agricultural lands within Santa Cruz County which are a limited and irreplaceable natural resource, to maintain the economic integrity of the economic farm units comprising the commercial agricultural areas of the County, to implement the County's agricultural preservation policy, and to maintain and enhance the general welfare of the County as a whole by preserving and protecting agriculture, one of the County's major economic sectors.
- **Public and Community Facilities (PF):** The purposes are to provide areas for public and quasi-public community facilities, including public and private institutions providing an essential public service or facility and to regulate the use of land for public and community facilities with regard to their locations, design, service areas, and range of uses.
- **Airport Combining Zone (AIA):** The purposes are to protect public health, safety, and welfare by ensuring the orderly expansion of airports, and to implement land use measures that protect the public from exposure to excessive noise and safety hazards within specified areas around the Watsonville Municipal Airport.

Refer to Section 3.4.2 in Section 3.4, Biological Resources, for a description of the Santa Cruz County Sensitive Habitat Protection Ordinance, Riparian Corridor and Wetlands Protection Ordinance, and Significant Trees Protection Ordinance, and Tree Removal Policy.

3.11.3 Methodology and Significance Thresholds

Methodology

Potential impacts related to land use and planning as a result of the Project were evaluated by comparing Project objectives and characteristics to existing plans and policies throughout the County, including General Plan and LCP land use and zoning designations and policies. Mitigation measures required throughout this Environmental Impact Report (EIR) for identified areas of potentially significant impacts were taken into consideration in the evaluation of consistency with applicable policies and plans.

Significance Thresholds

The introduction in Chapter 3, Environmental Impact Analysis, states that the significance thresholds used in this analysis are based on Appendix G of the California Environmental Quality Act (CEQA) Guidelines, which provides a sample Initial Study checklist that includes a number of factual inquiries related to the subject of land use, and the other environmental topics. The letters and thresholds presented below correspond with the questions in the Appendix G Initial Study checklist.

For the purpose of this EIR, a significant impact would occur if implementation of the Project would:

A. Physically divide an established community.

B. Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.

3.11.4 Project Impact Analysis

For each impact, the overall conclusion or significance determination is presented at the end of the discussion, as well as in parentheses at the end of the numbered impact statement.

As described in Chapter 2, Project Description, the Project components include:

1. Transfer Stations (Transfer Station A and Transfer Station B)
2. Organics Diversion Facility (ODF Option 1 and ODF Option 2)
3. Landfill Closure and Revegetation
4. Optional Elements: a) Internal Access Road Improvements, b) Scale House Upgrades, c) Recycling Center, d) Equipment Parking and Storage Area
5. General Plan/Local Coastal Program Land Use Designation and Zoning Map Amendments

Threshold A: Physically divide an established community.

Impact LUP-1 THE PROJECT WOULD NOT PHYSICALLY DIVIDE AN ESTABLISHED COMMUNITY. (LESS THAN SIGNIFICANT)

The Project consists of a series of improvements within the existing landfill footprint and on vacant portions of adjacent parcels on County-owned land. Components of the Project that would occur within the existing landfill footprint include Transfer Station B, Organics Diversion Facility (ODF) Options 1 and 2, landfill closure and revegetation, and the optional elements of internal access road improvements, scale house upgrades, and recycling center upgrades. Components that would occur outside the existing landfill footprint but on County-owned property adjacent to the landfill footprint are Transfer Station A and the optional element of the equipment parking and storage area. Refer to **Figure 2-1**.

To accommodate Transfer Station A and maintain public traffic flow outside landfill operations, a portion of Harkins Slough Road would be realigned to the north and east of its existing footprint, near the northern and eastern property boundaries (refer to **Figure 2-1**). A stop sign would be added at the 90-degree turn in the far northeast corner to slow traffic for safety. Harkins Slough Road provides access to the Buena Vista Migrant Center (farmworker housing and childcare facility) and the Housing Authority's affordable housing complex known as Tierra Alta, southeast of the landfill, and the Rountree Medium (Jail) Facility south of the landfill. Realignment of Harkins Slough Road would maintain separation of local public traffic accessing these land uses from landfill operation. Because the realigned roadway includes a stop sign and there currently is no stop sign in the portion of Harkins Slough Road, the travel time for those using Harkins Slough Road may be slightly longer. However, the realignment would not impede traffic or physically divide the community.

Overall, the Project components would occur within the existing landfill footprint and vacant portions of adjacent parcels, and the realignment of Harkins Slough Road would maintain separation of public traffic from landfill operation traffic. Implementation of the Project components would not create any new land use barriers, preclude the development of surrounding parcels or otherwise divide or disrupt the physical arrangement of the surrounding community. Therefore, implementation of the Project including the primary components and optional improvements, as well as the associated General Plan/LCP land use designation and zoning map amendments, would not physically divide established communities. The impact would be **Less than Significant.** No mitigation is required.

Threshold B:	Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.

Impact LUP-2 THE PROJECT WOULD NOT CONFLICT WITH APPLICABLE LAND USE PLANS, POLICIES, OR REGULATIONS ADOPTED FOR THE PURPOSE OF AVOIDING OR MITIGATING AN ENVIRONMENTAL EFFECT. (LESS THAN SIGNIFICANT)

As shown on **Figure 2-2**, the majority of the Project area is zoned for Public and Community Facilities (PF-AIA). The existing landfill, associated infrastructure, and Project components are compatible with this zoning designation. The eastern portion of the Project area, a 35-acre section of parcel APN 052-021-33 including a portion of the existing landfill, is zoned Commercial Agriculture (CA-AIA). As noted in Section 1.2.2 (Buena Vista Landfill under Landfill Closure and Agricultural Viability) and Section 3.2 (Agricultural Resources, Impact AG-2), an Agricultural Viability Study prepared by Rush and Associates determined that this area is unsuitable for farming or grazing operations (**Appendix B**). To achieve consistency with the existing and proposed use and in recognition of the area's unsuitability for agriculture, the Project includes rezoning the CA-AIA portion of this parcel to PF-AIA. The Project would also require a General Plan/LCP Amendment to change the General Plan/LCP Land Use Designation maps to redesignate the 35 acres on parcel APN 052-021-33 currently designated Agriculture (AG) to Public Facility/Institutional (P).

To address potential conflicts with any applicable land use plan, policy or regulations, the Project is evaluated for consistency with specific relevant policies—the purpose of which is to avoid or mitigate an environmental effect—in the County General Plan/LCP. As demonstrated in **Table 3.11-2,** Santa Cruz County General Plan/Local Coastal Program Policy Consistency Analysis, the Project would not conflict and therefore would be consistent with most applicable policies (66 of the 68 policies discussed).

The Project would be inconsistent with policies related to the protection of sensitive habitat areas, riparian, habitat, and wetlands, as well as the County's Significant Tree Protection Ordinance (SCCC Chapter 16.34); and the potential impact is fully addressed in Section 3.4, Biological Resources. As described in Section 3.4 and **Table 3.11-2**, the Project would impact coast live oak woodland, which is considered sensitive habitat, from construction of Transfer Station A and the realignment of Harkins Slough Road bordering the Wildlife Refuge. In addition, the Project would result in minimal impacts to riparian forest and sensitive habitat. Implementation of Mitigation Measures BIO-8a through BIO-8d would reduce potential impacts to riparian forest and other sensitive habitat to a less than significant level. However, it would not reduce impacts to coast live oak woodland to a less than significant level because on-site mitigation measures are out-of-kind, and tree replacement would take place off-site and require 35–40 years to attain the habitat features and qualities of the displaced habitat.

In summary, the Project, including the primary components and optional improvements, as well as the associated General Plan/LCP land use designation and zoning map amendments, would be consistent with most applicable policies (63 of 68) and therefore would not cause a significant impact due to a conflict with a land use plan, policy or regulation adopted for the purpose of avoiding or mitigating an environmental effect. The impact would be **Less than Significant**. No mitigation is required.

Table 3.11-2. Santa Cruz County General Plan/Local Coastal Program Policy Consistency Analysis

Santa Cruz County General Plan Policy	Consistency Discussion
Built Environment Element	
BE-4.2.2 (LCP) Site Design for Environmental Protection. Review new developments for compliance with SCCC Title 16 environmental ordinances. Siting and designs should minimize grading, avoid or provide mitigation for geologic hazards and sensitive habitats, reduce fire risk, conform to the physical constraints and topography of the site, and maintain natural drainage patterns. Streams should remain daylighted rather than piped, where possible, with development incentives or variances allowed to ensure feasibility and property owner support for open streams. Development on slopes should be low profile and step down the hillside. Unnecessary grading for the purpose of meeting building height restrictions is prohibited.	**Consistent.** The Project has been designed to minimize the required grading to minimize impacts to geological hazards and sensitive habitats, reduce fire risk, conform to the physical constraints and topography of the site, and maintain natural drainage patterns. For example, the Harkins Slough Road realignment near the oak woodland to the east would have a 2:1 slope, rather than a 3:1 slope or retaining wall that would require a large construction footprint and remove more trees. The grading required for the landfill closure and revegetation would be in compliance with regulatory requirements for landfill closure. Please refer to Sections 3.4, Biological Resources, 3.7, Geology and Soils, and 3.20, Wildfire, for additional discussions.
BE-4.2.4 (LCP) Wildlife-Compatible Development. Limit reflectivity, glare, and artificial light pollution from buildings and sites as practicable in order to preserve dark skies and reduce impacts to wildlife, especially in rural areas and over marine waters. Encourage landscapes that provide habitat for birds and wildlife as appropriate based on the location and intensity of development. Encourage the use of native plants and discourage the use of invasive species.	**Consistent.** The Project would limit reflectivity, glare, and artificial light pollution from new facilities. For example, the lighting for Transfer Station A in the northeast corner near the Wildlife Refuge (as well as Transfer Station B in the existing landfill maintenance yard) would be kept to a minimum to what is required for safety and operational needs during normal operating hours from 7:00 am to 5:00 pm, and it would be low level and directed away from the adjacent Wildlife Refuge. There could be minimal lighting installed for security at the optional equipment parking and storage area on Rountree Lane, which is located further from the Wildlife Refuge. There is no planned lighting for ODF Options 1 and 2, optional road improvements, or for landfill closure and revegetation. The Project does not include landscaping at existing or new facilities, but it does include several environmental enhancement and restoration features that support and encourage wildlife movement. As described in Section 2.4, these include Restoration of Harkins Slough Road Drainage, Culvert Modification with Small Wildlife Crossing at Main Entrance, Culvert Replacement under Old Landfill Entrance, and a Wildlife Movement Corridor planted with native vegetation, where feasible, between Gallighan Slough and Harkins Slough. Also, refer to Section 3.4 (Impact BIO-4).
BE-4.2.5 (LCP) Stormwater Runoff Reduction. Encourage the use of design elements such as permeable pavers and bioswales, in order to minimize impervious area and to reduce and pretreat stormwater flowing off site into the public storm drain system, and to improve the quality of stormwater infiltrating into the groundwater supply both on- and off-site.	**Consistent.** The Project would result in an increase in impervious surfaces compared to existing conditions. The Project includes stormwater filtration measures to prevent unwanted solid waste or contaminated stormwater from entering the stormwater system, including Stormceptors or filtration inlet bags. Refer to Section 3.10, Hydrology and Water Quality, for additional discussion on stormwater runoff reduction.

Table 3.11-2. Santa Cruz County General Plan/Local Coastal Program Policy Consistency Analysis

Santa Cruz County General Plan Policy	Consistency Discussion
BE-5.4.2 (LCP) Airport Land Use Compatibility. All land uses and development activity within the AIA must comply with the height, use, noise, safety, and density criteria that are compatible with airport operations as established by the latest version of the California Department of Transportation Division of Aeronautics Airport Land Use Planning Handbook (Handbook), and any applicable federal aviation regulations, including, but not limited to, Part 77 (commencing with Section 77.1) of Title 14 of the Code of Federal Regulations.	**Consistent.** The Project area is located within the designated Airport Influence Area (AIA) for the Watsonville Municipal Airport. Specifically, the Project area is located within the boundaries of the Safety Compatibility Zone 6 or the Traffic Pattern Zone (Santa Cruz County 2024a). The Project area is also located in the Overflight Zone. The Project is not located within the 60-decibel Community Noise Equivalent Level contour, and no sensitive receptors would be subject to adverse aviation noise impacts. The maximum allowable elevation or height of the landfill, in accordance with the permits and the restrictions of the Overflight Zone, is 200 feet. The elevation for the various Project components and associated structures would be below the 200-foot limit. Refer to Section 3.9, Hazards and Hazardous Materials, for additional discussion. The FAA No Hazard Determination has been issued to the County.
BE-5.4.4 (LCP) Land Use Limitations in Airport Safety Zones. New development within the airport safety zones must comply with the uses, densities, and intensities as established by the Handbook and federal law.	**Consistent.** The Project area is located within the designated AIA for Watsonville Municipal Airport. Specifically, the Project area is located within the boundaries of the Safety Compatibility Zone 6 or the Traffic Pattern Zone (Santa Cruz County 2024a). The Project components (Transfer Stations A and B, Organics Diversion Facility Options 1 and 2, landfill closure and revegetation, and the optional elements of internal access road improvements, scale house upgrades, recycling center upgrades, and parking and equipment storage area) are allowable uses within the Watsonville Safety Compatibility Zone 6.
BE-5.4.10 (LCP) Airspace Obstructions. Limit the height of buildings, antennas, other types of structures, and trees so as not to pose a potential hazard to flight. The criteria for determining the acceptability of a project or other condition with respect to height is determined by the standards set forth in Federal Aviation Regulations Part 77, Subpart C, Objects Affecting Navigable Airspace; the United States Standard for Terminal Instrument Procedures; and applicable airport design standards published by the Federal Aviation Administration (FAA).	**Consistent.** The maximum allowable elevation or height of the landfill, in accordance with the permits and the restrictions of the Overflight Zone, is 200 feet. The elevation for the various Project components and associated structures would be below the 200-foot limit. Refer to Section 3.9 for additional discussion.
BE-6.2.1 Environmental Review Required. Require environmental review per CEQA (California Public Resources Code, Title 13, Sections 21000–21178; and California Code of Regulations, Title 14, Sections 15000-15387) and associated guidelines for all non-exempt development projects, rezonings, and General Plan Amendments.	**Consistent.** The Project would require a General Plan/LCP Amendment and a change to the General Plan/LCP Land Use Designation maps to redesignate the 35 acres on parcel APN 052-021-33 currently designated Agriculture (A) to Public Facility/Institutional (P). This Environmental Impact Report (EIR) is a project-specific EIR being prepared for the Buena Vista Landfill Redevelopment Project.

Table 3.11-2. Santa Cruz County General Plan/Local Coastal Program Policy Consistency Analysis

Santa Cruz County General Plan Policy	Consistency Discussion
BE-6.2.2 Mitigation Measures Required. Require mitigation measures as identified through the environmental review process to be incorporated into all approved projects as conditions of approval or require adoption of statements of overriding considerations if mitigations cannot be implemented to reduce environmental impacts below significance thresholds.	**Consistent.** This project-specific EIR is being prepared for the Buena Vista Landfill Redevelopment Project. Mitigation measures have been identified in the following sections and will be incorporated into the conditions of approval for the Project. A list of the mitigation measures is provided in the Executive Summary, **Table ES-2.** • 3.4, Biological Resources • 3.5, Cultural Resources • 3.7, Geology and Soils • 3.13, Noise • 3.18, Tribal Cultural Resources
Access and Mobility Element	
AM-6.2.1 Level of Service Criteria. Require development projects to provide multimodal roadway improvements necessary to achieve a minimum level of service (LOS) of "D," except for those where a lesser LOS has been accepted by the County pursuant to the criteria specifically identified in Table 3-2 below. When development is proposed on roads where a LOS E or F standard has been accepted, require feasible mitigation in the form of road improvements, a fair share contribution to a road improvement program, or other in-lieu mitigation for the transportation system.	**Consistent.** As discussed in Section 3.17, Transportation, and described in **Appendix L**, Transportation Impact Analysis, all study intersections are anticipated to operate at an acceptable LOS during the AM and PM peak hour, and the Project is not anticipated to create a significant traffic adverse effect, under all the conditions evaluated, including: Existing, Interim (2032), Interim (2032) Plus Project, Cumulative (2045), and Cumulative (2045) Plus Project. Additionally, there is sufficient queuing storage for all movements at study intersections. The Project is not anticipated to increase the vehicle queue and create an adverse effect to the study intersections during AM and PM peak hours.
AM-6.2.3 Trip Generation Reductions. Allow for the reduction of trip generation rates for the purposes of VMT analysis if proposed development can demonstrate lower than average trip rates through land use siting close to high quality transit, transportation demand management measures, providing a mixture of uses on site, or other factors that have been demonstrated through research to produce lower trip rates than Institute of Traffic Engineers (ITE) standard trip rates.	**Consistent.** As discussed in Section 3.17, Transportation, a Vehicle Miles Traveled (VMT) screening was conducted for the Project. The County's VMT Guidelines provide details on appropriate screening thresholds that can be used to identify when a proposed land use project is anticipated to result in a less than significant VMT impact without conducting a more detailed VMT analysis. The Small Project screening criteria applies to projects with low trip generation per existing CEQA exemptions. Projects generating less than 110 net new trips per day are presumed to have a less than significant VMT impact and require no further analysis. The employee daily trip estimates from Institute of Transportation Engineers (ITE), 11th Edition for Small Office Buildings (ITE 712) is summarized in Section 3.17 (**Table 3.17-4**). ITE estimates the new office space constructed as Project workspace would generate a total of 86 weekday vehicle trips per day, which is below the small project screening threshold of 110 net new trips. Therefore, no additional VMT analysis is needed. It is also important to note that Project operation is not anticipated to generate any "new" vehicle trips, as the waste management workforce is expected to

Table 3.11-2. Santa Cruz County General Plan/Local Coastal Program Policy Consistency Analysis

Santa Cruz County General Plan Policy	Consistency Discussion
	stay the same. Thus, the ITE trip generation rates estimate trips for the existing workforce, not new trips generated by the Project.
Agriculture, Natural Resources and Conservation Element	
Policy ARC-1.3.1 Conversion of Commercial Agricultural Lands. Consider conversion and/or development of commercial agricultural lands to non-agricultural uses only when all of the following criteria are met: ▪ It is determined that the land is not viable for farming or for other allowable agriculture uses, and that it is not likely to become viable in the near future (See Policy ARC-1.3.2); and ▪ Findings are made that new information has been presented to demonstrate that the conditions on the land in question do not meet the criteria for commercial agricultural land; and ▪ The conversion of such land or use to non-agricultural uses will not impair the viability of, or create potential conflicts with, other commercial agricultural lands in the area; and ▪ The conversion of such land is concentrated on the site or parcel to the minimum area necessary to achieve the objectives of the proposed conversion.	**Consistent.** A portion of the Project area (35 acres) is zoned Commercial Agriculture and Airport Combining Zone (CA-AIA), and no portion of the Project area is enrolled in a Williamson Act contract. The 35-acre portion of the Project area zoned CA-AIA is not currently being farmed or grazed, and there is no history of conventional farming or use of the property as rangeland (**Appendix B**). However, as currently zoned, some of the Project components and uses (Transfer Station A, ODF Option 1, and optional equipment parking and storage area) would conflict with the allowed uses under the existing zoning for commercial agricultural use. The Project includes updates to land use designations of parcel APN 052-021-33, including Agricultural Resource Map, General Plan/LCP Program Map, and Zoning Map amendments, to reflect and support the historical use of the property as a landfill and the proposed landfill redevelopment. An Agricultural Viability Study (**Appendix B**) was prepared as an agriculture-based evaluation of the condition and status of the 35 acres located in the eastern portion of land within APN 052-021-33. Based on the analysis, the study concluded that the 35-acre area was never wholly appropriate for use as designated Commercial Agriculture (CA). In addition, the study determined that the poor and highly variable soil quality, native vegetation, proximity to the wildlife refuge, and topography were not and are not suitable for farming, nor would it be suitable for farming upon cessation of the existing landfill activities. Refer to Section 3.2, Agricultural Resources, for a discussion of potential impacts and mitigation measures.
ARC-1.3.2 Determining Agricultural Viability. Require a viability study to be conducted in conjunction with an application that proposes to convert commercial agricultural and prime agricultural lands to non-agricultural land uses, to include but not limited to an economic feasibility evaluation which contains at least: ▪ An analysis of the gross revenue from the agricultural products grown in the area for the five years immediately preceding the date of filing the application. ▪ An analysis of the operational expenses, excluding the cost of land, associated with the production of agricultural products grown in the area for the five years immediately preceding the date of filing the application. ▪ An identification of the geographic area used in the analyses. The area shall be of sufficient size to provide an accurate evaluation of the economic feasibility of agricultural uses for the land stated in the application.	**Consistent.** As stated above, an Agricultural Viability Study (**Appendix B**) was prepared for the 35 acres located in the eastern portion of land within APN 052-021-33 and concluded that the 35-acre area was never wholly appropriate for use as designated Commercial Agriculture (CA). An economic feasibility evaluation was not included in the viability study, because the area analyzed has not been in agricultural production since the County approved landfill expansion in 1985 (over 40 years ago). The County's Agricultural Policy Advisory Commission (APAC) would review the viability study and make recommendations as part of the approval process.

Table 3.11-2. Santa Cruz County General Plan/Local Coastal Program Policy Consistency Analysis

Santa Cruz County General Plan Policy	Consistency Discussion
Recommendations regarding viability shall be made by the Agricultural Policy Advisory Commission based on evaluation of the viability study and the following criteria: parcel size, sizes of adjacent parcels, degree of non-agricultural development in the area, inclusion of the parcel in utility assessment districts, soil capabilities and topography, water availability and quality, and proximity to other agricultural use.	
ARC-1.4.1 Agricultural Buffers Required. In order to prevent or minimize potential land use conflicts, nonagricultural habitable uses such as residences (excluding farmworker housing), habitable accessory structures and non-agricultural commercial businesses that are located on land adjacent to a parcel in the Commercial Agriculture or Agriculture Preserve zone districts are required to provide a 200-foot buffer setback to the property line of the adjacent commercial agricultural parcel, unless an exception, as provided in ARC-1.4.2, is approved to reduce the extent of the agricultural buffer.	**Consistent.** The Project does not propose any non-agricultural habitable uses such as residences, nor commercial business operations. The Project includes public facility operations [e.g., waste transfer, recycling, composting] which would be located more than 200 feet from adjacent commercial agricultural properties. Although Transfer Station A in the northeast corner could be within 200 feet of land zoned for Commercial Agriculture, the land to the east is a Wildlife Refuge and would not be used for agricultural purposes, and the land to the north is abandoned greenhouses with no planned agricultural production. Additionally, Transfer Station A would be enclosed with fencing to prevent potential land use conflicts. Also refer to Section 3.2, Agricultural Resources.
ARC-3.1.3 (LCP) Environmentally Sensitive Habitat Areas (ESHA). Evaluate sites proposed for development within the coastal zone for the presence of ESHA, within the categories of habitat areas described in ARC-3.1.2(d) through (j), and other categories that may meet the Coastal Act Section 30107.5 definition of ESHA. Areas confirmed to be ESHA may only be developed for uses dependent on such resources in these habitats within the Coastal Zone, unless the other uses are: (1) consistent with sensitive habitat protection policies and serve a specific purpose beneficial to the public; (2) determined through environmental review that any adverse impacts on the resource will be completely mitigated and there is no feasible less-damaging alternative; and (3) legally necessary to allow a reasonable economic use of the land, and there is no feasible less-damaging alternative	**Inconsistent.** As discussed in Section 3.4, the Project would impact coast live oak woodland, and, minimally, Harkins Slough Road Drainage, which are considered Coastal Act/LCP ESHA, from construction of Transfer Station A and the realignment of Harkins Slough Road. The project has been designed to minimize this impact to the extent feasible as described in Section 2.4 under Harkins Slough Road Realignment and in Section 3.4. However, the Project is not considered an allowable resource-dependent use within ESHA, nor does it fulfill all of the three conditions listed in the column to the left. Therefore, the Project would be inconsistent with General Plan/LCP Policy ARC-3.1.3. An exception may be granted by the Decision-Making Body[1] if, as described in detail in Section 3.4.2 Regulatory, and under Thresholds B, C, and E of Section 3.4. 4, the following findings can be made: (1) That adequate measures will be taken to ensure consistency with the purpose of this chapter to minimize the disturbance of sensitive habitats; and (2) One of the following situations exists: (a) The exception is necessary for restoration of a sensitive habitat; or

Table 3.11-2. Santa Cruz County General Plan/Local Coastal Program Policy Consistency Analysis

Santa Cruz County General Plan Policy	Consistency Discussion
	(b) It can be demonstrated by biotic assessment, biotic report, or other technical information that the exception is necessary to protect public health, safety, or welfare. The Proposed Project, or the least environmentally damaging alternative, may qualify for an exception to ARC-3.1.3, because the Project is necessary to protect public health, safety, and welfare (see 2b above) through the ongoing provision of public waste management services.
ARC-3.1.6 (LCP) Development Within Sensitive Habitats. Sensitive habitats shall be protected against any significant disruption of habitat values, and any proposed development within or adjacent to these areas must maintain or enhance the functional capacity of the habitat. Reduce in scale, redesign, or, if no other alternative exists, deny any project that cannot sufficiently mitigate significant adverse impacts on sensitive habitats unless approval of a project is legally necessary to allow a reasonable use of the land**.**	**Inconsistent.** As described above in the Consistency Discussion for Policy ARC-3.1.3 and in Section 3.4, development of Transfer Station A and the realignment of Harkins Slough Road would impact coast live oak woodland and, minimally, the riverine habitat of the Harkins Slough Road Drainage, both of which are considered sensitive habitat. Impacts to coast live oak woodland would be significant and unavoidable. ODF Option 2, if selected, would minimally impact a wetland swale. In addition, Project improvements are positioned adjacent to oak woodland along Harkins Slough Road and within the Wildlife Refuge, and ODF Option 2 is adjacent to wetlands and other sensitive habitats. Impacts to sensitive habitats would be minimized to the extent feasible and mitigation would be implemented to compensate for impacts. Nevertheless, the Project would be inconsistent with General Plan/LCP Policy ARC-3.1.6, as well as the County's Sensitive Habitat Ordinance (SCCC Chapter 16.32). The Proposed Project may qualify for an exception to ARC-3.1.6, as described above under ARC-3.1.3.
ARC-3.1.7 (LCP) Site Design and Use Regulations. Protect sensitive habitats against any significant disruption or degradation of habitat values in accordance with the Sensitive Habitat Protection ordinance. Utilize the following site design and use regulations on parcels containing these resources, excluding existing agricultural operations: (1) Structures, when allowed, shall be placed as far from the habitat as feasible. (2) Delineate development envelopes to specify location of development in minor land divisions and subdivisions. (3) Consider use of conservation or open space easements, deed restrictions, Conditions of Approval or equivalent measures to protect that portion of a sensitive habitat on a project parcel which is undisturbed by a proposed development activity or to protect sensitive habitats on adjacent parcels.	**Inconsistent.** Construction of Transfer Station and the realignment of Harkins Slough Road require the displacement of coast live oak woodland, a sensitive habitat. ODF Option 2, if selected, would result in minimal impacts to a wetland swale. In addition, these improvements would occur adjacent to coast live oak woodland in the Wildlife Refuge and may degrade this important habitat. These Project components have been designed to reduce tree removal and impacts to the extent feasible. Additionally, the Project includes minimal impacts to and restoration of the Harkins Slough Road drainage, located on the west side of Transfer Station A, which would ultimately improve habitat values in this drainage. The Proposed Environmental Enhancement and Habitat Restoration Features, as described in Section 2.4, would improve habitat conditions in other sensitive habitats within the Project area.

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(4) Limit or restrict outdoor access of domestic animals where they threaten sensitive habitats. (5) Limit removal of native vegetation to the minimum amount necessary for structures, landscaping, driveways, septic systems and gardens; (6) Maintain regulations and impose development permit conditions of approval as warranted, to limit landscaping with invasive or exotic species and to strongly encourage or require the use of characteristic native species, as well as consistency with the Water Efficient Landscaping Ordinance.	With the exception of Transfer Station A and the Harkins Slough Road Realignment, the Project's primary components are within developed and ruderal habitats. However, the Proposed Project would result in impacts within and adjacent to sensitive habitats and, therefore, is inconsistent with ARC-3.1.7. See also ARC-3.1.3. An exception may be authorized, as described under ARC 3.1.3 above.
ARC-3.1.8 (LCP) (EJ) Chemicals Within Sensitive Habitats. Maintain regulations that restrict the use of insecticides, herbicides, or any toxic chemical substance in sensitive habitats, except when the habitat itself is threatened, an emergency has been declared, when a substantial risk to public health and safety exists, including maintenance for flood control by the CDID, or when such use is authorized pursuant to a permit issued by the Agricultural Commissioner. The responsible use of herbicides to eradicate invasive, non-native plants can be an appropriate management action in Sensitive Habitats.	**Consistent.** The County would maintain regulations that restrict the use of toxic chemicals within and adjacent to sensitive habitats, including Channelized Gallighan Slough within the landfill property, drainages adjacent to the property (e.g., Buena Vista Drive Tributary, Harkins Slough Road Drainage), associated riparian habitats, and oak woodland in the Wildlife Refuge and north and east side of Harkins Slough Road. No proposed toxic chemical applications are planned for the Project area or adjacent land uses. Prior to the onset of construction activities, the County would be required to prepare an erosion control plan and would prepare a SWPPP in accordance with the state NPDES, which would include the implementation of best management practices (BMPs) to ensure toxic substances that may be related to construction activities would not enter sensitive environments adjacent to the trail corridor, as discussed in Section 3.10, Hydrology and Water Quality.
ARC-3.1.9 (LCP) Biotic Assessments. Within the following areas, require a biotic assessment as part of normal Project review to determine whether a full biotic report should be prepared by a qualified biologist, and require biotic permits as part of application reviews as may be needed: (1) Areas of biotic concern, mapped; (2) Sensitive habitats, mapped and unmapped; and (3) For sites within the coastal zone, for the presence of Environmentally Sensitive Habitat Area.	**Consistent.** The Project area is within the Coastal Zone and within and adjacent to sensitive habitats including coast live oak woodland, Channelized Gallighan Slough, Buena Vista Drive Tributary, Harkins Slough Road Drainage, and associated riparian habitats. The Wildlife Refuge and Harkins Slough to the east also support sensitive habitats. Therefore, a Biotic Assessment has been prepared (EcoSystems West 2025). Also refer to Section 3.4, Biological Resources, for further discussion.
ARC-3.1.13 (LCP) Wildlife Resources Beyond Sensitive Habitats. For areas which may not meet the definition of sensitive habitat contained in policy ARC-3.1.2, yet contain valuable wildlife resources (such as migration corridors or exceptional species diversity), protect these wildlife habitat values and species using the techniques outlined in policies ARC-3.1.5 and 3.1.7, or prioritize for open space designation, and use other mitigation measures or strategies identified through the environmental	**Consistent.** As discussed in Section 3.4, Biological Resources, the majority of the Project Study Area and surrounding lands consist of developed and ruderal habitats including the active solid waste landfill, the Rountree Medium (Jail) Facility, and the Buena Vista Migrant Center (farmworker housing and childcare facility) and Tierra Alta housing complex. The aquatic habitats within, along the margins of, and nearby the Study Area constitute more naturalized habitats that support wildlife resources.

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review process or other conservation plans and programs of the County, State and non-profit agencies	Another exception to this disturbed landscape includes the Wildlife Refuge that borders the Project area to the east. Non-native ornamental trees including eucalyptus, Monterey cypress, sweetgum, and bottlebrush are found along the margins of the Project area, including by the Rountree Medium (Jail) Facility and bordering Buena Vista Drive and Harkins Slough Road. Non-native and ruderal grasslands are widespread along the margins of the landfill, in upland portions of the Wildlife Refuge, and on the Old Landfill. These areas contain valuable wildlife resources such as cover, shelter, foraging opportunities, and nesting and roosting substrate as well as movement habitat. As discussed in Section 3.4, potential impacts to wildlife resources would be reduced to a less than significant level with the mitigation measures identified therein. Additionally, the Project includes several enhancement and restoration features that would improve wildlife movement through the landfill property. As described in Section 2.4, these include a wildlife movement corridor between Gallighan Slough and Harkins Slough, wildlife directional features at key locations, and culvert modifications under the driveway at the Main Entrance and under the internal roadway to the Old Landfill that would allow for passage of small wildlife species.
ARC-3.2.1 (LCP) Habitat Restoration with Development Approval. Require as mitigation and/or a condition of development approval, restoration of any area of the subject property which is an identified degraded sensitive habitat, with the magnitude of required restoration to be proportional and commensurate with the scope of the project. Restoration and monitoring plans must ensure sufficient detail to guide efforts through the duration of the restoration period and include success criteria. Project conditions may include erosion control measures, removal of non-native or invasive species, planting with characteristic native species, diversion of polluting run-off, water impoundment, and other appropriate means. The objective of habitat restoration activities shall be to enhance the functional capacity and biological productivity of the habitat(s) and whenever feasible, to restore them to a condition which can be sustained by natural occurrences, such as tidal flushing of lagoons.	**Consistent.** As discussed in Section 3.4*, t*he Project would be required to mitigate for impacts to sensitive habitats. As described in Section 2.4, the Project includes several environmental enhancement and habitat restoration features, including: Restoration of Harkins Slough Road Drainage, Culvert Modification with Small Wildlife Crossing at Main Entrance, Culvert Replacement under Old Landfill Entrance, and a Wildlife Movement Corridor between Gallighan Slough and Harkins Slough. These features would offset potential impacts associated with the Project. The development of these features as well as additional required mitigation, such as off-site creation of oak woodland, would be presented in a Mitigation Plan with sufficient detail to guide efforts through the duration of the restoration period and include performance standards and specific success criteria. Refer to Mitigation Measures BIO-8a through 8d. The Mitigation Plan would be determined in coordination and consultation with the relevant resource agencies, including the County of Santa Cruz, USACE, the Regional Board, USFWS, CDFW, and the Coastal Commission. Therefore, the Project is considered consistent with this policy.
ARC-3.3.3 (LCP) Activities Within Riparian Corridors and Wetlands. Development activities, land alteration, and vegetation disturbance within riparian corridors and	**Inconsistent.** The Project would result in limited impacts to Harkins Slough Road Drainage and its required buffer and, if ODF 2 is selected, minimal impacts to a

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wetlands and required buffers shall be prohibited unless an exception permit is granted per the Riparian Corridor and Wetlands Protection ordinance. As a condition of a riparian exception permit, require evidence of compliance with applicable permit or review requirements of the U.S. Army Corps of Engineers, California Department of Fish and Wildlife, and other federal or state agencies that may have regulatory authority over activities within riparian corridors and wetlands.	wetland swale, and is, therefore, inconsistent with ARC-3.3.3. In the Coastal Zone, the Project is required to be consistent with the LCP and conform to the specific requirements in the Coastal Act, which prohibits development in riparian corridors and wetlands and associated buffers. The Project would require a Riparian Corridor and Wetlands Protection Ordinance Exception (SCCC Chapter 16.30). As discussed in Section 3.4, limited impacts and restoration of Harkins Slough Road Drainage would ultimately be beneficial. In addition, two other environmental enhancement and habitat restoration features are located within riparian corridors: Culvert Modification with Small Wildlife Crossing at Main Entrance, and Culvert Replacement under Internal Roadway to Old Landfill. These elements would improve the overall ecological functions and values of Channelized Gallighan Slough and the Buena Vista Drive Tributary. While beneficial, these Project components include work within the riparian corridor and would therefore require a Riparian Corridor and Wetlands Protection Ordinance Exception from the County.
ARC-3.3.5 (LCP) Setbacks from Wetlands. Prohibit development within the 100-foot riparian corridor of all wetlands. Permit exceptions to this setback only where consistent with the Riparian Corridor and Wetlands Protection ordinance, and in all cases, maximize distance between proposed structures and wetlands as feasible and mitigated. Require measures to prevent water quality degradation from adjacent land uses, as outlined in Goal ARC-4: Water Resources.	**Inconsistent.** The Project would result in limited impacts to Harkins Slough Road Drainage and its required buffer and, if ODF 2 is selected, minimal impacts to a wetland swale and its buffer, and is, therefore, inconsistent with ARC-3.3.5. In the Coastal Zone, the Project is required to be consistent with the LCP and conform to the specific requirements in the Coastal Act, which prohibits development in riparian corridors and wetlands, and their associated buffers. The Project would require a Riparian Corridor and Wetlands Protection Ordinance Exception (SCCC Chapter 16.30). See ARC-3.3.3 above.
ARC-3.3.6 (LCP) Compatible Uses with Riparian Corridors. Allow compatible uses in and adjacent to riparian corridors that do not impair or degrade the riparian plant and animal systems, or water supply values, such as non-motorized recreation and pedestrian trails, parks, interpretive facilities and fishing facilities. Allow development in these areas only in conjunction with approval of a riparian exception permit. Where the riparian corridor is already developed, support enhancement of riparian corridors with native plantings that increase and/or enhance the buffer qualities adjacent to streams.	**Inconsistent**. The Project would result in limited impacts to Harkins Slough Road Drainage and its required buffer and, if ODF 2 is selected, minimal impacts to a wetland swale and its buffer, and is, therefore, inconsistent with ARC-3.3.65. In the Coastal Zone, the Project is required to be consistent with the LCP and conform to the specific requirements in the Coastal Act, which prohibits development in riparian corridors and wetlands, and their associated buffers. The Project would require a Riparian Corridor and Wetlands Protection Ordinance Exception (SCCC Chapter 16.30). See ARC-3.3.3 above.

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ARC-3.3.8 (LCP) Environmental Review for Riparian Corridor and Wetland Protection. Require environmental review of all proposed development projects affecting riparian corridors or wetlands and preparation of a Biotic Report for projects that, as proposed, may have a significant effect on the corridors or wetlands. Compliance with County regulations is generally considered to prevent the possibility of significant environmental impacts, and any biotic and/or riparian exception permit process may involve project specifications and/or conditions that would also prevent the possibility of significant environmental impacts**.**	**Consistent.** This EIR represents the environmental review for the Project. A Biotic Assessment has been prepared (EcoSystems West 2025). Also refer to Section 3.4 for further discussion on the Project's biological impacts.
ARC-3.3.10 (LCP) Development in Wetland Drainage Basins. Require development projects in wetland drainage basins to include drainage facilities or Best Management Practices (BMPs) that will maintain surface runoff patterns and water quality, unless a wetland management plan specifies otherwise, and will minimize erosion, sedimentation, and introduction of pollutants.	**Consistent.** Prior to the onset of construction activities, the County would prepare an erosion control plan, prepare a SWPPP in accordance with the state Stormwater NPDES program, and implement BMPs to ensure that runoff and erosion that may be related to construction activities would not enter sensitive environments adjacent to the Project, resulting in the addition of toxic materials or sedimentation to wetlands, as discussed in Sections 3.4, Biological Resources, and 3.10, Hydrology and Water Quality. Additionally, Section 3.4 identifies mitigation measures that would reduce potential impacts to wetlands to a less than significant level.
ARC-4.1.14 (LCP) Water Pollution from Urban Runoff. Review proposed development projects for their potential to contribute to water pollution via increased storm water runoff. Require all development and redevelopment projects to be designed to minimize the generation, transport, and discharge of stormwater pollutants by maintaining natural discharge and groundwater recharge rates. Design strategies shall include minimization of impervious areas, pollution prevention strategies, retention and percolation of stormwater, filtration or treatment of stormwater, or other appropriate stormwater best management practices.	**Consistent.** As discussed in Section 3.10, implementation of the Project would alter the onsite drainage pattern. The Project includes filtration measures to prevent unwanted solid waste or contaminated stormwater from entering the stormwater system, including Stormceptors or filtration inlet bags. Refer to Section 3.10, Hydrology and Water Quality, for additional discussion on stormwater runoff reduction.
ARC-4.2.12 (LCP) Drainage Design. Require retention of stormwater runoff from impervious surfaces for all new development and redevelopment.	**Consistent.** The Project includes new stormwater drainage features to accommodate increased runoff from new impervious surfaces Refer to Section 3.10 for additional discussion on stormwater runoff reduction and treatment.
ARC-4.4.1 (LCP) Impacts from New Development on Water Quality. Do not approve new development adjacent to marshes, streams, and bodies of water if such development would cause adverse impacts on water quality that cannot be fully mitigated.	**Consistent.** As discussed in Section 3.10, the Project would not cause adverse impacts on water quality. Avoidance and minimization measures would be implemented to protect water quality. Additionally, as discussed in Section 3.4, several mitigation measures would be required to protect biological resources, and these include specific actions that protect aquatic features during construction (Mitigation Measures BIO-8a, BIO-8b, BIO-8c).

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ARC-4.4.4 (LCP) Protecting Riparian Corridors and Coastal Lagoons. Require drainage facilities to infiltrate, filter, or treat stormwater runoff as needed to protect water quality for all new development within 1,000 feet of riparian corridors or coastal lagoons. Encourage vegetative-based treatments where feasible.	**Consistent.** The Project area is not located withing 1,000 feet of a coastal lagoon. However, the Project is located within County-defined riparian corridors. The Project includes filtration measures to prevent unwanted solid waste or contaminated stormwater from entering the stormwater system, including Stormceptors or filtration inlet bags. Additionally, as discussed in Section 3.4, several mitigation measures would be required to protect biological resources, and these include specific actions that protect aquatic features during construction and mitigate for direct and indirect impacts to these features (Mitigation Measures BIO-8a, BIO-8b, BIO-8c).
ARC-5.1.2 (LCP) Development Within Visual Resource Areas. Recognize that designated visual resources of Santa Cruz County possess diverse characteristics that are worthy of protection. Require projects in visual resource areas to be evaluated against the context of their unique environments and regulate structure height, setbacks, materials, and design to protect these resources consistent with the objectives and policies of this section.	**Consistent.** As discussed in Section 3.1, Aesthetics and Scenic Resources, the Project area is characterized as a highly disturbed environment from historical and current landfill operations, with no notable scenic resources or vistas available to the public. The ongoing operation of heavy machinery, accumulation of debris, and continuous addition of waste have resulted in a landscape with irregular terrain, extensive modifications, and low visual quality. The implementation of the Project would not substantially degrade the existing visual context of the area or otherwise adversely affect scenic resources compared to existing conditions. Views from Buena Vista Drive (a County-designated scenic roadway) would not be substantially changed and would be improved once the landfill is closed. Refer to Section 3.1 for further discussion on existing scenic and visual resources, including views from public roadways.
ARC-5.1.3 (LCP) Protection of Public Vistas and Scenic Assets. Protect significant public vistas and public scenic assets as identified in Policy ARC-5.1.1, even those that are not mapped and designated as visual resource areas, scenic roads, coastal special scenic areas, or other unique features, by minimizing disruption of landform and aesthetic character caused by grading operations, timber harvests, utility wires and poles, signs, inappropriate landscaping and structure design. Provide necessary landscaping to screen development that is unavoidably sited within these vistas. Proposed landscaping within public vistas should be sited and designed to retain existing public views of vistas and scenic assets especially for coastal designated visual resources.	**Consistent.** As stated above, the Project area is characterized as a highly disturbed environment from historical and current landfill operations, with no notable scenic resources or vistas available to the public. The ongoing operation of heavy machinery, accumulation of debris, and continuous addition of waste have resulted in a landscape with irregular terrain, extensive modifications, and low visual quality. There are no publicly accessible viewpoints of a scenic resource or vista within, adjacent to, or of the Project area. Refer to Section 3.1 for further discussion on existing scenic and visual resources, including views from public vistas and roadways.
ARC-5.1.6 (LCP) Preserving Ocean Vistas. Where public ocean vistas exist, require these vistas be retained to the maximum extent possible as a condition of approval for any new development.	**Consistent.** There are no public views of the ocean from the Project area.

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ARC-5.1.7 (LCP) Open Beaches and Blufftops. Do not permit or allow the placement of new permanent structures that would be visible from a public beach, except where allowed on existing parcels of record, or for shoreline protection, public beach access, or public ocean viewing, and where consistent with Santa Cruz County Code, Chapter 13.11. Use the following criteria: (1) Allow infill structures (typically residences and accessory structures on existing lots of record) where compatible with the pattern of existing development. (2) Require shoreline protection and access structures to use natural materials and finishes to blend with the character of the area and integrate with the landform.	**Consistent.** The Project would not permit or allow the placement of any new permanent structures that would be visible from a public beach.
Policies ARC-5.2.1 (LCP) Designation of Scenic Roads.[1] The following roads and highways are valued for their vistas.[1] The public vistas from these roads shall be afforded the highest level of protection. (1) State Highways • Highway 1 – from San Mateo County to Monterey County (2) County Roads • Bonita Drive and San Andreas Road – from Highway 1 to Beach Road • Buena Vista Drive – from San Andreas Road to Larkin Valley Road	**Consistent.** Regional access to the existing Buena Vista Landfill is primarily from Highway 1, and the main entrance to the landfill is from Buena Vista Drive, which operates as a two-way street with one lane in each direction. The proposed road realignment to accommodate Transfer Station A would occur on Harkins Slough Road, which is a public roadway not designated as a scenic route by the County. The Buena Vista Landfill is located approximately one mile south of SR-1. The Project area and SR-1 are separated by intervening topography, including hills and vegetation, which block any direct line of sight between the two locations. Thus, the Project area, including the highest portion of the landfill, is not visible from SR-1; and the scenic qualities of and views from SR-1 would not be affected by the Project. A portion of Buena Vista Drive, from San Andreas Road to Larkin Valley Road, is a county-designated scenic roadway (Santa Cruz County 2024). This designated portion extends along the west side of the Buena Vista Landfill. A small portion of the organics diversion facility (ODF) Option 2, which would be located on top of the Old Landfill, could be visible from Buena Vista Drive. However, as discussed in Section 3.1, the views from the roadway below are limited and fleeting as drivers navigate the windy road. San Andreas Road is also a county-designated scenic road, but it is located 1 mile southwest of the landfill, and views are obstructed by intervening topography and vegetation. As discussed in Section 3.1, the Project aligns with the existing industrial landscape of the Buena Vista Landfill, thus maintaining visual consistency with the site's disturbed and industrial character and would not substantially degrade the existing visual quality of the views or otherwise adversely affect scenic resources compared to existing conditions. Further, any views of the Project components from designated scenic roads would be distant, elevated, and fleeting to passing motorists. Finally, as stated in Section 2.4, Project Components (under Additional Information for ODF

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	Options 1 and 2, Vegetation Removal and Landscaping), the County would install large shrubs or trees in containers along the northern perimeter of the facility if needed to screen views of ODF 2 from Buena Vista Drive.
ARC-6.1.1 (LCP) Protection and Designation of Significant Resources. Protect significant geological features such as caves, large rock outcrops, inland cliffs and special formations of scenic or scientific value, hydrological features such as karst topography, major waterfalls or springs, and paleontological features, through the environmental review process. Designate such sites on the General Plan/LCP Resources and Constraints Maps where identified.[2]	**Consistent.** The Project would not be located near currently identified hydrological, geological, or paleontological features. Further, compliance with existing regulations regarding hydrological, geological, and paleontological resources, and implementation of mitigation measures pertaining to these resources would ensure that the Project would not result in significant impacts to such resources. For a full discussion on hydrological, geological, and paleontological resources and the mitigation measures contained therein, refer to Section 3.7 and Section 3.10.
ARC-8.1.1 (LCP) Evaluation of Native American Cultural Sites. Protect all archaeological resources until they can be evaluated. Prohibit any disturbance of Native American Cultural Sites, archaeological sites, or identified tribal cultural resources without an appropriate permit. Maintain the Native American Cultural Sites ordinance.	**Consistent.** As described below for Policy ARC-8.1.2 and in Section 3.5, the cultural resources studies found that the Project Area does not contain intact or significant cultural deposits, and that no further archaeological investigation would be warranted. However, as part of the Native American tribal outreach conducted, Native American representatives requested monitoring during subsurface construction activities in Areas 1, 2, and 3. Therefore, given this request and the proximity of important cultural resources to the Project Area, all initial ground disturbing activities associated with Areas 1, 2, and 3 would be monitored by a qualified archaeologist and a representative from the local Native American community (Mitigation Measure CR-2b).
ARC-8.1.2 (LCP) Site Surveys. Require an archaeological site survey (surface reconnaissance) as part of the environmental review process for all projects with very high site potential within the Archaeological Sensitive Areas, as designated on the General Plan/LCP Resources and Constraints Maps (Appendix F).	**Consistent.** As described in Section 3.5, a qualified archaeologist conducted a database search with the Northwest Information Center; conducted archaeological site field surveys; prepared a Phase I Cultural Resources Inventory; and based on the results of the Phase 1, prepared an Extended Phase I Archaeological Assessment of three areas where subsurface excavation is planned to determine the presence/absence of cultural resources in the Project area. The three areas include: the culvert beneath the Main Landfill entrance driveway (Area 1), the Transfer Station A site in the northeast corner of the Project area (Area 2), and optional equipment parking and storage area on the south side of Rountree Lane (Area 3). The study concluded that the majority of excavated soils were identified as disturbed fill layers, no intact significant cultural deposits were found, and no further investigation is warranted. However, based on the proximity of important cultural resources to the project area and recommendations of Native American representatives (as described above for Policy ARC-8.1.1), the archaeologists identified required mitigation measures to reduce potential impacts to a less than significant level. These include stopping work if resources are discovered during construction and monitoring during construction in Areas 1, 2, and 3 (Mitigation Measures CR-2a and CR-2b).

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ARC-8.1.5 Accidental Discovery of Archaeological Resources. If archaeological resources or human remains are discovered accidentally during grading or construction, the activity shall cease and the property owner shall notify the proper authority in accordance with the Native American Cultural Sites ordinance.	**Consistent.** To ensure compliance with this policy, the Project includes a legally binding Mitigation Measure CR-2a, requiring the construction contractor to cease activities immediately and notify the County if archaeological resources or human remains are discovered accidentally during grading or construction Refer to Section 3.5 for further discussion.
ARC-8.1.6 (LCP) Environmental Review. Environmental review shall be required for any project with the potential to significantly impact archaeological or tribal cultural resources.	**Consistent.** Environmental review is being conducted as part of this EIR (Section 3.5), including preparation of the 2024 Phase I Cultural Resource Inventory for the Buena Vista Landfill Redevelopment Project (Albion 2024), and the 2025 Extended Phase I Archaeological Assessment (Albion 2025). Refer to Section 3.5 for further discussion.
ARC-8.1.7 (LCP) Consultation for Discretionary Projects. The County shall consult with any California Native American tribe that requests notice of projects in the geographic area traditionally affiliated with the tribe prior to the release of a Negative Declaration or Environmental Impact Report, pursuant to Public Resources Code sections 21073 and 21080. If tribal cultural resources are identified, the County shall work with the affected tribe to identify appropriate mitigation measures to protect the resource.	**Consistent.** AB 52 consultation notification letters were mailed in June 2025 for the Project. One response was received from the Amah Mutsun Tribal Band requesting consultation on the Project. The consultation meeting was conducted on August 4, 2025. No tribal cultural resources were identified within the Project Area during the consultation process or as part of the cultural resource studies prepared for the Project. However, the Tribe expressed a need for monitoring in areas where cultural resources are present and where they are likely to be present. Mitigation Measures CR-2b requires that all initial ground disturbing activities associated with Areas 1, 2, and 3 shall be monitored by a qualified archaeologist and a representative from the local Native American community. Refer to Section 3.18, Tribal Cultural Resources, for further discussion.
ARC-8.2.3 Development Activities. For development activities on property containing historic resources require protection, enhancement, and/or preservation of the historic, cultural, architectural, engineering, or aesthetic values of the resource consistent with regulations in the Historic Preservation ordinance as determined by the Historic Resources Commission.	**Consistent.** The Project area does not contain historic resources, as documented in the cultural resources report prepared to support this EIR (Albion 2024). Refer to Section 3.5 for further discussion.
ARC-8.2.8 Environmental Review. Environmental review shall be required for any project with the potential to significantly impact historic resources.	**Consistent.** The Project area does not contain historic resources, as documented in the cultural resources report prepared to support this EIR (Albion 2024). Refer to Section 3.5 for further discussion.

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Public Safety Element	
6.1.3 (LCP) Engineering Geology Report for Public Facilities in Fault Zones. Require a full engineering geology report by a certified engineering geologist whenever a significant potential hazard is identified by a Geologic Hazards Assessment or Preliminary Geologic Report, and prior to the approval of any new public facility or critical structure within the designated fault zones.	**Consistent.** Geotechnical reports to identify subsurface conditions were prepared for the Project to support this EIR (refer to **Appendix H**). The Project area is not zoned under the Alquist-Priolo Fault Rupture Zone Act. In addition, there are no known active faults located in the Project area (**Appendix H1**). However, the Project area is located in a highly seismic region near several major fault zones (**Appendix H1**). All proposed structures would be designed and constructed in conformance with the most recently adopted California Building Code design parameters, which are specifically tailored to minimize the risk of structure failure due to seismic hazards. Once capacity of the current active landfill area is reached, the landfill closure and revegetation plan would be implemented. A landfill closure cover system, commonly called a cap, would be installed. The final cover design would be required to comply with the U.S. Environmental Protection Agency Seismic Design Guidance for Municipal Solid Waste Landfill Facilities requirements for design of landfills located in seismic impact zones (**Appendix D**). Refer to Section 3.7 for additional discussion.
6.1.4 (LCP) Site Investigation Regarding Liquefaction Hazard. Require site-specific investigation by a certified engineering geologist and/or civil engineer of all development proposals of more than four residential units in areas designated as having a high or very high liquefaction potential. Proposals of four units and under and non-residential projects shall be reviewed for liquefaction hazard through environmental review and/or geologic hazards assessment, and when a significant potential hazard exists a site-specific investigation shall be required.	**Consistent.** The Project's ODF Option 2 would be located on the "top deck" of the Old Landfill in the southwest portion of the Project area. Portions of the Old Landfill are underlain by Terrace deposits and the Aromas formation; however, stream channel deposits are present along Gallighan Slough which is located to the northeast and below the Old Landfill (**Figure 2-1**). The area along Gallighan Slough, including the Old Landfill site where ODF Option 2 would be located, is susceptible to liquefaction, which could pose a risk to people as a result of the structures not being able to support themselves. (**Appendix H2**). As discussed in Section 3.7, Mitigation Measure GEO-2 requires the preparation of a Liquefaction Evaluation as part of the final design, if ODF Option 2 is selected and approved; identify the potential effect on the Old Landfill and the development of ODF Option 2; and identify any design measures to reduce the effect and minimize the risk of loss, injury, and death. Refer to Section 3.7 for additional discussion.

Table 3.11-2. Santa Cruz County General Plan/Local Coastal Program Policy Consistency Analysis

Santa Cruz County General Plan Policy	Consistency Discussion
6.1.8 Design Standards for new Public Facilities. Require all new public facilities and critical structures to be designed to withstand the expected ground shaking during the design earthquake on the San Andreas Fault.	**Consistent.** As stated in Section 2.6.2, General Methodology, all proposed structures would be designed and constructed in conformance with the most recently adopted California Building Code design parameters, which are specifically tailored to minimize the risk of structure failure due to seismic hazards. Once capacity of the current active landfill area is reached, the landfill closure and revegetation plan would be implemented. A landfill closure cover system, commonly called a cap, would be installed. The final cover design would be required to comply with the U.S. Environmental Protection Agency Seismic Design Guidance for Municipal Solid Waste Landfill Facilities requirements for design of landfills located in seismic impact zones.
6.3.4 Erosion Control Plan Approval Required for Development. Require approval of an erosion control plan for all development, as specified in the Erosion Control ordinance. Vegetation removal shall be minimized and limited to that amount indicated on the approved development plans, but shall be consistent with fire safety requirements.	**Consistent.** As stated in Section 2.6.2, the Project would comply with the requirements to prepare an erosion control plan for new development. The Project would disturb over 1 acre; therefore, it would be subject to the NPDES Construction General Permit (Order No. 2012-0006-DWQ) adopted by the State Water Resources Control Board. Compliance with the permit requires each qualifying development project to file a Notice of Intent with the State Water Resources Control Board. Permit conditions require development of a SWPPP, which must describe the site, the facility, erosion and sediment controls, runoff water quality monitoring, means of waste disposal, implementation of approved local plans, control of construction sediment and erosion control measures, maintenance responsibilities, and non-stormwater management controls. Additionally, inspection of construction sites before and after storms is required to identify stormwater discharge from the construction activity and to identify and implement erosion controls, where necessary. Further, the Project includes BMPs identified in Section 2.6.5, Best Management Practices, in Chapter 2 to be implemented during construction.
6.3.8 On-Site Sediment Containment. Require containment of all sediment on the site during construction and require drainage improvements for the completed development that will provide runoff control, including onsite retention or detention where downstream drainage facilities have limited capacity. Runoff control systems or Best Management Practices shall be adequate to prevent any significant increase in site runoff over pre-existing volumes and velocities and to maximize on-site collection of non-point source pollutants.	**Consistent.** As described in Section 2.6.2 prior to construction, the Project would prepare a SWPPP which must describe the site, the facility, erosion and sediment controls, runoff water quality monitoring, means of waste disposal, implementation of approved local plans, control of construction sediment and erosion control measures, maintenance responsibilities, and non-stormwater management controls. Additionally, inspection of construction sites before and after storms is required to identify stormwater discharge from the construction activity and to identify and implement erosion controls, where necessary. Further, the Project includes BMPs identified in Section 2.6.5 to be implemented during construction.

Table 3.11-2. Santa Cruz County General Plan/Local Coastal Program Policy Consistency Analysis

Santa Cruz County General Plan Policy	Consistency Discussion
	Post construction, the Project would provide runoff control for the new facilities. For Transfer Station A, stormwater surface runoff from new impervious surfaces built within Transfer Station A facility limits would be collected at the low point on the back (north) side of the transfer station, directed toward the transfer station, and conveyed via storm pipe infrastructure into the landfill's existing stormwater channel. The realigned Harkins Slough Road would drain in the direction of the transfer station facility to prevent an increase of stormwater runoff to the existing perimeter ditch to the north of the property and to the open space east of the property. Stormwater would be conveyed from the new road to the facility via sheet flow, storm pipe, or a combination of both to the proposed stormwater conveyance systems located adjacent to Transfer Station A. For Transfer Station B, stormwater surface runoff at Transfer Station B would be conveyed via curbing and V-ditches to a series of catch basins located within the paved area, similar to current conditions. The ultimate outfall would be the existing outfall located east of the facility into the perimeter ditch. The anticipated increase in runoff volume can be conveyed effectively through the existing or replaced stormwater pipe. If ODF Option 2 is approved, the existing drainage on the top deck of the Old Landfill would be improved and restored so it can (1) convey stormwater as originally designed, (2) accommodate increased stormwater runoff from new impervious surfaces at the ODF Option 2 site, and (3) support native wetland and riparian vegetation. For Landfill Closure, a surface water management system would be implemented which would control flows on the landfill surface after the final cover has been placed; prevent infiltration, inundation, and ponding on the landfill final cover; minimize erosion of final cover; minimize erosion, slope failure, washout, and over-topping of associated surface water conveyances; and minimize sediments carried off site. For the optional equipment parking and storage area, Project design would maintain the existing grade, which slopes gently from north to south with surface runoff entering the existing drainage swale. Project design would maintain the existing grade and capture stormwater runoff with a bioswale, underground recharger chambers, or use of a Stormceptor system to capture debris and oils while allowing stormwater to flow efficiently. Other measures that may be implemented include gravel disconnect areas, level spreaders, or check dams to dissipate the runoff to a non-erosive flow.

Table 3.11-2. Santa Cruz County General Plan/Local Coastal Program Policy Consistency Analysis

Santa Cruz County General Plan Policy	Consistency Discussion
6.5.8 Public Facilities within Critical Fire Hazard Areas. Discourage location of public facilities and critical utilities in Critical Fire Hazard Areas. When unavoidable, special precautions shall be taken to ensure the safety and uninterrupted operation of these facilities.	**Consistent.** The Project is not located in a critical fire area. Also refer to Section 3.20, Wildfire.
6.6.1 Hazardous Materials Ordinance. Maintain the County's Hazardous Materials Ordinance, placing on users of hazardous and toxic materials the obligation to eliminate or minimize the use of such materials wherever possible, and in all cases to minimize the release, emission, or discharge of hazardous materials to the environment, and properly to handle all hazardous materials and to disclose their whereabouts. Further, maintain the County's ordinance relating to ozone-depleting compounds. Ensure that any amendment of existing ordinance provisions is based on a finding that the amendments will provide protection to the environment and the community against toxic hazards that is equal to or stronger than the existing provisions.	**Consistent.** As discussed fully in Section 3.9, Hazards and Hazardous Materials, small quantities of potentially toxic substances (e.g., petroleum and other chemicals used to operate and maintain construction equipment) would be used within the Project area and transported to and from the site during construction. However, the Project contractor would be required to comply with California Health and Safety Code, Chapter 6.95, which would ensure that risks from routine use, transport, handling, storage, disposal, and release of hazardous materials would be minimized. Compliance with existing regulations would ensure that impacts related to hazardous materials are avoided and minimized to the extent feasible. The County would continue to collect household hazardous waste at the Buena Vista Landfill facility consistent with current operations and regulatory requirements.
Parks, Recreation, Public Facilities Element	
PPF-4.1.2 (LCP) Written Commitments Confirming Water Service Required for Permits. Concurrent with project application, or prior to issuance of a building permit as authorized by the Planning Director, require a written commitment from the water agency that verifies the capability of the system to serve the development. Projects shall not be approved, or building permits shall not be issued, in areas that do not have a proven, adequate water supply. A written commitment is a letter from the agency guaranteeing that the required level of service for the project will be or is available, prior to the issuance of building permits, or in the case of a subdivision, prior to filing the Final Map or Parcel Map. The County decision-making body shall not approve any development project unless it determines that such Project has adequate water supply available.	**Consistent.** Operation of the Project would require permanent demand for water at Transfer Stations A and B, which would include conference/break rooms, restrooms, hose bibs for periodic washing of interior transfer station walls, and fire suppression. The amount of water required would not be substantial, and a portion that would be required is already being used for operation of the existing maintenance facility, which has a conference/breakroom and restrooms. In addition, water would be needed at both ODF Option 1 and Option 2. Option 1 is status quo; therefore, it would continue to use water for dust suppression to manage fugitive dust and debris from compost preprocessing operations. If ODF Option 2 is selected, additional water would be needed to provide process water for composting materials on site. As discussed in Section 3.19, Utilities and Service Systems**,** water for operating the transfer stations would be provided from the existing well and water tanks located at the neighboring Rountree Medium (Jail) Facility. The on-site well provides adequate water to support the Project fire suppression and water supply needs (Schaaf & Wheeler 2025).

Table 3.11-2. Santa Cruz County General Plan/Local Coastal Program Policy Consistency Analysis

Santa Cruz County General Plan Policy	Consistency Discussion
PPF-4.4.1 (LCP) New Development and Redevelopment. Require runoff levels to be maintained at predevelopment rates for a minimum design storm as determined by County Design Criteria by requiring projects to provide both on and off-site improvements, including on-site percolation methods. Utilize on-site detention methods only where percolation methods are not feasible. In addition, development and use permits shall comply with any and all relevant stormwater program requirements under the State Water Resources Control Board Agriculture, Cannabis Cultivation, Wastewater, and other regulatory programs.	**Consistent.** Implementation of the Project is anticipated to increase the volume of stormwater runoff from new impervious surfaces associated with the development of Transfer Station A and possibly ODF Option 2 and the optional equipment parking and storage area. However, stormwater features as described in Section 2.4 would effectively convey the stormwater through the site and would ensure runoff rates are maintained similar to existing conditions.
PPF-4.4.3 (LCP) Minimizing Impervious Surfaces. Require new development and redevelopment to limit coverage of lots by parking areas and other impervious surfaces, in order to minimize the amount of post-development surface runoff and maintain groundwater recharge rates.	**Consistent.** The County minimized the new impervious surface of the Project to the extent feasible given the operational needs. The existing landfill is designed to prevent groundwater infiltration that could mobilize materials disposed in the waste body and contaminate groundwater. While implementation of the Project would introduce additional paved surfaces, most of those paved areas would be constructed on top of the lined or capped landfill areas that are designed to prevent groundwater recharge or on already paved areas. Therefore, the dispersed nature of the new impervious surfaces would ensure that the infiltration capacity would not be substantially altered compared to existing conditions, consistent with the goals to protect groundwater levels and prevent groundwater overdraft. Refer to section 3.10 for additional discussion.
PPF-4.4.4 (LCP) Downstream Impact Assessments. For any proposed development or redevelopment project within the County, require the applicant to conduct a downstream impact assessment and submit a stormwater management plan. The assessment should analyze the design of any improvements needed to upgrade the storm drain system such that local flooding would be eliminated for the appropriate design rainstorm. Ensure the project is conditioned to make improvements and/or pay fair share of improvement costs.	**Consistent.** The County prepared a drainage assessment that confirmed the Project, with the proposed drainage features and modifications, would not exacerbate local flooding. The Project includes grading and drainage improvements where new facilities are proposed (e.g., Transfer Stations A & B, ODF Option 2, optional equipment parking and storage), connecting new facilities to the existing system, including filtration features, and modifying outfalls as necessary. Additionally, to address localized flooding that occurs along Buena Vista Drive from the Buena Vista Drive Tributary on the west side of the landfill due to agricultural sediment runoff, the Project includes increasing the size of the culvert downstream in Channelized Gallighan Slough beneath the internal road to the Old Landfill. The County is also planning improvements within the Buena Vista Drive Tributary to reduce localized flooding.
PPF-4.4.5 (LCP) Control Surface Runoff. Require new development and redevelopment to reduce the discharge of stormwater pollutants to the maximum extent practicable in order to protect surface and groundwater quality and watersheds. Condition development project approvals to provide ongoing	**Consistent.** The proposed surface water management systems described in Section 2.4 for all the Proposed Project components would reduce the discharge of stormwater pollutants to the maximum extent practicable. The existing stormwater management system at the landfill would continue to control flows on the landfill

Table 3.11-2. Santa Cruz County General Plan/Local Coastal Program Policy Consistency Analysis

Santa Cruz County General Plan Policy	Consistency Discussion
maintenance for the stormwater management facilities associated with their developments.	surface after the final cover has been placed; prevent infiltration, inundation, and ponding on the landfill final cover; minimize erosion of final cover; minimize erosion, slope failure, washout, and over-topping of associated surface water conveyances; and minimize sediments carried off site. Stormwater is currently managed by routing drainage within the landfill area to a water quality unit using ditches and channels. A water quality unit was installed as part of Module 5 construction to replace the former sedimentation basin that used to occupy the Module 5 area. As the landfill starts to approach final grades, additional water quality units may be installed, as necessary, to manage stormwater. The water quality units would be sized as part of the site's final closure. The water quality units would be part of the ongoing monitoring program already approved by the Regional Water Quality Control Board. The units would be routinely cleaned out to maintain full functionality. Stormwater surface runoff at Transfer Station A would be collected at the low point on the back (northern) side of the transfer station, directed toward the transfer station, and conveyed via storm pipe infrastructure into the landfill's existing stormwater channel. Filtration measures would be taken to prevent unwanted solid waste or contaminated stormwater from entering the stormwater system, including Stormceptors or filtration inlet bags. Stormwater surface runoff at Transfer Station B would be conveyed via curbing and V-ditches to a series of catch basins located within the paved area, similar to current conditions. The ultimate outfall would be the existing outfall located east of the facility into the perimeter ditch. Improvements would be made to this outfall to ensure it is adequate to handle any increase in flow, if needed. ODF Option 1 facility would be paved and would include a roof structure for the receiving and preprocessing of organic materials to limit stormwater contact and to control runoff from the facility. Stormwater runoff would be directed by diversion berms into larger stormwater conveyance channels. The area may also include stormwater check dams to slow down the runoff to minimize erosion. ODF Option 2 would be designed to maintain the existing grade sloping southeast towards the existing seasonal wetland and drainage located on the south portion of the landfill top deck. To accommodate increased stormwater runoff from the newly paved area, a new drainage ditch would be installed parallel to the existing seasonal wetland. Paved stormwater berms may be used to direct the stormwater runoff into the new drainage ditch. The new drainage ditch would include an outlet structure at the downgradient end to tie into the existing seasonal wetland.

Table 3.11-2. Santa Cruz County General Plan/Local Coastal Program Policy Consistency Analysis

Santa Cruz County General Plan Policy	Consistency Discussion
	The currently unpaved internal landfill roads would be examined to determine if improvements are necessary to support Project implementation. Similar to existing conditions, stormwater surface runoff from roadway improvements would flow to the adjacent unpaved areas downslope to the existing drainage system, composed of perimeter and bench drainage ditches and culverts, which routes stormwater to an existing water quality unit located at the north end of the entrance facility. Upgrades to the scale house and recycling center, which could include adding scales and expanding the recycling center to accommodate more materials, would occur on existing paved areas and would not increase the amount of impervious surface and stormwater runoff. The equipment parking and storage area would be primarily paved, creating an increase in impervious surface and stormwater runoff. The design would maintain the existing grade, which slopes gently from north to south, and capture stormwater runoff with a bioswale, underground recharge chambers, gravel disconnect areas, level spreaders, or check dams to dissipate the runoff to a non-erosive flow. In addition, a Stormceptor system would be used to capture debris and oils while allowing stormwater to flow efficiently.
PPF-4.5.1 Materials Recovery. Establish, in conformance with state law, materials recovery through recycling, reuse and composting, as the primary and fundamental strategy of solid waste management by the County, with landfill disposal as a secondary and essential component. Designate materials recovery and reuse projects as a funding priority in allocating capital expenditures for solid waste management.	**Consistent.** The Buena Vista Landfill is a Class III municipal solid waste landfill that receives non-hazardous solid waste and is a center for waste handling, recycling collection, organics diversion, and other waste reduction activities necessary to comply with state and federal laws. The Project purpose is to ensure an orderly landfill closure program that meets state requirements and provides ongoing solid waste handling capabilities to allow the County to meet state-required waste management goals for waste reduction, source separation, materials recycling, household hazardous waste management, and composting. The Project includes developing Transfer Stations A and B at the landfill site to collect the solid waste (that cannot be diverted for recycling and composting) and transfer it in trucks to a regional landfill. The County would continue materials recovery at the Buena Vista facility in compliance with state law organics diversion requirements. The County is considering and would implement one of two ODF options for continued organics diversion at the Buena Vista facility, to handle the increase in diverted organic waste requiring processing. The County would also continue to accept household hazardous waste (HHW) and recycling. The Project includes an option to upgrade the existing recycling

Table 3.11-2. Santa Cruz County General Plan/Local Coastal Program Policy Consistency Analysis

Santa Cruz County General Plan Policy	Consistency Discussion
	center, which could include relocating and expanding it on site to accommodate recovery of more mandated materials.
PPF-4.5.7 Increase Recycling Opportunities. Provide the opportunity for recycling to all residents and businesses in the unincorporated County in a convenient manner to maximize participation, including recycling collection services, curbside drop off, buyback and source separated collection through publicly provided service, as well as non-profit and private independent collection businesses.	**Consistent.** The County would continue to accept recycling at the Buena Vista facility. The Project includes an option to upgrade the existing recycling center, which could include relocating and expanding it on site to accommodate recovery of more mandated materials.
PPF-4.5.9 Meeting State and Local Landfill Diversion Goals. Consider mandatory recycling or material-specific landfill disposal prohibitions if state and local landfill diversion goals are not met through the use of voluntary programs.	**Consistent.** The County would continue to accept recyclable materials and HHW, and the Project includes an option to upgrade the existing recycling center which could include relocating and expanding it on site to accommodate recovery of more mandated materials. Additionally, as described above and below for Policy PPF-4.5.15, the County would continue to divert organic materials (e.g., vegetation/yard waste, food waste) at the Buena Vista facility in compliance with state law organics diversion requirements, and the Project includes two options for improving operation.
PPF-4.5.15 (LCP) Organics Waste Diversion. Adopt strategies and continue to conduct planning efforts to remove all organic waste from the waste stream.	**Consistent.** The County would continue to divert organic materials (e.g., vegetation/yard waste, food waste) at the Buena Vista facility in compliance with state law organics diversion requirements. The County is considering and would implement one of two ODF options for continued organics diversion at the Buena Vista facility, to handle the increase in diverted organic waste requiring processing. ODF Option 1 would continue preprocessing activities in generally the same location with some operational improvements, and preprocessed materials would continue to be transported off site for composing. ODF Option 2 would relocate the ODF to the "top deck" of the Old Landfill in the southern portion of the Buena Vista facility and expand the ODF to include preprocessing, composting, and post-processing steps to produce finished compost on site (within the County-owned landfill property).
PPF-4.5.21 (EJ) Land Use Compatibility with Waste Disposal. Ensure compatibility of land uses adjacent to County solid waste disposal and transfer facilities through zoning and the land use permit process.	**Consistent.** The Project includes closing the landfill, adding transfer stations (enclosed structures), and improving the organics diversion and other existing operations within or immediately adjacent to the Buena Vista landfill facility. Thus, the Project components would be compatible with the existing land uses in the Project area, as well as the adjacent lands zoned for public facilities and agricultural uses. Public facilities are located to the southeast, south, and southwest of the landfill site. These public facilities include the County's Buena Vista Migrant Center (farmworker housing and childcare facility), a publicly owned farmworker housing development

Table 3.11-2. Santa Cruz County General Plan/Local Coastal Program Policy Consistency Analysis

Santa Cruz County General Plan Policy	Consistency Discussion
	and childcare center, and the Tierra Alta affordable housing complex. The County's Rountree Medium (Jail) Facility is located south of the landfill site on Rountree Lane. The City of Watsonville's landfill is located southwest of the County's "Old Landfill" and is accessed from San Andreas Road. The City of Watsonville landfill is used only by Watsonville's city-operated refuse collection trucks. Agricultural uses are located to the northwest, north and northeast of the landfill site and include greenhouses, landscape nursery, horse stables, row crops, and fallow lands. The land immediately adjacent to the north where Transfer Station A would be located includes greenhouses that have been vacant and unused for several years. The Project would not adversely affect any existing agricultural uses. Refer to Section 3.2, Agricultural Resources, for a discussion of potential impacts. The open space land east of Harkins Slough Road is a National Wildlife Refute (ecological preserve) that is managed by the federal government. The potential impacts in this area include tree removal on County land (outside the preserve) for the realignment of Harkins Slough Road. Tree removal has been minimized to the extent possible through design measures to locate the roadway as close to the new transfer station as possible and using a 2:1 slope to support the roadway (instead of a 3:1 slope or retaining wall which requires much more construction space). Transfer Station A operations would occur within a secure perimeter fence, and Harkins Slough Road would extend between the transfer station and the open space. Refer to Section 3.4, Biological Resources, for a discussion of potential impacts.
PPF-4.5.22 Landfills and Environmental Protection. Ensure protection of the local environment, including air, groundwater and surface water resources through proper landfill design, construction, operation and ongoing environmental monitoring.	**Consistent.** As stated in Section 2.1, Overview, the Buena Vista Landfill is nearing capacity, and the purpose of the Project is to ensure an orderly landfill closure program and provide ongoing solid waste handling capabilities. During continued operations of the landfill until it can no longer accept solid waste, the landfill will continue to operate in accordance with relevant regulations. As described in Section 2.4 under Landfill Closure and Revegetation, the landfill would be closed in accordance with the Buena Vista Landfill Preliminary Closure and Post-closure Maintenance Plan (2021), developed in accordance with federal and state standards (**Appendix D**). Protective measures associated with closure of the landfill include installation of foundation, barrier, drainage, and vegetative cap layers, grading, a surface water management system, environmental monitoring and control systems, and habitat restoration.

Table 3.11-2. Santa Cruz County General Plan/Local Coastal Program Policy Consistency Analysis

Santa Cruz County General Plan Policy	Consistency Discussion
PPF-4.5.23 Hazardous Wastes and Environmental Damaging Compounds in Landfills. Prohibit the disposal of radioactive waste, hazardous waste and ozone depleting compounds in County landfills.	**Consistent.** Consistent with current operations, the Buena Vista facility would continue to accept household hazardous waste (e.g., cleaning products, automotive products, batteries), but would not accept waste that is defined as hazardous by the RCRA or CCR Title 22. Hazardous waste, asbestos (friable and non-friable), radioactive waste, and untreated medical waste (biohazardous or infectious waste) are not currently allowed and would not be allowed for disposal with Project implementation. Additionally, although current operations accept soil, no soil of any kind would be accepted (Santa Cruz County 2024b).
PPF-4.5.25 Access to Landfills and Materials Recovery Facilities. Continue to provide access to individual self-haul vehicles either at the Ben Lomond Transfer Station, the Buena Vista Landfill or at future Materials Recovery Facilities for refuse disposal, household hazardous waste drop - off and recycling and other materials recovery	**Consistent.** The Project would enable the County to continue providing access to individual self-haul vehicles at the Buena Vista Landfill through the proposed redevelopment, which includes two new waste transfer stations. Transfer Station A would serve self-haulers (residents and businesses). In addition, the County would continue to accept household hazardous materials and recycling. The Project includes an option to upgrade the existing recycling center, which could include relocating and expanding it on site to accommodate recovery of more mandated materials. The Project does not include any modifications to the Ben Lomond Transfer Station.
PPF-4.5.27 Reuse of Closed Landfill Sites. Provide for rehabilitation and reuse of closed landfill sites consistent with environmental protection requirements, while planning for the future solid waste needs of the County. Rehabilitation shall include mitigation of resource degradation, where possible.	**Consistent.** The Project would provide for the rehabilitation and reuse of the Buena Vista Landfill once it reaches capacity and closes, as described in Section 2.4 and **Appendix D**, Preliminary Closure Plan. The Project purpose is to ensure an orderly landfill closure program that meets state requirements and provides ongoing solid waste handling capabilities to allow the County to meet state-required waste management goals for waste reduction, source separation, materials recycling, household hazardous waste management, and composting. As part of the Project, Transfer Stations A and B would be developed at the Buena Vista facility to collect the solid waste that cannot be diverted for recycling and composting and transfer it in trucks to a regional landfill. In accordance with the California and federal landfill closure regulations, the Project includes installation of a landfill closure cover system, commonly called a cap, that consists of four layers: foundation, barrier, drainage, and vegetative. Like other portions of the landfill that have been closed and capped, the existing environmental monitoring and control systems would continue to monitor and control groundwater, leachate, surface water, and landfill gas control and monitoring. In addition to the required cap and vegetative cover, as described in Section 2.4, the Project includes the following environmental enhancement and habitat restoration

Table 3.11-2. Santa Cruz County General Plan/Local Coastal Program Policy Consistency Analysis

Santa Cruz County General Plan Policy	Consistency Discussion
	features at the Buena Vista facility: Restoration of Harkins Slough Road Drainage, Culvert Modification with Small Wildlife Crossing at Main Entrance, Culvert Replacement under Internal Roadway to Old Landfill, Wildlife Movement Corridor between Gallighan Slough and Harkins Slough, and Wildlife Directional Features at Key Locations. Finally, as identified in Chapter 3 of this EIR (including Sections 3.4 and 3.5), the Project would include mitigation for potential degradation of biological resources, cultural resources, and other resources.
Noise Element	
Policy 9.2.1. Require acoustical studies for all new development projects that may affect the existing noise environment affecting sensitive land uses and receptors and that may not conform to the Normally Acceptable Noise Exposure in Table 9-2.	**Consistent.** A noise analysis was prepared as part of this EIR. The potential impacts to adjacent sensitive receptors, including people residing at the adjacent Rountree Medium (Jail) Facility, Buena Vista Migrant Center (farmworker housing and childcare facility), and Tierra Alta affordable housing complex), would be less than significant with mitigation (Mitigation Measures N-1, N-2a, N-2b). Refer to Section 3.13, Noise.
Policy 9.2.2. Require site-design and noise reduction measures for any project, including transportation projects, that would cause significant degradation of the noise environment due to project effects that could: (a) Increase the noise level at existing noise-sensitive receptors or areas by 5 dB or more, where the post project CNEL or DNL will remain equal to or below 60 dB; (b) Increase the noise level at existing noise-sensitive receptors or areas by 3 dB or more, where the post project CNEL or DNL would exceed 60 dB; This policy shall not be interpreted in a manner that would limit the ability of the County to require noise related mitigation measures or conditions of approval for projects that may generate lesser increases than the above. Special consideration may also be applied to special events or activities subject to permit requirements, or to land use development permits for uses and activities exempted from County noise control regulations.	**Consistent.** As discussed in Section 3.13, the Project would result in potential noise impacts to nearby sensitive receptors during construction of the optional equipment parking and storage area and operation of Transfer Station B and ODF Option 2. The closes sensitive receptors to the equipment area are residences at the north end of Tierra Alta Drive, and the temporary impact would be reduced to less than significant with noise-reducing measures for construction equipment (Mitigation Measure N-1). The closest sensitive receptor to both Transfer Station B and ODF Option 2 is the Rountree Medium (Jail) Facility. The worst-case operation of both Transfer Station B and ODF Option 2 would potentially exceed the County Noise Ordinance standard. This impact would be reduced by requiring noise shielding features for preprocessing grinder operation. The implementation of Mitigation Measures N-2a and 2b would reduce impacts to sensitive receptors to below the County General Plan Noise Element standards. No other Project components would cause a significant degradation to the noise environment. Refer to Section 3.13 for further discussion.
Policy 9.2.4. For all new commercial and industrial developments which would increase noise levels above the normally acceptable standards in Table 9-2 or the maximum allowable standards in Table 9-3, the best available control technologies shall be used to minimize noise levels. In no case shall the noise levels exceed the standards of Table 9-3.	**Consistent.** As described above for Policy 9.2.2 and discussed in Section 3.11, Project operation would result in potential noise impacts to nearby sensitive receptors. The closest sensitive receptor to both Transfer Station B and ODF Option 2 is the Rountree Medium (Jail) Facility. The worst-case operation of Transfer Station B and ODF Option 2 would potentially exceed the County Noise Ordinance standard. This impact would be reduced by requiring noise shielding features for preprocessing

Table 3.11-2. Santa Cruz County General Plan/Local Coastal Program Policy Consistency Analysis

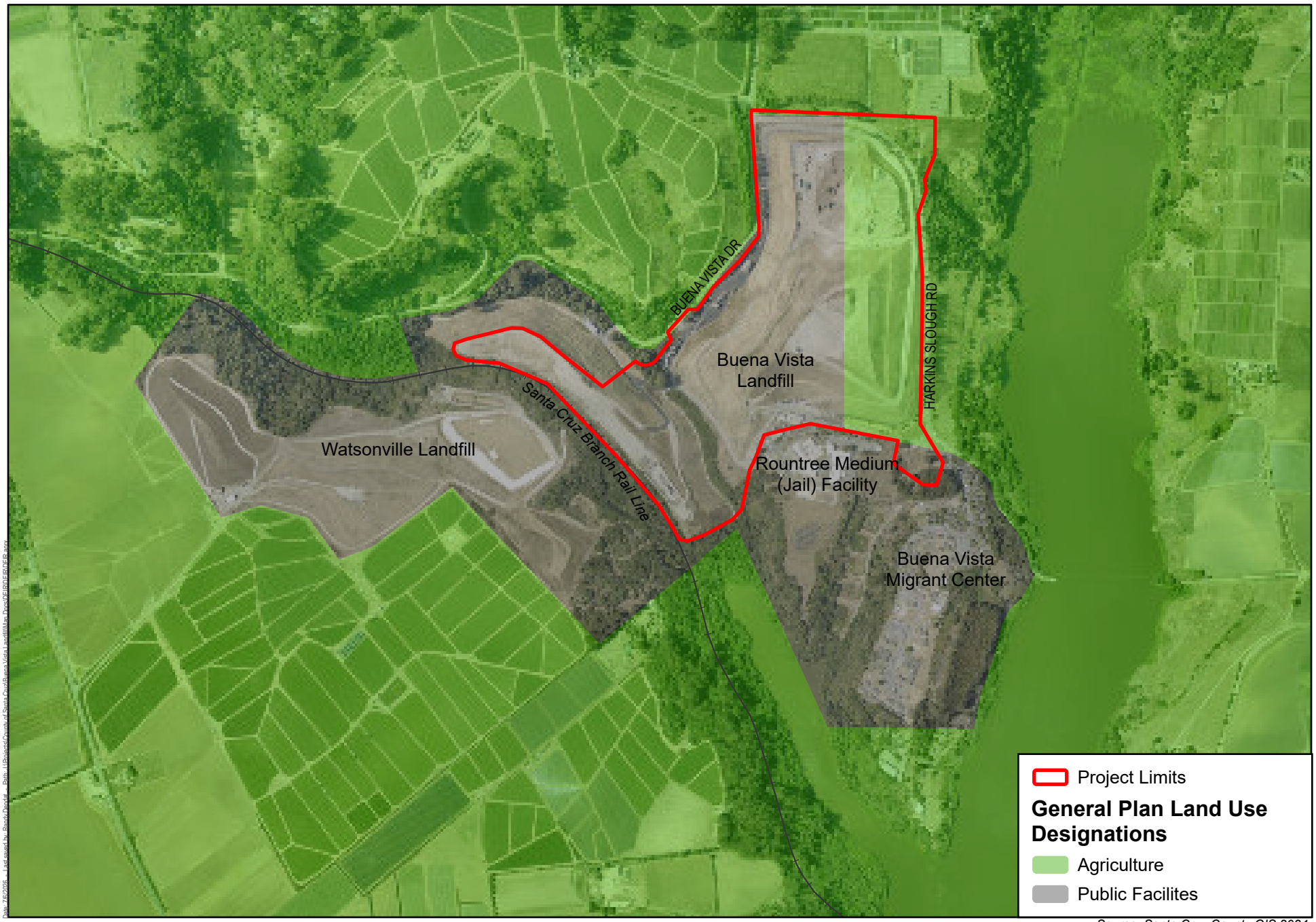
Santa Cruz County General Plan Policy	Consistency Discussion
	grinder operation. The implementation of Mitigation Measures N-2a and N-2b would reduce impacts to sensitive receptors to below the County General Plan Noise Element standards. No other Project components would cause a significant degradation to the noise environment. Refer to Section 3.13 for further discussion.
Policy 9.2.5. The following noise mitigation strategies are preferable to construction of conventional masonry noise barriers where these strategies are a feasible option to reduce impacts on sensitive uses: ▪ Avoid placement of noise sensitive uses in noisy areas. ▪ Avoid placement of significant noise generators in noise sensitive areas. ▪ Increase setbacks between noise generators and noise sensitive uses. ▪ Orient buildings such that the noise sensitive portions of a Project (e.g. bedrooms) are shielded from noise sources (such as through careful design of floor plan). ▪ Use sound-attenuating architectural design and building features. ▪ Employ technologies that reduce noise generation, such as alternate pavement materials on roadways, when appropriate. ▪ Employ traffic calming measures where appropriate.	**Consistent.** Refer to the discussion above for Policies 9.2.2 and 9.2.4.
Policy 9.2.6. Require mitigation and/or best management practices to reduce construction noise as a condition of Project approvals, particularly if noise levels would exceed 75 dB at neighboring sensitive land uses or if construction would occur for more than 7 days.	**Consistent.** As discussed in Section 3.13, average construction noise levels would have the potential to exceed the County Noise Ordinance and General Plan Policy 9.2.6 standard of 75 dBA up to approximately 200 feet from the construction area. This impact would be reduced by implementing Mitigation Measure N-1. Refer to the discussions above and in Section 3.13 for further discussion.

Notes:

[1] Although the General Plan/LCP includes a comprehensive list of roadways throughout the County, this table only includes those visible or within 1 mile of the Project area.

[2] Although the General Plan/LCP includes a comprehensive list of identified sites of hydrological, geological, or paleontological features, they are located in the Bonny Doon Planning Area, which is located in north County and not near the Project area.

BMP = best management practice; CDID = Community Development & Infrastructure Department; CNEL = community noise level equivalent; DNL = day-night average noise level; LCP = Local Coastal Program; NPDES = National Pollutant Discharge Elimination System; RCRA = Resource Conservation and Recovery Act; SWPPP = Stormwater Pollution Prevention Plan; VMT = vehicle miles traveled



Source: Santa Cruz County GIS 2024.

Harris & Associates

N

0 500 1,000

Feet

Figure 3.11-1

County of Santa Cruz General Plan Land Use Designations

Buena Vista Landfill Redevelopment Project

3.12 Mineral Resources

This section describes existing mineral resource use, outlines the regulatory framework applicable to mineral resources, and evaluates impacts related to mineral resources as a result of the Buena Vista Landfill Redevelopment Project (Project) construction and operation. **Table 3.12-1** presents a summary of potential impacts related to mineral resources. All figures are presented at the end of Section 3.12.

Table 3.12-1. Summary of Project Impacts Related to Mineral Resources

Impact	Significance before Mitigation	Mitigation	Significance after Mitigation
MIN-1. The Project would not result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state.	Less than Significant	None required	Less than Significant
MIN-2. The Project would not result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan.	No Impact	None required	No Impact

Note: The impact, significance determination, and mitigation apply to the Project as a whole, considering all Project components, unless otherwise noted.

3.12.1 Existing Conditions

The State Geologist classifies mineral lands solely on the basis of geologic factors, and the existing land use, by statute, is not considered. Classification of an area as a Mineral Resource Zone-2 (MRZ-2) indicates the existence of a deposit that meets certain criteria for value and marketability. The state classification also includes MRZ-1, 3, and 4 resource zones. The first two of these categories are used to indicate if an area contains no resources (MRZ-1) or contains potential but presently unproven resources (MRZ-3). Areas where it is not possible to assign any of these categories are classified MRZ-4. In compliance with the state Surface Mining and Reclamation Act of 1975 (SMARA), Santa Cruz County has prepared a Mining Ordinance. Mineral information is classified by the state. Under SMARA, Santa Cruz County is the designated lead agency to regulate mining operations in the county.

A portion of the Project area is designated by the County as a Mineral Resource Area (**Figure 3.12-1,** Mineral Resource Area). Prior to the County's acquisition of the Buena Vista Landfill parcel, Granite rock had mineral rights to mine aggregate from the northern portion of the site near the current intersection of Buena Vista Drive and Harkins Slough Road. Interviews with County landfill employees indicate that mining activities decreased, and mineral rights were relinquished as the resource was depleted. Aggregate materials were also used as landfill cover and were removed when landfill modules 4A, 4B, 5, and 6 were built. California Geological Survey Mineral Land Classification Construction Aggregate Resources maps do not identify significant aggregate or other mineral resources at or near the Project area (DOC and CGS 2021).

Several active mining operations in Santa Cruz County provide important mineral resources for industry and construction, including sand and granitic rock (Santa Cruz County 2024). Eight quarries exist in the county, four of which are currently closed. There are no active quarries located near the Project area.

3.12.2 Regulatory Setting

This section describes the federal, state, and local plans, policies, and laws relevant to mineral resources for the Project.

Federal

No federal regulations related to mineral resources are applicable to the Project.

State

Surface Mining and Reclamation Act

SMARA was enacted in 1975 to address the need for a continuing supply of mineral resources and to prevent or minimize the negative impacts of surface mining to public health, property, and the environment. Requirements for SMARA are codified under California Public Resources Code, Section 2710 et seq. Under state law, mining operations are required to obtain permits before starting operations and to abide by local and state operating requirements. Mining operations are also required to have appropriate reclamation plans in place, provide financial assurances, and abide by state and local environmental laws.

The California Geological Survey Mineral Resources Project provides information about California's non-fuel mineral resources. The Mineral Resources Project classifies lands throughout the state that contain regionally significant mineral resources per SMARA. Non-fuel mineral resources include metals such as gold, silver, iron, and copper; industrial metals such as boron compounds, rare-earth elements, clays, limestone, gypsum, salt, and dimension stone; and construction aggregate including sand, gravel, and crushed stone. Development generally results in a demand for minerals, especially construction aggregate. Urban preemption of prime deposits and conflicts between mining and other uses throughout California led to passage of SMARA, which requires cities and counties to incorporate the mapped designations approved by the state in their General Plans.

Local

Santa Cruz County General Plan/Local Coastal Program

The Agriculture, Natural Resources, and Conservation Element of the Santa Cruz County General Plan/Local Coastal Program (LCP) provides a framework for the conservation and sustainable management of agricultural land, natural and cultural resources, and open space in Santa Cruz County:

- **Policy ARC-7.2.1 (LCP), Identification of Mineral Resource Areas**. Areas classified by the State Geologist and designated by the State Mining and Geology Board as Regionally or Statewide Significant Mineral Resource Areas[1] and areas classified by the State as MRZ-2 Zones (areas containing significant mineral deposits), excluding those areas with existing land uses and/or land use designations which conflict with mineral resource extraction, are shown on the General Plan/LCP Resources and Constraints Maps (Appendix F) as Mineral Resource lands.

[1] Mineral Resources are classified via Special Report 146 Part IV, Mineral Land Classification: Aggregate Materials in the San Francisco-Monterey Bay Area; and designated by the State Mining and Geology Board via the California SMARA Designation Report No. 7, Designation of Regionally Significant Construction Aggregate Resource Areas in the South San Francisco Bay, North San Francisco Bay, Monterey Bay Production – Consumption Regions.

- **Policy ARC-7.2.2 (LCP), Uses in Mineral Resource Areas**. Lands within Mineral Resource areas, as identified on the County General Plan/LCP Resources and Constraints Maps, shall be planned and used in ways that support future mineral extraction. Development on Mineral Resource lands shall be limited to mining and mining-related uses and other uses compatible with mining. Uses compatible with future mining operations require a low public or private investment in structures and land improvements, facilitating future mining because of the low economic value of the land and its improvements. Examples of such uses include large-lot rural development, recreation (public and commercial), agriculture and grazing, timber operations, and open space. Land uses inherently incompatible with mining require a high public or private investment in structures and land improvements inhibiting future mining because of the higher economic value of the land and improvements. Examples of incompatible uses include high-density residential development, public facilities, commercial uses, and extensive industrial uses.
- **Policy ARC-7.2.3, Review of Incompatible Uses**. Under special circumstances, the County may permit the development of incompatible uses on mineral resource areas. In such cases, the proposed use shall be reviewed to determine whether it would threaten future mineral extraction. Existing area development, existing and planned public infrastructure and other land use policies for the area shall be considered in making this determination. Buffer areas and visual screening may be required to mitigate impacts between mining and proposed adjacent land uses.
- **Policy ARC-7.2.4, Minimizing Conflicts Between New Development and Mineral Resource Areas**. Where a proposed land use has been determined to threaten the potential to extract minerals, the County shall require all reasonable and feasible mitigations to avoid or minimize conflicts between the proposed use and future development of the mineral resource. The County shall make written findings in support of its decision to permit such a use, in accordance with the requirements of the Surface Mining and Reclamation Act.
- **Policy ARC-7.2.5 (LCP), Land Division and Density Requirements on Mineral Resource Land**. Require a minimum size of 40 gross acres per parcel for land divisions, and allow a maximum residential density of one dwelling unit per 40 gross acres per existing parcel of record on Mineral Resource areas as designated on the General Plan/LCP Resources and Constraints Maps.

3.12.3 Methodology and Significance Thresholds

Methodology

The analysis of mineral resources impacts follows the guidance and methodologies recommended in Appendix G of the California Environmental Quality Act (CEQA) Guidelines.

Significance Thresholds

The introduction in Chapter 3, Environmental Impact Analysis, states that the significance thresholds used in this analysis are based on Appendix G of the CEQA Guidelines, which provides a sample Initial Study checklist that includes a number of factual inquiries related to the subject of mineral resources and the other environmental topics.

For the purposes of this Environmental Impact Report (EIR), a significant impact would occur if implementation of the Project would result in the:

A. Loss of availability of a known mineral resource that would be of value to the region and the residents of the state, or

B. Loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan.

3.12.4 Project Impact Analysis

For each impact, the discussion is separated into Project construction, Project operation, and Project components as needed to describe the potential impact. The overall conclusion or significance determination is presented at the end of the discussion, as well as in parentheses at the end of the numbered impact statement.

As described in Chapter 2, Project Description, the Project components include:

1. Transfer Stations (Transfer Station A and Transfer Station B)
2. Organics Diversion Facility (ODF Option 1 and ODF Option 2)
3. Landfill Closure and Revegetation
4. Optional Elements: a) Internal Access Road Improvements, b) Scale House Upgrades, c) Recycling Center Upgrades, d) Equipment Parking and Storage Area
5. General Plan/Local Coastal Program Land Use Designation and Zoning Map Amendments

Threshold A:	Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state.

Impact MIN-1 THE PROJECT WOULD NOT RESULT IN THE LOSS OF AVAILABILITY OF A KNOWN MINERAL RESOURCE THAT WOULD BE OF VALUE TO THE REGION AND THE RESIDENTS OF THE STATE. (LESS THAN SIGNIFICANT IMPACT)

As stated in Section 3.12.1 above, a small portion of the Project area is designated by the County as a Mineral Resource Area (**Figure 3.12-1**). However, this area was privately mined and then further excavated for the construction of several modules of the existing landfill. This is an area where the proposed landfill closure and revegetation, as well as the optional scale house and recycling center upgrades, would take place. A portion of the Project area was used for mining construction aggregate, but the available resource was primarily exhausted before the construction of landfill modules that are now ready for closure. There is no history of mining in other areas near the Project vicinity, nor does the California Geological Survey identify potentially significant mineral resources near the Project area. The Project area has been used as a regional landfill since the 1960s.

Additionally, as described in **Table 2-2** (Section 2.6, Project Construction), implementation of all the Project components would require approximately 51,382 cubic yards of imported aggregate and 2,500 cubic yards of concrete with ODF Option 1, and approximately 57,197 cubic yards of imported aggregate and 5,100 cubic yards of concrete with ODF Option 2. The optional equipment parking and storage area would require an additional 4,000 cubic yards of imported aggregate. Aggregate base is actively mined in the Monterey Bay Area, which is estimated to meet demand for 41 to 50 years (California Geological Survey 2018), and supplies for the Project are expected to come from

local sources in the Watsonville area in south Santa Cruz County. Thus, the demand created by the Project would not represent a significant impact on that supply.

Therefore, implementation of the Project, including the primary components and optional improvements, as well as the associated General Plan/LCP land use designation and zoning map amendments, would not result in the loss of availability of a known mineral resource that would be of value to the region or residents of the state. The impact would be **Less than Significant**. No mitigation is required.

Threshold B:	Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan.

Impact MIN-2 THE PROJECT WOULD NOT RESULT IN THE LOSS OF AVAILABILITY OF A LOCALLY IMPORTANT MINERAL RESOURCE RECOVERY SITE DELINEATED ON A LOCAL GENERAL PLAN, SPECIFIC PLAN, OR OTHER LAND USE PLAN. (NO IMPACT)

The Project area is composed of County-owned parcels zoned Public Facilities-Airport Influence Area (PF-AIA) and Commercial Agriculture-Airport Influence Area (CA-AIA), which are not considered to be Extractive Use Zones (M-3) for mineral resources nor does it have a land use designation with a Quarry Designation Overlay (Q) (Santa Cruz County 2024).

Therefore, the Project, including the primary components and optional improvements, as well as the associated General Plan/LCP land use designation and zoning map amendments, would not result in the loss of availability of a known mineral resource or locally important mineral resource recovery (extraction) site delineated on a local general plan, specific plan, or other land use plan would occur as a result of this Project. There would be **No Impact**.



Source: Santa Cruz County GIS 2024.

Harris & Associates

N

0 500 1,000

Feet

Figure 3.12-1

Mineral Resource Area

Buena Vista Landfill Redevelopment Project

3.13 Noise

This section describes the existing noise conditions and the regulatory framework applicable to noise and identifies potential noise impacts resulting from the Buena Vista Landfill Redevelopment Project (Project) construction and operation. **Table 3.13-1** summarizes identified impacts related to noise.

Table 3.13-1. Summary of Project Impacts Related to Noise

Impact	Significance before Mitigation	Mitigation	Significance after Mitigation
N-1. Project construction of optional equipment parking and storage area may result in a substantial temporary increase in noise levels at residential receptors.	Potentially Significant	N-1	Less than Significant
N-2. Project operation of Transfer Station B and Organics Diversion Facility Option 2 may expose persons to or generate excessive noise levels at Rountree Medium (Jail) Facility.	Potentially Significant	N-2a, N-2b	Less than Significant
N-3. Project construction would not expose persons to or generate excessive groundborne vibration or groundborne noise levels.	Less than Significant	None Required	Less than Significant
N-4. Project construction and operation would not expose people residing or working in the Project area to excessive noise from aircraft.	Less than Significant	None Required	Less than Significant

Note: The impact, significance determination, and mitigation apply to the Project as a whole, considering all Project components, unless otherwise noted.

3.13.1 Existing Conditions

Overview of Noise

The California Department of Transportation (Caltrans) defines noise as sound that is loud, unpleasant, unexpected, or undesired. Further, for this noise analysis, noise only exists if a source, path, and receiver are present. Sound pressure waves must be produced by a source and transmitted through a medium, such as air. The sound must be perceived by, registered by, or affect a receptor, such as an ear or noise-monitoring device (Caltrans 2013).

Sound pressure levels are quantified using a logarithmic ratio of actual sound pressures to a reference pressure squared, called “bels.” A bel is typically divided into tenths, or decibels (dB). Sound pressure alone is not a reliable indicator of loudness because frequency (or pitch) also affects how receptors respond to the sound. To account for the pitch of sounds and the corresponding sensitivity of human hearing to those sounds, the raw sound pressure level is adjusted with a frequency-dependent A-weighting scale that is stated in A-weighted decibels (dBA) (Caltrans 2013).

Reaction to a given sound varies depending on the acoustical characteristics of the source and the environment of the receptor. The A-scale de-emphasizes low-frequency sounds because human receptors are more sensitive to high-frequency sounds, and high-frequency sounds are more likely to cause hearing damage. People tend to compare an intruding noise with existing background noise levels. If a new noise is considerably louder or more noticeable than existing noise levels, it is generally considered objectionable. The activity that the receptor is engaged in also affects response. For

example, the same noise source, such as constant freeway traffic, may be more objectionable to people sleeping than to workers in a factory. A 3 dBA change is the smallest increment that is perceivable by most receivers, and a 5 dBA change in community noise levels is noticeable. Generally, 1 to 2 dBA changes are not detectable except under controlled laboratory conditions. A sound that is 10 dBA greater than the reference sound is typically perceived as twice as loud (Caltrans 2013).

A receptor's response to a given noise may vary depending on the sound level, duration of exposure, character of the noise sources, time of day during which the noise is experienced, and activity affected by the noise. Activities most affected by noise include rest, relaxation, recreation, study, and communication. In consideration of these factors, different measures of noise exposure have been developed to quantify the extent of the effects from a variety of noise levels on the receptors. For example, some measures consider the 24-hour noise environment of a location by using a weighted average that penalizes noise levels during normal relaxation and sleeping hours. Other measures consider an average noise level over a period of time that includes ambient noise and a steady-state noise source for a given period of time within the averaging period (Caltrans 2013). The indices for measuring community noise levels used in this report are defined below.

Equivalent Continuous Sound Level (Leq) is the sound level corresponding to a steady-state sound level containing the same total energy as a time-varying signal over a given sample period. Leq is the "energy" average noise level during the time period of the sample. Leq can be measured for any time period but is typically measured for 15 minutes, 1 hour, or 24 hours.

Day-Night Noise Level (Ldn) is a 24-hour, time-weighted average noise level. Time-weighted refers to the fact that noise that occurs during certain sensitive time periods is penalized for occurring at these times. In the Ldn scale, those events that take place during the night (10:00 p.m. to 7:00 a.m.) are penalized by 10 dBA. This penalty was selected to attempt to account for increased human sensitivity to noise during the quieter period of day, where sleep is the most probable activity.

Community Noise Equivalent Level (CNEL) is similar to the Ldn scale except that it includes an additional 5 dBA penalty for events that occur during the evening (7:00 p.m. to 10:00 p.m.) time period. Thus, both the Ldn and CNEL noise measurements represent a 24-hour average of A-weighted noise levels, with Ldn providing a nighttime adjustment and CNEL providing both an evening and nighttime adjustment.

The dB level of a sound decreases (or attenuates) as the distance from the source of that sound increases. For a single point source, such as a piece of mechanical equipment, the sound level normally decreases by approximately 6 dBA for each doubling of distance from the source. Sound that originates from a linear, or "line," source, such as vehicular traffic, attenuates by approximately 3 dBA per doubling of distance. Other contributing factors that affect sound reception include ground absorption, natural topography that provides a natural barrier, meteorological conditions, or the presence of human-made obstacles such as buildings and sound barriers (Caltrans 2013).

Overview of Vibration

Vibration is defined as the dynamic excitation of an elastic system, such as the ground or a structure, that results in oscillatory movement of the system (Caltrans 2013). Typical human-made causes of earthborne vibration include trains and construction activities such as blasting, pile driving, and operation of heavy earthmoving equipment. The resulting waves transmitted through solid material are referred to as structureborne or groundborne vibration. Vibration energy spreads out as it travels through the ground, causing the vibration amplitude to decrease with distance away

from the source. Because the effects of vibration elicit a greater response than the vibration itself, vibration is typically only perceptible to people inside buildings (FTA 2018).

Vibration levels are typically expressed in terms of the peak particle velocity (PPV) and root mean square amplitude, both in inches per second. PPV is most appropriate for evaluating building damage potential. Caltrans estimates that continuous vibration levels of less than 0.08 PPV and single-event vibration levels of less than 0.12 PPV do not result in damage to even the most fragile historic buildings (Caltrans 2013). PPV does not account for human response to vibration. The root mean square amplitude represents the average vibration amplitude, which accounts for the time it takes for the human body to respond to vibration signals. The root mean square amplitude is also given in decibel notation, referenced as vibration decibels (VdB), which serves to compress the range of numbers required to describe vibration relative to human response (FTA 2018). The general human response to different levels of groundborne vibration velocity levels is described in **Table 3.13-2**.

Table 3.13-2. Human Response to Groundborne Vibration

Vibration Velocity Level	Noise Level[a]	Human Reaction
65 VdB	40 dBA	Approximate threshold of perception for many people. Mid-frequency sound may disturb sleep.
75 VdB	50 dBA	Approximate dividing line between barely perceptible and distinctly perceptible. Many people find that transportation-related vibration at this level is annoying. Mid-frequency noise disturbs sleep and is considered annoying in more quiet areas.
85 VdB	60 dBA	Vibration acceptable only if there is an infrequent number of events per day. Low-frequency noise disturbs sleep, and mid-frequency noise can be annoying to daytime noise-sensitive land uses, such as schools.

Source: FTA 2018.
Notes: dBA = A-weighted decibel; VdB = vibration decibel
[a] Approximate noise level when vibration spectrum peak is near 60 hertz.

The rumbling sound caused by the vibration of room surfaces is called groundborne noise. Groundborne noise is often perceived as louder than community noise sources (broadband noise) at the same noise level. This is accounted for by setting the limits for groundborne noise lower than those set for broadband noise. The relationship between groundborne vibration and groundborne noise depends on the frequency content of the vibration and the acoustical absorption of the receiving room. If the vibration spectrum peaks at 30 hertz, the A-weighted sound level will be approximately 40 dBA lower than the velocity level. Correspondingly, if the vibration spectrum peaks at 60 hertz, the A-weighted sound level will be about 25 dBA lower than the velocity level (FTA 2018). The same human reaction corresponds to a given vibration velocity level and its resulting noise level; therefore, for simplicity, this analysis refers only to a source's vibration velocity level (VdB) to describe potential human response to groundborne vibration and noise.

Sensitive Receptors

Noise level allowances for various types of land uses reflect the varying noise sensitivities associated with those uses. In general, noise-sensitive land uses (called "sensitive receptors") are any residence, hospital, school, hotel, library, office, or similar facility where quiet is an important attribute of the environment. Such uses have more stringent noise level allowances than most commercial or agricultural uses that are not subject to impacts such as sleep disturbance.

The nearest sensitive receptors to the Project area are residences in the Buena Vista Migrant Center (farmworker housing and childcare facility) and Tierra Alta Affordable Housing, located southeast of the

Project area on Tierra Alta Drive, and the Rountree Medium (Jail) Facility, located south of the Project, as shown on **Figure 2-1**, Project Overview. The Rountree Medium (Jail) Facility is considered a sensitive receptor because, although not a traditional residence, people are residing and sleeping there.

Existing Noise Levels

The Buena Vista Landfill is currently in active operation, and noise sources within and adjacent to the Project area include haul trucks, off-road equipment for tasks such as burying waste, waste handling and processing equipment, and use of bird deterrent noises as required by the California Department of Resources Recycling and Recovery (CalRecycle). Equipment and trucks are in operation during the landfill hours of operation, currently Monday through Saturday, from 7:00 a.m. to 5:00 p.m. Bird deterrent noise is used as a means of vector control to prevent the spread of refuse being carried off site by birds. The three types of loud noises currently used to disperse birds from the active fill area include loud bang from a starter's pistol (shotgun noise), loud shrill whirling firework noise, and loud low bang popping noise from a controlled propane explosion (propane cannon). The noise is discharged intermittently, as needed to clear birds from dumped refuse and active landfill burial area during daytime hours (typically 9:00 a.m. to 4:00 p.m.), and as frequently as once every 30 minutes when curbside collected garbage arrives with food waste (typically 10:00 a.m. to 1:00 p.m.).

Existing noise sources in the surrounding area consist primarily of traffic noise from Buena Vista Drive, intermittent aircraft noise (the landfill is in the Watsonville Municipal Airport overflight zone), and intermittent operation of agricultural equipment on surrounding agricultural land. Highway 1 also produces traffic noise, but it generally cannot be heard from the Project area due to distance, intervening topography, and noise generated by landfill operations. Calculated existing noise levels for Buena Vista Drive are provided in **Table 3.13-3**. Noise levels are generally consistent with the Santa Cruz County's (County's) General Plan normally compatible standard for residential land uses of 60 dBA CNEL, as described below, except adjacent to State Route 1.

Table 3.13-3. Existing Buena Vista Drive Vehicle Noise Levels

Segment	Existing Noise Level (dBA CNEL)
State Route 1 Northbound Ramps to State Route 1 Southbound Ramps	62.3
State Route 1 Southbound Ramps to Ranport Road/Fiesta Way	60
Ranport Road/Fiesta Way to Harkins Slough Road	60
Harkins Slough Road to Landfill Entrance	58.8
Landfill Entrance to San Andreas Drive	58.6

Source: Appendix L (traffic data). Refer to **Appendix K** for model input and output.
Notes: dBA CNEL = A-weighted decibel Community Noise Equivalent Level
Noise level calculated at 50 feet from roadway centerline.

3.13.2 Regulatory Setting

This section describes the federal, state, and local plans, policies, and laws relevant to noise for the Project.

Federal

Federal Transit Administration Vibration Guidelines

Although the Federal Transit Administration standards are intended for federally funded mass transit projects, the impact assessment procedures and criteria included in the Transit Noise and Vibration Impact Assessment Manual (FTA 2018) are routinely used for projects proposed by local

jurisdictions. The manual includes guideline criteria for assessing the impacts of groundborne vibration, presented in **Table 3.13-4**.

Table 3.13-4. Federal Transit Administration Groundborne Vibration Impact Criteria

	Impact Levels (VdB)		
Land Use Category	**Frequent Events[a]**	**Occasional Events[b]**	**Infrequent Events[c]**
Category 1: Buildings where vibration would interfere with interior operations	65	65	65
Category 2: Residences and buildings where people normally sleep	72	75	80
Category 3: Institutional land uses with primarily daytime uses	75	78	83

Source: FTA 2018.
Notes: VdB = vibration decibel
[a] "Frequent Events" are defined as more than 70 vibration events of the same source per day.
[b] "Occasional Events" are defined as between 30 and 70 vibration events of the same source per day.
[c] "Infrequent Events" are defined as fewer than 30 vibration events of the same source per day.
Vibration levels are measured in or near the vibration-sensitive use.

State

As required by Section 65302 of the California Government Code, desirable noise levels are stated in the Noise Element of General Plans prepared by counties and cities. Division 28 of the California Health and Safety Code requires that the California Office of Noise Control in the California Department of Health Care Services develop model elements and model noise ordinances to guide local jurisdictions in developing noise standards. The objective of noise standards is to provide the community with a means of judging the noise environment that it deems to be generally acceptable. The state has also adopted guidelines for land use compatibility and community noise environment in the State of California General Plan Guidelines, published by the Governor's Office of Planning and Research (OPR 2017). Noise levels up to 60 dBA CNEL are considered normally acceptable for low-density residential land use, and noise levels up to 70 dBA CNEL are conditionally acceptable with the incorporation of noise insulation features. Noise levels up to 70 dBA CNEL are normally acceptable for schools and commercial land use.

Local

Santa Cruz County General Plan/Local Coastal Program

According to the County's General Plan Noise Element, noise-sensitive land uses include residential (residences, hotels, and motels), institutional (schools, libraries, museums, hospitals, personal care, meeting halls, and churches), and office (office buildings, business commercial, and professional) land uses. The recommended exterior noise limit for all noise-sensitive land uses is 60 dB Ldn (or CNEL), and the recommended maximum interior noise level is 45 dB Ldn (or CNEL). The normally acceptable noise limit for commercial facilities is 65 dBA CNEL. The following policies apply to the development of new noise sources and vibration exposure in the County (Santa Cruz County 2024a):

- **Policy 9.1.3.** Noise levels in common outdoor use areas in multi-unit residential development should not exceed 60 dBA CNEL. Where this goal cannot be met by reasonable measures, such

as strategic site layout and noise barriers, 65 dBA CNEL might be considered acceptable. [Outdoor noise limits do not apply to private exterior balconies.]

- **Policy 9.2.1.** Require acoustical studies for all new development projects that may affect the existing noise environment affecting sensitive land uses and receptors and that may not conform to the Normally Acceptable Noise Exposure in General Plan Noise Element Table 9-2, Acceptable through Unacceptable Ranges of Noise Exposure by Land Use.
- **Policy 9.2.2.** Require site-design and noise reduction measures for any project, including transportation projects, that would cause significant degradation of the noise environment due to project effects that could:
  - □ Increase the noise level at existing noise-sensitive receptors or areas by 5 dB or more, where the post-project CNEL will remain equal to or below 60 dB;
  - □ Increase the noise level at existing noise-sensitive receptors or areas by 3 dB or more, where the post-project CNEL would exceed 60 dB.

  This policy shall not be interpreted in a manner that would limit the ability of the County to require noise-related mitigation measures or conditions of approval for projects that may generate lesser increases than the above. Special consideration may also be applied to special events or activities subject to permit requirements, or to land use development permits for uses and activities exempted from County noise control regulations.
- **Policy 9.2.3.** Incorporate noise considerations into the site plan review process, particularly with regard to parking and loading areas, ingress/egress points and refuse collection areas.
- **Policy 9.2.4.** For all new commercial and industrial developments which would increase noise levels above the normally acceptable standards in General Plan Table 9-2, Acceptable through Unacceptable Ranges of Noise Exposure by Land Use, or the maximum allowable standards in Table 9-3, the best available control technologies shall be used to minimize noise levels. In no case shall the noise levels exceed the standards of General Plan Noise Element Table 9-3, Maximum Allowable Noise Exposure.
- **Policy 9.2.5.** The following noise mitigation strategies are preferable to construction of conventional masonry noise barriers where these strategies are a feasible option to reduce impacts on sensitive uses:
  - □ Avoid placement of noise sensitive uses in noisy areas.
  - □ Avoid placement of significant noise generators in noise sensitive areas.
  - □ Increase setbacks between noise generators and noise sensitive uses.
  - □ Orient buildings such that the noise sensitive portions of a project (e.g., bedrooms) are shielded from noise sources (such as through careful design of floor plan).
  - □ Use sound-attenuating architectural design and building features.
  - □ Employ technologies that reduce noise generation, such as alternate pavement materials on roadways, when appropriate.
  - □ Employ traffic calming measures where appropriate.
- **Policy 9.2.6.** Require mitigation and/or best management practices to reduce construction noise as a condition of project approvals, particularly if noise levels would exceed 75 dB at neighboring sensitive land uses or if construction would occur for more than 7 days.

County General Plan Table 9-2, Acceptable through Unacceptable Ranges of Noise Exposure by Land Use, establishes noise levels normally considered compatible or incompatible with various land uses. Noise levels up to 60 dBA CNEL are considered normally compatible with residential land uses, and noise levels

up to 75 dBA CNEL are conditionally acceptable with residential uses if residential development includes adequate noise insulation features to meet the interior noise standard of 45 dBA CNEL. Noise levels up to 70 dBA are considered normally acceptable for agricultural, industrial, and utility uses.

County General Plan Table 9-3, Maximum Allowable Noise Exposure Stationary Noise Sources, includes noise standards for stationary noise sources, as detailed in **Table 3.13-5**.

Table 3.13-5. Maximum Allowable Noise Exposure Stationary Noise Sources

	Daytime[a] (7:00 a.m. to 10:00 p.m.)	Nighttime[a,b] (10:00 p.m. to 7:00 a.m.)
Hourly Leq – Average Hourly Noise Level, dB[c]	50	45
Maximum Level, dB[c]	70	65
Maximum Level dB – Impulsive Noise[d]	65	60

Source: Santa Cruz County 2024a
Notes: dB = decibel; Leq = equivalent continuous sound level
As determined at the property line of the receiving land use. When determining the effectiveness of noise mitigation measures, the standards may be applied on the receptor side of noise barriers or other property line noise mitigation measures.
[a] Allowable levels shall be raised to the ambient noise levels where the ambient levels exceed the allowable levels. Allowable levels shall be reduced by 5 dB if the ambient hourly Leq is at least 10 dB lower than the allowable level.
[b] Applies only where the receiving land use operate or is occupied during nighttime hours.
[c] Sound level measurements shall be made with "slow" meter response.
[d] Sound level measurements shall be made with "fast" meter response.

Santa Cruz County Code

Chapter 8.30, Noise, and Chapter 13.15, Noise Planning, of the County Code establish noise regulations in Santa Cruz County. Section 8.30.010 of the County Code states that "offensive noise" shall not be permitted between 10:00 p.m. and 8:00 a.m. Section 8.30.010 of the County Code states that daytime noise exceeding 75 dB at the property line from which the sound is broadcast should be considered offensive. The ordinance also states that the necessity of the noise should be taken into consideration in determining if a noise violates the code (Section 8.30.010[C][5]) (Santa Cruz County 2024b). Section 13.15.050 states that all uses, except temporary construction, shall conform to the noise parameters established in Tables 9-2 and 9-3 of the General Plan, described above. Section 13.15.060 also includes special requirements for heating, ventilation, and air conditioning (HVAC) systems such that noise from HVAC systems may not exceed 55 dBA at any neighboring property line.

3.13.3 Methodology and Significance Thresholds

Methodology

The analysis of noise impacts considers the effects of both temporary construction-related noise and long-term noise associated with the operation of the Project. For construction noise, short-term noise levels are estimated using the Federal Highway Administration (FHWA) Roadway Construction Noise Model (RCNM). The potential for exposure of people to excessive groundborne vibration from construction is evaluated using reference vibration levels provided in the Federal Transit Administration's Transit Noise and Vibration Impact Assessment Manual (FTA 2018). Changes to ambient roadway noise levels are evaluated using standard noise modeling equations adapted from the FHWA noise prediction model. The modeling calculations consider the posted vehicle speed, average daily traffic volume, and estimated vehicle mix. The noise model assumes that roadways

would experience a decrease of approximately 3 dBA for every doubling of distance from the roadway. Traffic data is provided in the Project-specific traffic study prepared by Kimley-Horn (2024), including intersection volumes with and without Project implementation, and anticipated truck volumes (**Appendix L**). Traffic counts conducted by Kimley-Horn were used to estimate daily trip distribution for all daily traffic and truck traffic. The traffic counts were also used to estimate the proportion of truck trips attributable to medium duty and heavy truck traffic. Refer to **Appendix K** for detailed noise modeling assumptions.

Significance Thresholds

The introduction at the beginning of Chapter 3, Environmental Impact Analysis, states that the significance thresholds used in this analysis are based on Appendix G of the California Environmental Quality Act (CEQA) Guidelines, which provides a sample Initial Study checklist that includes a number of factual inquiries related to the subject of noise and the other environmental topics. Thus, the letters and thresholds presented below correspond with the questions in the Appendix G Initial Study checklist.

For purposes of this Environmental Impact Report, a significant impact would occur if implementation of the Project resulted in any of the following conditions:

A. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the Project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.
B. Generation of excessive groundborne vibration or groundborne noise levels.
C. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, exposure of people residing or working in the project area to excessive noise.

3.13.4 Project Impact Analysis

For each impact, the discussion is separated into Project construction, Project operation, and Project components as needed to describe the potential impact. The overall conclusion or significance determination is presented at the end of the discussion, as well as in parentheses at the end of the numbered impact statement.

As described in Chapter 2, Project Description, the Project components include:

1. Transfer Stations (Transfer Station A and Transfer Station B)
2. Organics Diversion Facility (ODF Option 1 and ODF Option 2)
3. Landfill Closure and Revegetation
4. Optional Improvements: a) Internal Access Road Improvements, b) Scale House Upgrades, c) Recycling Center Upgrades, d) Equipment Parking and Storage Area
5. General Plan/Local Coastal Program Land Use Designation and Zoning Map Amendments

Threshold A:	Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the Project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.

Impact N-1 PROJECT CONSTRUCTION OF OPTIONAL EQUIPMENT PARKING AND STORAGE AREA MAY RESULT IN A SUBSTANTIAL TEMPORARY INCREASE IN NOISE LEVELS AT RESIDENTIAL RECEPTORS. (LESS THAN SIGNIFICANT IMPACT WITH MITIGATION)

Impact N-2 PROJECT OPERATION OF TRANSFER STATION B AND ORGANICS DIVERSION FACILITY OPTION 2 MAY EXPOSE PERSONS TO OR GENERATE EXCESSIVE NOISE LEVELS AT ROUNTREE MEDIUM (JAIL) FACILITY. (LESS THAN SIGNIFICANT IMPACT WITH MITIGATION)

This analysis addresses changes to ambient vehicle noise as a result of all Project components, followed by a discussion of construction and operational noise sources from individual Project components.

Changes to Ambient Vehicle Noise

Calculated vehicle noise levels are provided with and without Project implementation for interim (Year 2032) conditions in **Table 3.13-6** and for future (Year 2045) conditions in **Table 3.13-7**.

As shown in **Table 3.13-6** and **Table 3.13-7**, Project implementation would not result in a noticeable (more than 3 dBA) increase in noise level on any roadway segment. The Project would cause noise levels to exceed the most conservative noise compatibility standard of 60 dBA CNEL on Buena Vista Drive from Harkins Slough Road to the Landfill entrance under both modeling scenarios. However, noise levels would be reduced to below 60 dBA CNEL within approximately 65 feet of the roadway centerline. No noise-sensitive land uses are located within 65 feet of the roadway centerline along this segment of Buena Vista Drive. As such, the Project would not result in a significant increase in ambient traffic noise levels; thus, the impact would be **Less than Significant**.

Table 3.13-6. Interim (Year 2032) Buena Vista Drive Vehicle Noise Levels

Segment	Interim Noise Level (dBA CNEL)	Interim + Project Noise Level (dBA CNEL)	Change Attributable to Project (dBA CNEL)
State Route 1 Northbound Ramps to State Route 1 Southbound Ramps	63.2	63.2	0
State Route 1 Southbound Ramps to Ranport Road/Fiesta Way	61	62.1	+1.1
Ranport Road/Fiesta Way to Harkins Slough Road	60.4	61.6	+1.2
Harkins Slough Road to Landfill Entrance	59	60.8	+1.8
Landfill Entrance to San Andreas Drive	59.7	59.8	+0.1

Source: Appendix L (traffic data). Refer to **Appendix K** for model input and output.
Notes: dBA CNEL = A-weighted decibel Community Noise Equivalent Level
Noise level calculated at 50 feet from roadway centerline.

Table 3.13-7. Cumulative (Year 2045) Buena Vista Drive Vehicle Noise Levels

Segment	Cumulative Noise Level (dBA CNEL)	Cumulative + Project Noise Level (dBA CNEL)	Change Attributable to Project (dBA CNEL)
State Route 1 Northbound Ramps to State Route 1 Southbound Ramps	64	64.6	+0.6
State Route 1 Southbound Ramps to Ranport Road/Fiesta Way	62.1	62.8	+0.7
Ranport Road/Fiesta Way to Harkins Slough Road	61	61.9	+0.9
Harkins Slough Road to Landfill Entrance	59.2	61	+1.8
Landfill Entrance to San Andreas Drive	60.8	60.9	+0.1

Source: Appendix L (traffic data). Refer to **Appendix K** for model input and output.
Notes: dBA CNEL = A-weighted decibel Community Noise Equivalent Level
Noise level calculated at 50 feet from roadway centerline.

Transfer Stations (Transfer Station A and Transfer Station B)

The potential for the proposed transfer stations to generate noise during construction and operation is addressed below.

Construction

The operation of heavy equipment during construction of the new transfer station buildings and realignment of Harkins Slough Road would result in temporary increases in noise within the vicinity of active construction. Expected construction equipment includes excavators, dump trucks, loaders, bulldozers, concrete trucks, concrete pump trucks, cranes, and smooth or sheepsfoot compactors. No pile driving would be required. **Table 3.13-8** provides average noise levels associated with typical equipment that may be required for new transfer station and Harkins Slough Road realignment construction.

As described in Section 2.6, Project Construction, construction of Transfer Station A and Harkins Slough Road is estimated to begin in summer 2027 and would continue until approximately spring 2029. Construction of Transfer Station B would begin in spring 2029 and continue until approximately summer 2030. Construction activities would include grading and earthwork, installation of erosion and sediment controls, relocation and extension of utilities, construction of new buildings, and paving around new facilities. Construction of Transfer Station B would require demolition of the existing maintenance building and trailer and relocation of waste if encountered. Harkins Slough Road realignment would require earthwork and grading, as well as installation of a retaining wall and new roadway.

Table 3.13-8. Typical Construction Noise Levels

Equipment	Typical Noise Level (dBA) 50 Feet from Source	Typical Noise Level (dBA) 150 Feet from Source	Typical Noise Level (dBA) 275 Feet from Source
Backhoe	77.6	68	63
Loader	80	71	65
Tractor	84	75	69
Crane	80.6	71	66
Lift	74.7	65	60
Dump Truck	76.5	67	62
Concrete Pump Truck	81.4	72	67
Paver	77.2	68	62
Compactor/Roller	83.2	74	68
Jackhammer	88.9	79	74
Air Compressor	77.7	68	63
Generator	80.6	71	66
Concrete Saw	89.6	80	75
Pneumatic Tools	85.2	76	70

Source: FHWA 2006.
Notes: dBA = A-weighted decibel
FHWA 2006 for noise levels at 50 feet. Noise levels at other distances assume attenuation rate of 6 dBA for every doubling of distance.

Noise levels from the transfer station and Harkins Slough Road realignment construction were determined based on typical equipment noise levels determined by the FHWA RCNM. The construction area for individual Project components is limited, and a limited number of pieces of construction equipment are anticipated to be in operation at once. The three noisiest pieces of construction equipment with the potential to operate simultaneously in the same location (jackhammer, concrete saw, and pneumatic tools) were modeled using the RCNM and would have the potential to generate combined noise levels up to 89.6 dBA at 50 feet, and hourly average noise levels of 87 dBA at 50 feet from the construction site. This equipment is primarily anticipated to be required during demolition, and is a conservative assumption for other construction activities. Noise levels from point sources, such as construction sites, typically attenuate at a rate of about 6 dBA per doubling of distance (Caltrans 2013).

Construction would occur during daytime hours and, therefore, would not be expected to result in sleep disturbance. However, average construction noise levels would have the potential to exceed the County Noise Ordinance and General Plan Policy 9.2.6 standard of 75 dBA up to approximately 200 feet from the construction area. Residences in the area include the Buena Vista Migrant Center (farmworker housing and childcare facility), Tierra Alta Affordable Housing, as well as the Rountree Medium (Jail) Facility, all of which are located south of the landfill (**Figure 2-1**).

Transfer Station A and the Harkins Slough Road realignment would be located on the northern landfill property boundary, and construction would not occur within 200 feet of any sensitive receptors. Therefore, this impact of Transfer Station A would be **Less than Significant.**

Transfer Station B would be located on the southern landfill boundary adjacent to the Rountree Medium (Jail) Facility. The Buena Vista Migrant Center (farmworker housing and childcare facility) and Tierra Alta Affordable Housing would be located more than 1,000 feet from the Transfer Station B construction area and would not be exposed to significant construction noise. However, the property line of the Rountree Medium (Jail) Facility is located adjacent to the Transfer Station B construction area and as such, noise levels at the property line could exceed 75 dBA. The facility uses along the property line include parking, landscaping, and access roads that would not be sensitive to noise. Occupied buildings within 200 feet of the construction area consist of office, loading, and other operations that are also generally not considered noise sensitive. The facility lodging area is located approximately 280 feet from the construction area. As such, lodging areas of the facility would not be exposed to construction noise levels above 75 dBA. Additionally, construction would occur during daytime hours, when the facility would be less sensitive to noise, and the facility is currently exposed to equipment noise from active landfill operation. Therefore, this impact of Transfer Station B would be **Less than Significant**, with no mitigation required.

Operation

Operation of the transfer stations would result in the operation of new equipment and changes to traffic patterns that would have the potential to increase noise exposure during operation. The hours of operation for the transfer stations would be Monday through Saturday, from 7:00 a.m. to 5:00 p.m., with the facility open to the public from 7:30 a.m. to 3:30 p.m. Monday through Saturday (except 7:30 a.m. to 2:30 p.m. on Wednesdays), which are the current hours of operation. No nighttime operation would occur. As shown in **Table 3.13-6** and **Table 3.13-7**, Project traffic would not result in a significant change to vehicle noise levels compared to noise levels without the Project. Additionally, changes to the Harkins Slough Road alignment would not move the roadway closer to area noise-sensitive land uses. As such, changes to traffic patterns as a result of the Harkins Slough Road alignment would not result in a significant increase in ambient noise levels. Operation of new equipment is addressed below.

The Noise Element establishes standards for operation in County General Plan Table 9-2 and Table 9-3. Table 9-2 establishes maximum ambient community noise levels that are compatible with various land use types. Table 9-3 establishes hourly average and maximum noise level standards for stationary noise sources at new commercial and industrial development. The Project is a modification of existing municipal infrastructure; it does not propose new commercial or industrial development. Additionally, as shown in **Table 3.13-3**, ambient vehicle noise levels in the area range from 58 dBA CNEL to 62 dBA CNEL. Based on modeled traffic noise levels, existing equipment operation, and the Project's location in the overflight area for Watsonville Municipal Airport, existing noise levels in the Project area exceed the hourly noise level limit for new commercial and industrial development of 50 dBA. As such, due to land use type and existing ambient noise level conditions, the Maximum Allowable Noise Exposure standards are not applicable for determining the potential operational impacts of the Project. The noise compatibility standards set forth in Table 9-2 are the most appropriate for the Project. Based on the ambient noise level standards of 60 dBA Ldn for residential uses and 65 dBA Ldn for commercial uses, the Project would result in a significant impact if it would cause daytime noise levels in excess of 60 dBA at residential land uses and 65 dBA at non-residential uses. Based on Policies 9.1.1, 9.1.2, and 9.1.3 listed in Section 3.13.2, Regulatory Setting, the standards are applied at the nearest occupied building, or outdoor usable space for residential uses, rather than property line to reflect where noise exposure would occur.

Transfer station operation would result in noise from trucks, such as backup beeping and tailgate slamming, operation of equipment used on the tipping floor, and a new HVAC system on the transfer station office. It is assumed that some additional small off-road equipment, such as forklifts or loaders, may also be required for transfer station operation. The existing building on the Transfer Station B site currently operates an HVAC system; therefore, an HVAC system would not be a new source of noise at this facility. Pumping would be required for wastewater collection and hauling. Operation of a pump for wastewater removal would occur intermittently several times per month, consistent with existing landfill wastewater removal operations. Because pump operations would be short-duration, intermittent, and similar to existing conditions, wastewater removal would not result in a significant increase in noise exposure and is not further addressed below. Transfer Station B would include a new maintenance shop; however, the facility would replace the existing facility. Existing maintenance activities at the Transfer Station B site currently require the use of equipment and machinery similar to that required by a typical commercial automotive repair business. Continued use of maintenance equipment would be similar to existing conditions at this location. The evaluation of impacts below focuses on new noise sources associated with transfer stations, which consist of transfer operations and additional off-road equipment and an HVAC system at Transfer Station A (not Transfer Station B because there are similar existing noise sources at that site).

A similar proposed transfer facility in King County, Washington, determined that average interior noise levels for transfer station operations is approximately 84 dBA, including truck dumping, front-end loader operations, backup alarms, and other unloading activities (King County 2024). The interior noise level estimate does not include attenuation from tunnels or buildings. Both transfer stations would include full-depth tunnels for transfer trailer loading. The tunnels and proposed buildings would provide some noise attenuation for truck and equipment noise, consistent with U.S. Environmental Protection Agency recommendations to reduce community noise exposure (USEPA 2001).

To determine the potential screening distance for transfer station impacts, it is conservatively assumed that transfer station operation would generate noise levels of 84 dBA at approximately 50 feet. Specifications for the proposed HVAC system at Transfer Station A are not yet available; however, typical commercial HVAC systems can reach up to 78 dBA at 3 feet, or 54 dBA at 50 feet. Therefore, Transfer Station A operation would have the potential to result in a combined worst-case daytime noise level of approximately 84 dBA 50 feet.

Thus, both transfer stations would have the potential to exceed the daytime noise threshold of 60 dBA for residential use up to 800 feet from transfer station operation, and the non-residential standard of 65 dBA up to 450 feet from operation. Energy saving features would limit HVAC system operation during nighttime hours. Units may occasionally cycle on during nighttime hours. Based on the ambient noise compatibility standard of 60 dBA CNEL, which is more conservative than Noise Ordinance Section 13.15.060, a nighttime screening level of 50 dBA would apply to nighttime HVAC noise. HVAC operation would have the potential to exceed the nighttime hourly noise level limit of 50 dBA up to 75 feet from operation.

Transfer Station A would be located approximately 2,000 feet from the property line of sensitive receptors including the Buena Vista Migrant Center (farmworker housing and childcare facility), Tierra Alta Affordable Housing, and Rountree Medium (Jail) Facility. As such, operational impacts from Transfer Station A would not exceed the County's General Plan Noise Element standard at the nearest receptors.

Transfer Station B would be located approximately 900 feet from the landfill's southeast property line with the Buena Vista Migrant Center (farmworker housing and childcare facility) and Tierra Alta

Affordable Housing. As such, the Buena Vista Migrant Center (farmworker housing and childcare facility) and Tierra Alta Affordable Housing would not be exposed to excessive noise from Transfer Station B operation. Transfer Station B would exceed 65 dBA at the nearest property line with Rountree Medium (Jail) Facility. The nearest occupied buildings at the Rountree Medium (Jail) Facility are located approximately 130 feet from proposed Transfer Station B, and noise-sensitive lodging facilities are located approximately 280 feet from proposed Transfer Station B. Therefore, residential and non-residential uses would be located within the screening distance for potential daytime impacts from typical transfer station operation.

The screening distance for combined operation at Transfer Station B does not consider noise attenuation from the proposed tunnel or building that would reduce noise from trucks and transfer station equipment. As shown on **Figure 2-3**, Project Traffic Flow, trucks would enter and exit Transfer Station B on the eastern and western sides of the proposed building. The Rountree Medium (Jail) Facility would be located south of the proposed building; therefore, building openings would be oriented away from receptors. Additionally, the transfer station is designed so that trucks would drive into a below-grade tunnel that would provide an additional noise barrier to surrounding uses. Conservatively assuming the proposed building and tunnel would provide 5 dBA of noise attenuation, which is typical for a barrier that breaks the line of sight to the noise source (internal transfer station operation), transfer station noise would be reduced to 79 dBA at 50 feet from the building, or 60 dBA at 450 feet and 65 dBA at 250 feet. Residential and non-residential uses at Rountree Medium (Jail) Facility would be within these screening distances. As such, daily operation at Transfer Station B would have the potential to exceed the County General Plan Noise Element daytime noise compatibility standard. This impact would be reduced by requiring noise shielding features.

Therefore, this impact of Transfer Station B would be **Less than Significant with Mitigation** (Mitigation Measure N-2a). Implementation of Mitigation Measure N-2a, described below, would reduce noise at nearby sensitive receptors to below the County General Plan Noise Element standards.

Organics Diversion Facility (ODF Option 1 and ODF Option 2)

The potential for the proposed ODF to generate noise during construction and operation is addressed below.

Construction

The operation of heavy equipment during construction of either ODF option would result in temporary increases in noise within the vicinity of active construction. Similar to transfer station construction, expected construction equipment includes excavators, dump trucks, loaders, bulldozers, concrete trucks, concrete pump trucks, and cranes. No pile driving would be required. **Table 3.13-8** provides average noise levels associated with typical equipment.

As described in Section 2.6, construction of the ODF is estimated to begin in summer 2027 and would continue until approximately spring 2029. Construction activities for ODF Option 1 would include compaction of the area to prevent settlement and installation of a closure cap system and protective cover. Construction of ODF Option 2 would require the installation of erosion and sediment controls, concrete pads, and composting equipment. Both options would include the installation of stormwater infrastructure and a new canopy and paving.

The screening distance of 200 feet determined for transfer station construction is conservative for ODF construction because the noisiest construction equipment, including the jackhammer and concrete saw, is not anticipated to be required. This type of equipment may be required for demolition and, thus, would not be required for either ODF option.

ODF Option 1 construction area would be located in the approximate middle of the northern half of the landfill, more than 200 feet from the landfill's property line. The access road to the facility would extend to the active landfill limits but would not be located within 200 feet of any existing sensitive receptor. ODF Option 2 construction area would be located within the Old Landfill boundary in the southwestern portion of the Project area and would be located more than 200 feet west of the nearest sensitive receptor (Rountree Medium [Jail] Facility). Additionally, construction would occur during daytime hours. Therefore, the construction-related noise impact of both ODF Option 1 and 2 would be **Less than Significant**.

Operation

Operation of ODF Option 1 would be similar to the existing conditions, including preprocessing equipment, truck operations, and use of off-road equipment. The facility would continue to be located in the northern portion of the landfill, away from the sensitive receptors south of the landfill. Minor changes to the layout would not result in substantial changes in equipment operations or noise levels. **Table 3.13-7** shows that the Project, including cumulative traffic noise, would not exceed the noise compatibility standard of 60 dBA CNEL more than 65 feet from any roadway segment, including at the landfill entrance. As such, noise levels from the new access road would not exceed 60 dBA CNEL outside the landfill boundary.

Operation of ODF Option 2 would relocate diversion operations to the Old Landfill site in the southwest portion of the Project area. Noise sources would include equipment for preprocessing such as grinding, operation of four fans for the mass-bed aeration system, truck loading and unloading, and pumps for collected wastewater. Other equipment needed for compost operation may include wheeled front loaders, skid steer loaders, material handler excavators, water truck, depackagers, and trommel screens. No nighttime operation would occur; therefore, impacts would be limited to daytime.

Assuming simultaneous operation of four typical industrial fans (85 dBA at 5 feet [AirPro 2020]), similar truck noise levels to those anticipated for the transfer stations (84 dBA at 50 feet), operation of the preprocessing grinder (96 dBA at 50 feet [City of Los Angeles 2005)], and the noisiest anticipated off-road equipment (loaders, 80 dBA at 50 feet), operation of ODF Option 2 would have the potential to result in combined noise levels of approximately 96 dBA at approximately 50 feet. This estimate is conservative, does not assume the installation of any noise attenuation features, and assumes that equipment would be located in the same place. In reality, equipment would be spread out across the facility. Therefore, the worst-case operation of ODF Option 2 would have the potential to exceed the noise compatibility threshold for residential use of 60 dBA up to approximately 3,200 feet, and 65 dBA for non-residential use up to 1,800 feet.

The closest occupied buildings to ODF Option 2 location are the residential and non-residential uses at the Rountree Medium (Jail) Facility, located 800 feet to the east. At this distance, worst-case combined noise levels would potentially exceed the noise compatibility standards for residential and non-residential. This impact would be reduced by requiring noise shielding features for equipment operation.

Therefore, this impact would be **Less than Significant with Mitigation** (Mitigation Measure N-2b). Implementation of Mitigation Measure N-2b, described below, would reduce noise from ODF Option 2 operation at nearby sensitive receptors to below County General Plan Noise Element standards.

Landfill Closure and Revegetation

The potential for the proposed landfill closure and revegetation to generate noise during construction and operation is addressed below.

Construction

The operation of heavy equipment during earthwork and truck activity required for the landfill closure and revegetation would result in temporary increases in noise within the vicinity of active construction. Similar to transfer station construction, expected construction equipment includes excavators, dump trucks, loaders, bulldozers, and trucks. No pile driving would be required. **Table 3.13-8** provides average noise levels associated with typical equipment.

As described in Section 2.6, landfill closure and revegetation may begin as early as 2028 and may continue until approximately 2034. The schedule would depend on the chosen ODF option, due to the potential location within the closure area. If ODF Option 1 is selected, construction could begin in 2028, but a later date is anticipated if ODF Option 2 is selected. Construction activities would include grading, relocation of waste if needed, installation of a cap system, placement of cover soil and topsoil, and seeding the entire area. The screening distance of 200 feet determined for transfer station construction is conservative for landfill closure and revegetation because the noisiest construction equipment, including the jackhammer and concrete saw, are not anticipated to be required. This equipment may be required for demolition, which is not required for landfill closure and revegetation. However, the Rountree Medium (Jail) Facility, Buena Vista Migrant Center (farmworker housing and childcare facility), and Tierra Alta Affordable Housing are located more than 200 feet south of the landfill closure and revegetation area limits. No other sensitive receptors are within 200 feet of the construction area. Additionally, construction would occur during daytime hours. Therefore, this impact would be **Less than Significant**. No mitigation is required.

Operation

Following construction, the landfill closure and revegetation would be mostly passive, consisting of a landfill cap. Ongoing management and monitoring of waste and landfill gas would occur. These systems are not anticipated to require heavy equipment operation that would be audible above existing conditions. Additionally, the existing loud noises currently used to disperse birds from the active fill area (shotgun noise, loud shrill whirling firework noise, and propane cannon) would cease. Therefore, operational impacts would be **Less than Significant**. No mitigation is required.

Optional Improvements: a) Internal Access Road Improvements, b) Scale House Upgrades, c) Recycling Center Upgrades, d) Equipment Parking and Storage Area

The potential for the optional elements to generate noise during construction and operation is addressed below.

Construction

The operation of heavy equipment during construction of the optional elements would result in temporary increases in noise within the vicinity of active construction. Expected construction equipment includes excavators, dump trucks, loaders, bulldozers, concrete trucks, concrete pump trucks, cranes, and smooth or sheepsfoot compactors. No pile driving would be required. **Table**

3.13-8 provides average noise levels associated with typical equipment that may be required for construction of the optional elements.

As described in Section 2.6, the specific timeline for the optional Project elements (internal access road improvements, scale house upgrades, recycling center modifications, and equipment parking and storage area) is unknown but could occur between 2027 and 2030. Specific details for internal access road improvements and recycling center are currently unknown but are anticipated to be similar to construction required for the Harkins Slough Road realignment and the ODF options described previously. Activities could include installation of erosion and sediment controls, clearing and grubbing, utility location and relocation, grading, placement of concrete retaining walls and foundations, installation of metal structures, and placement of crushed aggregate base and paved surface. Scale house upgrades could consist of the installation of additional scales with radio frequency identification located on the existing pavement. Activities anticipated for the parking and storage area include the installation of erosion and sediment controls, installation of fueling and charging facilities, and paving.

The screening distance of 200 feet determined for transfer station construction is conservative for the optional elements because the noisiest construction equipment, including the jackhammer and concrete saw, is not anticipated to be required. This equipment may be required for demolition, which is not required for the optional elements. The scale house and recycling center upgrades would be located on the western landfill limit and would not be located within 200 feet of any sensitive receptors.

The internal access road improvements would extend along the northwestern, northern, eastern, and southeastern landfill boundaries. The improvements would be closest to sensitive receptors in the southeast area of the landfill. The equipment and storage area would also be constructed in the southeast area of the landfill. Access road improvements and equipment and storage area construction would have the potential to exceed 75 dBA at the landfill property line with the Rountree Medium (Jail) Facility, Buena Vista Migrant Center (farmworker housing and childcare facility), and Tierra Alta Affordable Housing. However, sensitive buildings and outdoor use areas would be located outside the 200 feet screening distance. The closest receptor to the internal road improvements would be the Rountree Medium (Jail) Facility. The nearest occupied building at the facility is located approximately 200 from the improvement area but is not an area where people sleep and, therefore, is not a sensitive receptor. The noise-sensitive lodging building and outdoor activity areas are located more than 250 feet from the construction area.

The equipment storage and parking construction area would be located approximately 200 feet from the nearest residence or yard at the Buena Vista Migrant Center (farmworker housing and childcare facility) or Tierra Alta Affordable Housing. As discussed above, this screening distance is likely conservative for construction of this optional component. However, due to the sensitive nature of the existing receptors, it is assumed that construction of the equipment storage and parking area would have the potential to exceed 75 dBA at these receptors. Implementing noise-reducing measures during construction (Mitigation Measure N-1) would reduce noise at nearby sensitive receptors to below the County Noise Ordinance and General Plan Noise Element standards. Therefore, this impact related to construction of the optional elements would be **Less than Significant with Mitigation** (Mitigation Measure N-1).

Operation

Following construction, the internal access road improvements would not result in an increase in ambient noise levels because the improvements would not increase vehicle traffic volumes. Traffic noise may decrease due to the smoother surface after resurfacing. Similarly, the installation of additional scales and upgrades to the scale house would not increase truck volumes, and operation would be similar to existing conditions.

The new or expanded recycling center could result in new noise sources from additional equipment and truck operation, similar to the proposed transfer stations. However, the existing recycling center is located on the western boundary of the landfill or could be relocated to the existing ODF in the northern area of the site. Both locations are more than 1,000 feet from the sensitive receptors south of the landfill. Therefore, sensitive receptors would not be exposed to nuisance noise from changes to recycling center operation.

The new parking and storage facility could be just over 200 feet from the closest residence and yard at the Buena Vista Migrant Center (farmworker housing and childcare facility) and Tierra Alta Affordable Housing. This facility would result in intermittent noise similar to a parking lot, such as backup alerts and door slams. These sources typically range from approximately 51 to 66 dBA at a distance of 10 feet (Gordon Bricken & Associates 2012). As such, noise from the parking and storage area would not result in significant nuisance noise. Impacts related to the operation of the optional elements would be **Less than Significant**.

In summary, the construction and operation noise impacts from the Project would be **Less than Significant with Mitigation**. Specifically, construction noise at the Optional Equipment Parking and Storage Area (if selected) could result in noise impacts to sensitive receptors (residences on Tierra Alta Drive), but would be reduced to a less than significant level by implementing Mitigation Measure N-1 (implement noise-reducing measures for construction equipment used within 200 feet of occupied residence). Operation of equipment at Transfer Station B and ODF Option 2 (if selected) could result in noise impacts to sensitive receptors (Rountree Medium [Jail] Facility) but would be reduced to a less than significant level by implementing Mitigation Measure N-2a (noise-reducing design features at Transfer Station B) and Mitigation Measure N-2b (noise-reducing design features for ODF Option 2 equipment operation), respectively.

Mitigation Measure N-1: Implement Noise-Reducing Measures for Construction Equipment Used within 200 Feet of Occupied Residences

The County of Santa Cruz shall include the following in the construction specifications. The construction contractor shall employ the following noise-reducing measures where use of construction equipment occurs within 200 feet of an occupied residence:

- Use acoustical shelters around any air compressors, generators, and any other stationary construction equipment not fitted with baffled enclosures
- Use baffling around stationary construction equipment to reduce noise and vibration levels
- Properly muffle and maintain all construction equipment powered by internal combustion engines
- Prohibit unnecessary idling of internal combustion engines
- Whenever feasible, use electrical power to run air compressors and similar power tools

Mitigation Measure N-2a: Implement Noise-Reducing Design Features at Transfer Station B

Before the start of any operations of Transfer Station B, the County of Santa Cruz shall demonstrate that noise shielding features have been incorporated into Transfer Station B design to reduce noise levels to below an hourly average of 65 dBA at the nearest occupied building at Rountree Medium (Jail) Facility, and 60 dBA at the lodging facility. Measures to reduce noise exposure may include, but are not limited to, installation of industrial sound-proofing panels or curtains on all building walls or individual pieces of equipment to dampen noise.

Mitigation Measure N-2b: Implement Noise-Reducing Design Features for Organics Diversion Facility Option 2 Equipment Operation

Before the start of any operations of the ODF Option 2 (located at the Old Landfill), the County of Santa Cruz shall demonstrate that the proposed stationary equipment, including industrial fans and the preprocessing grinder, will include noise shielding or that a noise barrier will be installed on the site such that noise exposure will not exceed an hourly average of 65 dBA at the nearest occupied building at Rountree Medium (Jail) Facility, and 60 dBA at the lodging facility.

Threshold B:	Generation of excessive groundborne vibration or groundborne noise levels.

Impact N-3 PROJECT CONSTRUCTION WOULD NOT EXPOSE PERSONS TO OR GENERATE EXCESSIVE GROUNDBORNE VIBRATION OR GROUNDBORNE NOISE LEVELS. (LESS THAN SIGNIFICANT IMPACT)

Vibration during construction and operation are addressed below.

Construction

As described previously, expected construction equipment for all Project elements includes typical heavy construction equipment, including excavators, dump trucks, loaders, bulldozers, concrete trucks, concrete pump trucks, cranes, and smooth or sheepsfoot compactors. No pile driving would be required for any Project component.

The PPV metric, described in Section 3.13.1, Existing Conditions, is most appropriate for evaluating building damage potential associated with vibration. Typical vibration levels for available construction equipment required for the Project are provided in **Table 3.13-9**. Caltrans estimates that vibration levels less than 0.12 PPV do not result in damage to even the most fragile historic buildings (Caltrans 2013). As shown in **Table 3.13-9**, the highest level of construction-related vibration during operation of a vibratory roller would be below 0.12 PPV beyond 35 feet from the source. Other equipment would be below 0.12 PPV within 25 feet of equipment operation. The closest existing receptor to any construction area would be the Rountree Medium (Jail) Facility, located approximately 130 feet from proposed Transfer Station B. As such, vibration from construction would not be expected to result in building damage at nearby structures.

The VdB, described in Section 3.13.1, are most appropriate to describe vibration relative to human response and are used here to describe human response to groundborne vibration and its corresponding groundborne noise level (FTA 2018). As shown in **Table 3.13-9**, vibration levels would naturally reduce to below 85 VdB more than 50 feet from the construction area, which is the level that may be annoying to daytime noise-sensitive land uses. Construction would be limited to daytime hours. As described above, no existing sensitive receptors would be located within 50 feet

of any Project construction area. Therefore, the potential vibration impact during construction would be **Less than Significant**. No mitigation is required.

Table 3.13-9. Vibration Source Levels for Construction Equipment

Construction Equipment	Approximate PPV/VdB at 25 Feet[a]	Approximate PPV/VdB at 35 Feet[a]	Approximate PPV/VdB at 50 Feet[a]
Large Bulldozer	0.089/87	0.050/83	0.031/78
Loaded Truck	0.076/86	0.050/82	0.027/77
Small Bulldozer	0.003/58	0.002/54	0.001/45
Jackhammer	0.035/79	0.020/75	0.010/70
Vibratory Roller	0.210/94	0.120/90	0.074/85

Source: FTA 2018.
Notes: PPV = peak particle velocity; VdB = vibration decibel
[a] Based on the formula VdB = VdB (25 feet)−30log(d/25) provided by the FHWA (2006).

Operation

Project operation would result in truck trips and the operation of equipment that may generate some localized groundborne vibration. However, equipment and truck operations would be similar to existing operations on the landfill. The landfill is currently not a significant source of groundborne vibration. Future operation would not include any new source of vibration that would be expected to exceed current levels. Therefore, the potential vibration impact from operation would be **Less than Significant**. No mitigation is required.

Threshold C:	For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, exposure of people residing or working in the project area to excessive noise.

Impact N-4 PROJECT CONSTRUCTION AND OPERATION WOULD NOT EXPOSE PEOPLE RESIDING OR WORKING IN THE PROJECT AREA TO EXCESSIVE NOISE FROM AIRCRAFT. (LESS THAN SIGNIFICANT IMPACT)

The Watsonville Municipal Airport is located approximately 1 mile northeast of the Buena Vista Landfill. A portion of the Project area is located within the 55 dBA CNEL noise contour for the airport, and the Project area is subject to overflights. However, the Project area is not located within 60 dBA CNEL contour, which is the normally compatible standard for sensitive receptors. Therefore, the Project would not result in any new receptors within an area with the potential to be exposed to airport noise in excess of the normally compatible standard for sensitive receptors. Additionally, the Project is not a sensitive receptor and does not include any components that would have the potential to change air traffic patterns or introduce new sources of aircraft noise. Therefore, the Project would not expose people to excessive noise related to the operation of aircraft. The impact would be **Less than Significant.** No mitigation is required.

3.14 Population and Housing

This section describes existing population and housing, outlines the regulatory framework applicable to population and housing, and evaluates impacts related to population and housing as a result of the Buena Vista Landfill Redevelopment Project (Project) construction and operation. **Table 3.14-1** presents a summary of potential impacts related to population and housing.

Table 3.14-1. Summary of Project Impacts Related to Population and Housing

Impact	Significance before Mitigation	Mitigation	Significance after Mitigation
PH-1. The Project would not induce substantial unplanned population growth in an area, either directly or indirectly.	No Impact	None Required	No Impact
PH-2. The Project would not displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere.	No Impact	None Required	No Impact

Note: The impact, significance determination, and mitigation apply to the Project as a whole, considering all project components, unless otherwise noted.

3.14.1 Existing Conditions

Population

Santa Cruz County (County) had an estimated total population of 263,338 in 2023, with approximately 135,179 living in the incorporated cities and 128,159 living in the unincorporated areas of the County, which includes areas near the Buena Vista Landfill (AMBAG 2026). The Association of Monterey Bay Area Governments (AMBAG) is responsible for projecting regional growth for Santa Cruz, San Benito, and Monterey counties. AMBAG projections indicate the County's total population will be 281,399 in 2050, with approximately 152,837 in the incorporated cities and 128,562 in the unincorporated areas (AMBAG 2026). This indicates 7 percent growth, most of which will be in the incorporated cities.

The Project area is within the unincorporated area. There is no population residing within the Project area. However, as described below, there are people living in a residential complex and jail facility south of the Buena Vista Landfill. The surrounding rural area is sparsely populated.

Housing

In 2023, Santa Cruz County had 107,165 housing units with approximately 57,550 housing units in the unincorporated areas (AMBAG 2026). The AMBAG projections show that the total housing units in the County will grow to 120,092 units, with 61,380 units in the unincorporated areas (AMBAG 2026). This indicates 13 percent growth in total.

The Project area does not include any housing. However, the Buena Vista Migrant Center (104 units) and Tierra Alta Affordable Housing Complex (36 units) are located southwest of the Buena Vista Landfill on Tierra Alta Drive (Housing Authority of the County of Santa Cruz 2025). Additionally, the Rountree Medium (Jail) Facility, which has approximately 150 beds, is located south of the landfill on Rountree Lane and is temporarily housing people. The remainder of the surrounding area is rural with very low-density rural residences. Refer to **Figure 1-3**.

3.14.2 Regulatory Setting

This section describes the federal, state, regional, and local plans, policies, and laws relevant to population and housing for the Project.

Federal

No federal regulations related to population and housing are applicable to the Project.

State

California Housing Element Law

California planning and zoning law requires each city and county to adopt a General Plan for future growth (California Government Code, Section 65300). This plan must include a Housing Element that identifies housing needs for economic segments and provides opportunities for housing development to meet that need. At the state level, the Housing and Community Development Department estimates the relative share of California's projected population growth that would occur in each county based on California Department of Finance population projections and historical growth trends. These figures are compiled by the Housing and Community Development Department in a Regional Housing Needs Assessment for each region of California. Where there is a regional council of governments, the Housing and Community Development Department provides the Regional Housing Needs Assessment to the council. The council then assigns a share of the regional housing need to each of its cities and counties. The process of assigning shares gives cities and counties the opportunity to comment on the proposed allocations. The Housing and Community Development Department oversees the process to ensure that the council of governments distributes its share of the state's projected housing need.

Regional

Association of Monterey Bay Area Governments 2045 Metropolitan Transportation Plan and Sustainable Communities Strategy

AMBAG is the Metropolitan Planning Organization and Council of Governments for Santa Cruz, Monterey, and San Benito counties. AMBAG provides population growth estimates for the tri-county region and assigns Regional Housing Needs Allocations for each city and county in the region. In June 2026, the AMBAG Board of Directors adopted the 2050 Regional Growth Forecast, and this forecast employment, housing, and population for the AMBAG region through the year 2050.

Under state law and California Housing and Community Development Department oversight, AMBAG prepares the Regional Housing Needs Allocation plan for Monterey and Santa Cruz counties. The Regional Housing Needs Allocation establishes the total number of housing units that each city or county must plan for within an eight-year planning period (currently the "6th Cycle" and relevant from 2023 to 2031). The amount of housing allocated is determined by the Housing and Community Development Department and distributed among the relevant jurisdictions by AMBAG. AMBAG forecasts that the Counties of Santa Cruz and Monterey within the Monterey Bay Region will add 38,721new households between 2022 and 2045. For the eight-year time frame covered by this Housing Element Update, the Housing and Community Development Department has identified the region's housing need as 33,274 additional units.

AMBAG's 2050 Metropolitan Transportation Plan and Sustainable Communities Strategy includes goals and strategies for accommodating future growth, meeting regional greenhouse gas emissions reduction targets, and increasing the region's resilience and equity in the face of existing and emerging challenges.

Local

Santa Cruz County General Plan/Local Coastal Program

The Santa Cruz County General Plan is required by state law (California Government Code, Section 65300 et seq.) and sets the development patterns for the County. It establishes the Urban Services Line, determines residential densities and types of development, and protects vast areas of the County that are not appropriate for development due to agricultural uses, timber production, recreation, or other environmental constraints.

As described in Section 3.11, Land Use and Planning, the purpose of the County General Plan/Local Coastal Program (LCP) is to guide and regulate land use and development in unincorporated Santa Cruz County, and several guiding principles have been incorporated throughout the elements of the Santa Cruz County General Plan/LCP.

Santa Cruz County Housing Element

The Santa Cruz County 2023 Housing Element is part of the County General Plan. Under state law, the Housing Element is a policy document that focuses on the actions that will be undertaken by the County of Santa Cruz to accommodate current and future housing needs for County residents and provides quality neighborhoods for residents to invest in. The 2023 Housing Element was adopted by the Board of Supervisors in November 2023 and certified by the California Housing and Community Development Department in April 2024. The 2023 Housing Element focuses on the eight-year planning period from 2023 to 2031.

The 2023 Housing Element represents the County's intent to plan for the housing needs of the County while meeting the state housing goals as set forth in Article 10.6 of the California Government Code. The County's 2023 Housing Element accommodates the County's assigned Regional Housing Needs Allocation of 4,634 dwelling units assigned to it by AMBAG for the 2023–2031 eight-year planning period.

The Housing Element is driven by two guiding principles: facilitating the development of new housing; and affirmatively furthering fair housing. The goals and policies in this Housing Element address the County's identified housing needs and are implemented through a series of housing programs. Housing programs describe specific actions the County will take to achieve the goals and policies described herein. Santa Cruz County has unique geologic, geographic, and safety concerns, as well as water and sewer service availability constraints, which make developing new housing extremely costly and physically challenging in many areas of the County.

Santa Cruz County Code

CHAPTER 13.10, ZONING REGULATIONS

The Santa Cruz County Code (SCCC) includes six residential zone districts that provide a range of opportunities to develop single-family and multi-family housing units. The residential districts are intended to provide areas of residential use in locations and at densities consistent with the County

General Plan; preserve areas for primarily residential uses in locations protected from the incompatible effects of non-residential land uses; establish a variety of residential land use categories and dwelling unit densities, which provide a choice of diversified housing opportunities consistent with public health and safety; and to achieve patterns of residential settlement that are compatible with the physical limitations of the land and the natural resources of the County and that do not impair the natural environment. The residential zone districts establish development standards for residential projects.

MEASURE J: CHAPTER 17.01, GROWTH MANAGEMENT, AND CHAPTER 17.04, ANNUAL POPULATION GROWTH

In 1978, Santa Cruz County voters adopted Measure J, which requires the County to establish an annual population growth goal of an amount that represents Santa Cruz County's fair share of statewide population growth. The process is defined in SCCC Chapter 17.01 (Growth Management), Chapter 17.04 (Annual Population Growth Goal for Santa Cruz County), and Chapter 12.02 (Residential Permit Allocation System). Each year, a growth rate is set and then converted into a maximum number of "allocations" of market rate residential building permits that can be issued in the unincorporated area for the coming year (affordable housing and accessory dwelling units are not counted toward the annual building permit allocations). Permit allocations are divided between urban and rural portions of the unincorporated County, with a larger number of allocations in urban areas to encourage infill development. Since the mid-1980s, the number of building permits approved for new housing units has been substantially lower than the available allocations. Unused allocations from the previous year are also carried over to the next year and added to the total number of allocations for the coming year.

As required by the SCCC, an annual Growth Goal Report is prepared for consideration by the Planning Commission and the Board of Supervisors. This report examines population trends; the potential impact of growth on resources, services, and housing; and other factors used in establishing the annual growth goal and other growth management policies. The County of Santa Cruz Community Development and Infrastructure Department determines the recommended annual growth goal based on a number of factors, including analysis of population growth trends, resource constraints, and the status of residential building permit allocations for the current year. Following recommendation by the Planning Commission, the matter is returned to the Board of Supervisors for final action. In December 2024, the Board of Supervisors adopted a 2025 growth rate of 0.75 percent, which translates to 373 market rate residential building permit allocations. Including unused allocations from 2024, projected to total 206, an estimated total of 579 market rate residential building permit allocations would be available in 2025.

CHAPTER 17.10, AFFORDABLE HOUSING REQUIREMENTS

Measure J also includes an affordable housing component, codified in SCCC Chapter 17.10 (Affordable Housing Requirements), which requires that 15 percent of units in all new residential developments built since the measure passed are affordable to low- or moderate-income households and that such supply of housing remains affordable to subsequent purchasers. The Santa Cruz County Affordable Housing Guidelines are the implementation mechanism for Measure J and SCCC Chapter 17.10. The Affordable Housing Guidelines govern the sale or rental of residential properties by providing income and asset limits for participating households, sales prices, eligibility requirements for purchasing or renting affordable units, and development and marketing standards for affordable units. In addition to setting standards for sale and rental of affordable housing units, the Affordable Housing Guidelines establish the Affordable Housing Impact Fee schedules for new

residential and non-residential development to assist with impacts of new development on housing demand, and to assist the County in meeting its affordable housing goals.

3.14.3 Methodology and Significance Thresholds

Methodology

The analysis of population and housing impacts follows the guidance and methodologies recommended in Appendix G of the California Environmental Quality Act (CEQA) Guidelines.

Significance Thresholds

The introduction in Chapter 3, Environmental Impact Analysis, states that the significance thresholds used in this analysis are based on Appendix G of the CEQA Guidelines, which provides a sample Initial Study checklist that includes a number of factual inquiries related to the subjects of population and housing and the other environmental topics.

For the purposes of this Environmental Impact Report (EIR), a significant impact would occur if implementation of the Project would result in any of the following conditions:

A. Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

B. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

3.14.4 Project Impact Analysis

For each impact, the overall conclusion or significance determination is presented at the end of the discussion, as well as in parentheses at the end of the numbered impact statement.

As described in Chapter 2, Project Description, the Project components include:

1. Transfer Stations (Transfer Station A and Transfer Station B)
2. Organics Diversion Facility (ODF Option 1 and ODF Option 2)
3. Landfill Closure and Revegetation
4. Optional Elements: a) Internal Access Road Improvements, b) Scale House Upgrades, c) Recycling Center Upgrades, d) Equipment Parking and Storage Area
5. General Plan/Local Coastal Program Land Use Designation and Zoning Map Amendments

Threshold A:	Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure).

Impact PH-1 THE PROJECT WOULD NOT INDUCE SUBSTANTIAL UNPLANNED POPULATION GROWTH IN AN AREA, EITHER DIRECTLY OR INDIRECTLY. (NO IMPACT)

The Project would not induce substantial unplanned population growth in the area either directly (for example, by proposing new homes and businesses) or indirectly (for example, through

extension of roads or other infrastructure). The Project does not propose new homes, or other developments that would lead to direct population growth.

The Project includes three key components: 1) Developing two new waste transfer stations at the existing landfill site to implement transfer station operations for waste handling and transport; 2) Improving the existing organics diversion process; and 3) Implementing the landfill closure and revegetation plan once site capacity is reached. There are currently 40–45 staff, and it is anticipated there would be similar staffing levels with Project implementation. Therefore, the addition of the transfer station, improvements to the organics diversion process, or the optional construction of the recycling facility would not lead to new additional employees or direct population growth.

In addition, construction activities would involve a temporary increase in employees; however, employment opportunities associated with Project construction are assumed to be filled by the local workforce and would not result in population growth or the need for additional housing as the workforce would return to their existing homes at the end of the workday. Therefore, landfill redevelopment would not directly or indirectly induce substantial population growth in an area.

The Project would not involve extension of roads or other infrastructure that could indirectly lead to population growth. The construction of Transfer Station A requires reconfiguring the location of Harkins Slough Road. From its current location, Harkins Slough Road would be moved north and east toward the edge of property owned by the landfill and adjacent to a commercial agricultural operation (on the north) and Harkins Slough (on the east). Harkins Slough Road provides access to the Buena Vista Migrant Center (farmworker housing and childcare facility) and the Tierra Alta affordable housing complex, southeast of the landfill. The purpose of realigning Harkins Slough Road is to improve safety by keeping local residential traffic separated from internal landfill traffic. The reconfiguration of Harkins Slough Road would not result in indirect population growth. Potential impacts to the local roadways and access are addressed in Section 3.17, Transportation.

Therefore, the Project, including the primary components, realignment of Harkins Slough Road, and optional improvements, as well as the associated General Plan/LCP land use designation and zoning map amendments, would not directly or indirectly induce population. There would be **No Impact**.

Threshold B:	Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere.

Impact PH-2 THE PROJECT WOULD NOT DISPLACE SUBSTANTIAL NUMBERS OF EXISTING PEOPLE OR HOUSING, NECESSITATING THE CONSTRUCTION OF REPLACEMENT HOUSING ELSEWHERE. (NO IMPACT)

The Project is limited to developed areas of the existing Buena Vista Landfill and adjacent vacant lands owned by the County. The existing Buena Vista Landfill does not support any housing, and the Project would not displace any housing.

Therefore, the Project, including the primary components and optional improvements, as well as the associated General Plan/LCP land use designation and zoning map amendments, would not displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere. There would be **No Impacts**.

3.15 Public Safety and Services

This section identifies and evaluates impacts related to public safety and services that may arise through implementation of the Buena Vista Landfill Redevelopment Project (Project) construction and operation. The analysis addresses existing public safety features and services in addition to measures that have been included in the design of the Project to retain and enhance public safety and services following Project implementation. Public services analyzed in this section include fire protection, police protection, parks, and schools. **Table 3.15-1** summarizes identified impacts related to public safety and services.

Table 3.15-1. Summary of Impacts on Public Safety and Services

Impact	Significance before Mitigation	Mitigation	Significance after Mitigation
PUB-1. The Project would not result in the need for new or physically altered fire protection facilities.	Less than Significant	None Required	Less than Significant
PUB-2. The Project would not result in the need for new or physically altered police protection or law enforcement facilities.	Less than Significant	None Required	Less than Significant
PUB-3. The Project would not result in the need for the construction of new or physically altered school or park facilities.	Less than Significant	None Required	Less than Significant

Note: The impact, significance determination, and mitigation apply to the Project as a whole, considering all Project components, unless otherwise noted.

3.15.1 Existing Conditions

A wide range of state and local government entities provide extensive public services to the County of Santa Cruz (County). These services include fire and police protection, public health and safety, education, parks, and general public resources, including healthcare facilities. Emergency services are provided by emergency responders and nearby hospitals, police departments, and fire stations. Educational institutions are accessible and serve the local community, while various public safety services maintain a secure environment. The area supports the overall well-being and safety of the region's residents.

Fire Protection Services

Fire protection services in the County are provided by eight fire protection districts and two city fire departments. Fire protection districts serve the urban, suburban, and nearby rural areas of the unincorporated County and the incorporated Cities of Capitola and Scotts Valley. The Cities of Santa Cruz and Watsonville fire protection needs are served by their own city fire departments. Approximately 94 percent of the County's land area is in the unincorporated county, and 43 percent of this area falls outside the incorporated cities and unincorporated areas served by the eight (8) fire protection districts.

Fire protection needs in these more rural areas of the unincorporated County outside the eight (8) fire protection districts led to the development of County Service Area (CSA) 48, also known as the Santa Cruz County Fire Department. Unlike the eight (8) fire protection districts that focus on the more urban areas of Santa Cruz County, CSA 48 is specifically responsible for providing fire protection to the more remote unincorporated rural areas of the unincorporated County and is governed by the County Board of Supervisors.

The County currently contracts with the California Department of Forestry and Fire Protection (CAL FIRE) for the administration of CSA 48, including operational oversight and supervision of all career and volunteer firefighters. CAL FIRE provides essential services such as fire protection, rescue operations, emergency medical response, and hazardous materials response to protect lives and property and ensure public safety (Santa Cruz County 2024).

The Buena Vista Landfill is served by CSA 48. The nearest CAL FIRE County fire station is Corralitos Fire Station No. 49, located at 120 Eureka Canyon Road, approximately 4.9 miles north of the landfill. Additionally, Watsonville Fire Department Station No. 2, located at 370 Airport Boulevard and operated by the City of Watsonville, is 1.6 miles northeast of the landfill. Central Fire District Station 7, located at 314 Estrella Avenue, is 3.2 miles northwest of the landfill. These facilities could also serve the landfill as part of a mutual aid agreement between the two (2) city fire departments, the eight (8) fire protection districts, and CSA 48.

Police Protection Service

Police protection services in the unincorporated areas of Santa Cruz County, including the Buena Vista Landfill, are provided by the Santa Cruz County Sheriff's Office, which also operates the Rountree Medium (Jail) Facility located adjacent to the landfill. The Sheriff's Office patrols and conducts investigations throughout the unincorporated areas to provide law enforcement and protection for public safety (Santa Cruz County 2024). In addition to the Rountree Medium (Jail) Facility, nearby Santa Cruz County Sheriff's Offices include:

- **South County Sheriff's Service Center**, 790 Green Valley Road, Watsonville, approximately 4 miles east of the landfill.
- **Aptos Sheriff's Service Center**, 171 Aptos Village Way, Aptos, approximately 6 miles northwest of the landfill.
- **Cabrillo Sheriff's Office**, 6500 Soquel Drive, Aptos, approximately 7 miles northwest of the landfill.

Parks

There are no public parks within 3 miles of the Buena Vista Landfill. Santa Cruz County Department of Parks, Open Space and Cultural Services (Santa Cruz County Parks) manages a range of facilities, including regional parks that serve the entire County and local parks that cater to unincorporated neighborhoods. Parks are classified into neighborhood, community, rural, and regional categories.

The Ellicott Slough National Wildlife Refuge, Harkins Slough Unit, managed by the U.S. Fish and Wildlife Service (USFWS), is located adjacent to the Buena Vista Landfill property on the east side of Harkins Slough Road (**Figure 2-1**, Project Overview), but it is not open to the public. The refuge provides habitat for several protected wildlife species including the California red-legged frog, and the Harkins Slough Unit provides freshwater habitat for migratory birds. Additionally, a portion of the Watsonville Slough Ecological Preserve managed by the California Department of Fish and Wildlife (CDFW), is located south of the landfill and the Rountree Medium (Jail) Facility, and is open to the public for hiking and wildlife viewing.

Santa Cruz County Parks manages a range of facilities, including regional parks that serve the entire County and local parks that cater to unincorporated neighborhoods. The closest County parks are Seascape County Park, located on Sumner Avenue in Aptos approximately 4 miles northwest of the landfill, and Pinto Lake County Park, located on Green Valley Road in Watsonville approximately 3.5 miles northeast of the landfill.

The City of Watsonville manages several public parks and trails, all east of the landfill. The closest public park is Hazelwood Park on Herman Avenue approximately 1.3 miles to the east, and there are several public trails around Struve Slough approximately 1.7 miles to the east.

Finally, the coast is approximately 2 miles west of the Buena Vista Landfill, and the closest state beaches open to the public are Manresa State Beach approximately 3 miles and Sunset State Beach, both approximately 2 miles from the landfill.

Schools

Santa Cruz County features a diverse educational landscape with 13 public school districts. The Santa Cruz County Office of Education oversees educational services throughout the County (Santa Cruz County 2024). The Buena Vista Landfill is in the area served by the Pajaro Valley Unified School District, which comprises 36 schools (California State Geoportal 2021). The closest schools to the landfill are in Watsonville and include Rolling Hills Middle School, located at 130 Herman Avenue (1.3 miles from the landfill), and Pajaro Valley High School, located at 500 Harkins Slough Road (1 mile from the landfill).

3.15.2 Regulatory Setting

This section describes the federal, state, and local plans, policies, and laws relevant to public safety and services for the Project.

Federal

No federal regulations related to public safety and services are applicable to the Project.

State

California Master Mutual Aid Agreement

The California Master Mutual Aid Agreement is a framework agreement between the State of California and local governments for aid and assistance by the interchange of services, facilities, and equipment, including but not limited to fire, police, medical and health, communication, and transportation services and facilities for emergency rescue, relief, evacuation, rehabilitation, and reconstruction services. The Project area is covered by a mutual aid agreement between the state and Santa Cruz County to provide fire and emergency response services and the Bureau of Land Management, CDFW, California Highway Patrol, California State Parks Department, and County Sheriff's Office to provide police services throughout the County.

Local

Santa Cruz County General Plan/Local Coastal Program

The County General Plan/Local Coastal Program provides a framework for development and growth in the County. The Parks, Recreation, and Public Facilities Element includes objectives and policies for the adequate provision of public services to support existing and future populations. Key parks and public facilities policies and objectives relevant to the Project include objectives to provide adequate public services including fire, emergency response, police and schools, and safe recreational areas and passive natural open spaces for the residents of the County. Examples of these policies that pertain to adequate public services including fire, emergency response, police

and schools, and safe recreational areas and passive natural open spaces are located in Chapter 7, Parks, Recreation, and Public Facilities, of the County General Plan. Relevant policies are listed below (Santa Cruz County 2024):

- **Policy PPF-2.4.3, Safe and Clean Parks.** Ensure safety and cleanliness of parks facilities.
- **Policy PPF-3.2.3 Locations of New Schools.** Work with school districts and the County Office of Education to plan for additional new school sites to accommodate future population needs.
- **Policy PPF-3.2.5 Community Use of School Facilities.** Encourage broad community recreational and cultural use of school facilities by taking full advantage of the role and services of the community schools, the University of California at Santa Cruz, and Cabrillo College as training, recreational, and cultural centers.
- **Policy PPF 3.4.1, Reviewing New Development for Fire Protection**. Require review of all new developments, including building permits on existing parcels of record, by the County Fire Marshal or local fire agency, and require adequate access, water supply and location with respect to fire stations and Critical Fire Hazard Areas in order to ensure adequate fire protection.
- **Policy PPF 3.4.2, Development to be Consistent with Fire Hazards Policies.** Allow development approvals only if adequate water supply, access, and response time for fire protection can be made available in accordance with the Fire Hazards policies found in the Public Safety Element and appropriate design and mitigation strategies are provided.
- **Policy PPF-3.4.6 Maintaining Adequate Levels of Policing Services.** Provide adequate levels of policing service to protect County residents and businesses.

Santa Cruz County Code

Santa Cruz County Code, Chapter 15.03, establishes parks and recreation development impact fees to expand the County system of parks and recreation facilities through an assessment on new development projects authorized through the approval of building permits for commercial and residential development in the unincorporated portions of the County. Specifically, Chapter 15.03 established an impact fee schedule under the state's Mitigation Fee Act to ensure that all new private development pays its fair share cost to enable the County to continue to provide its current level of park service. The County Code, Chapter 15.02, similarly requires financing for school facilities with development fees and dedications related to public and private residential developments that may require the expansion of existing schools or the construction of new school facilities, consistent with state law.

3.15.3 Methodology and Significance Thresholds

Methodology

The assessment of impacts to public safety and services is based on a review of fire and police protection services, parks, and schools and consideration of potential changes in the level of service that may be required as a result of the Project.

Significance Thresholds

The California Environmental Quality Act (CEQA) does not treat impacts on service ratios or response times to be adverse effects on "the environment" (City of Hayward v. Board of Trustees of the California State University [2015] 242 Cal.App.4th 833, 843). Rather, what matters under CEQA is whether, in order to maintain adequate service ratios or response times, a city, county, or other

service provider would have to build new or expanded physical facilities, which themselves could result in environmental effects (Id. at pp. 843–844; see also Goleta Union School Dist. v. Regents of University of California [1995] 37 Cal.App.4th 1025, 1032–1033 [CEQA is not concerned with school overcrowding, which is a socioeconomic effect but is concerned with the impacts of school construction needed to alleviate overcrowding.]). Thus, under CEQA, the environmental analysis relating to the provision of the above-mentioned services should be limited to possible construction-related impacts, if any, associated with the services.

The introduction in Chapter 3, Environmental Impact Analysis, states that the significance thresholds used in this analysis are based on Appendix G of the CEQA Guidelines, which provides a sample Initial Study checklist that includes a number of factual inquiries related to the subject of public safety and services and the other environmental topics. Thus, the thresholds presented below correspond with the questions in the Appendix G Initial Study checklist.

For purposes of this Environmental Impact Report, a significant impact would occur if implementation of the Project would result in any of the following conditions:

A. Substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:
    - Fire protection
    - Police protection
    - Schools
    - Parks

3.15.4 Project Impact Analysis

For each impact, the overall conclusion or significance determination is presented at the end of the discussion, as well as in parentheses at the end of the numbered impact statement.

As described in Chapter 2, Project Description, the Project components include:

1. Transfer Stations (Transfer Station A and Transfer Station B)
2. Organics Diversion Facility (ODF Option 1 and ODF Option 2)
3. Landfill Closure and Revegetation
4. Optional Elements: a) Internal Access Road Improvements, b) Scale House Upgrades, c) Recycling Center Upgrades, d) Equipment Parking and Storage Area
5. General Plan/Local Coastal Program Land Use Designation and Zoning Map Amendments

Threshold A:	Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: Fire protection Police protection Schools Parks

Impact PUB-1 THE PROJECT WOULD NOT RESULT IN THE NEED FOR NEW OR PHYSICALLY ALTERED FIRE PROTECTION FACILITIES. (LESS THAN SIGNIFICANT IMPACT)

The Project, including all Project components, would not result in the need for new or physically altered fire protection facilities, the construction of which could cause environmental impacts, to maintain acceptable service ratios or response times. The Project would not induce population growth, increase the number of residents, or substantially increase the number of employees in the surrounding area that could require additional fire protection services.

Construction activities would temporarily increase employees in the Project area, but these positions would likely be filled by the local workforce, would not result in population growth, and are not anticipated to substantially affect the demand for fire protection services.

There are currently 40–45 staff working at the landfill, and it is anticipated there would be similar staffing levels (i.e., no substantial increase, if any, in number of employees) with Project implementation to operate the transfer stations, ODF, and other ongoing activities. Therefore, the Project would not introduce a substantial number of additional employees that could lead to an increased demand for fire protection services.

Further, the proposed facilities would be constructed in accordance with fire safety standards and managed in accordance with California Department of Resources Recycling and Recovery (CalRecycle) permit conditions designed to control fire risk. No new structures or uses pose a higher fire risk than current conditions.

Because the Project would not introduce new residents or a substantial number of new employees to the Project area, and given the controlled environment of the landfill and the current and planned safety measures in place, the Project would not require new or expanded fire protection facilities to maintain existing response times, service ratios, or performance standards. Therefore, expansion of fire service facilities that could cause physical impacts on the environment would not be needed as a result of the Project. The impact would be **Less than Significant**. No mitigation is required.

Impact PUB-2 THE PROJECT WOULD NOT RESULT IN THE NEED FOR NEW OR PHYSICALLY ALTERED POLICE PROTECTION OR LAW ENFORCEMENT FACILITIES. (LESS THAN SIGNIFICANT IMPACT)

The Project, including all Project components, would not result in the need for new or physically altered police protection or law enforcement facilities, the construction of which could cause environmental impacts, to maintain acceptable service ratios or response times. The Project would not induce substantial population growth or increase the number of employees or residents in the area that could require additional law enforcement services.

Construction activities would temporarily increase the number of employees in the Project area, but these positions would likely be filled by the local workforce, would not result in population growth, and are not anticipated to substantially affect the demand for police services.

As stated above, there are currently 40–45 staff working at the landfill, and it is projected that staffing levels would remain similar with Project implementation to operate the transfer stations, ODF, and other ongoing activities. Therefore, the Project would not introduce a substantial number of additional employees that could increase the need for police protection and law enforcement services.

Further, the landfill already has existing security measures, such as fencing, gates, and lighting, and the Project would not change these conditions or increase the need for law enforcement presence. To ensure Transfer A is within the security (perimeter) fencing, the fencing on the northeast side of the landfill would be extended to include the transfer station, and Harkins Slough Road would be realigned to remain outside the security fencing. Transfer Station B and the other project components would be within the existing security fencing.

Because the Project would not introduce new residents or a substantial number of new employees to the Project area, and because the existing security measures would remain in place, there would be no need for expanded police facilities or additional law enforcement resources that could cause physical impacts on the environment. Therefore, the impact would be **Less than Significant**. No mitigation is required.

Impact PUB-3 THE PROJECT WOULD NOT RESULT IN THE NEED FOR NEW OR PHYSICALLY ALTERED SCHOOL OR PARK FACILITIES. (LESS THAN SIGNIFICANT IMPACT)

The Project, including all Project components, would enhance existing public facilities to manage waste, would not result in the need for new or physically altered school or park facilities, and thus would not be subject to school and/or park fees. As described under Impacts PUB-1 and PUB-2, the Project would not induce population growth, increase the number of residents, nor substantially increase the number of employees in the surrounding area. Therefore, the Project would not generate a need for school or park facilities, nor be subject to school and/or park fees. As a result, there would be no environmental impacts from the construction of new or altered schools or park facilities.

Further, the Project would not result in adverse impacts to the adjacent USFWS National Wildlife Refuge to the east nor the CDFW Ecological Preserve to the south because protective measures would be implemented during Project construction and with Project design, such as ensuring there would be no contaminated stormwater runoff entering the sloughs. Refer to Sections 3.4, Biological Resources, for additional information.

Therefore, the impact would be **Less than Significant.** No mitigation is required.

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3.16 Recreation

This section describes existing recreational uses, outlines the regulatory framework applicable to recreation, and evaluates impacts related to recreation as a result of the Buena Vista Landfill Redevelopment Project (Project) construction and operation. **Table 3.16-1** presents a summary of potential impacts related to recreation.

Table 3.16-1. Summary of Project Impacts Related to Recreation

Impact	Significance before Mitigation	Mitigation	Significance after Mitigation
REC-1. The Project would not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.	No Impact	None	No Impact
REC-2. The Project would not include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.	No Impact	None	No Impact

Note: The impact, significance determination, and mitigation apply to the Project as a whole, considering all Project components, unless otherwise noted.

3.16.1 Existing Conditions

The Santa Cruz County Parks, Open Space, and Cultural Services Department (County Parks) manages 43 parks and open space properties totaling nearly 1,600 acres and 29 miles of coastline (Santa Cruz County 2018). The County Parks system serves the County in two ways: regional facilities that serve the entire County's population and local parks (e.g., neighborhood, rural, and community parks) that serve unincorporated neighborhoods that are outside an independent recreation and park district boundary. The County's park system includes 890 acres of County-operated public parks as well as 710 acres of open space (Santa Cruz County 2024a). The County's parks are classified primarily as neighborhood, community, rural, and regional.

The closest County park to the Project area is Pinto Lake County Park located approximately 3.5 miles to the northeast. The park provides a playground, open space areas with trails, soccer fields, baseball/softball fields, picnic areas, fitness equipment, bike pump track, fishing areas, dog parks, disc golf course, and wildlife viewing areas.

In addition, there are several existing park and recreation facilities located outside the County Parks system that are located within 4 miles of the Project area. These include several neighborhood and community parks and trail facilities in the City of Watsonville (City), including but not limited to the following:

- Pacific Golf Center, located approximately 0.5 miles to the northeast, is a golf practice facility that provides synthetic turf hitting stations and chipping, pitching, and putting surfaces. It is located on City-owned airport property that is leased to Pacific Golf Centers.
- Hazelwood Park, located 1.3 miles to the east, is a pocket park that provides a green area.
- Watsonville City Trails, located approximately 1.5 miles to the east, is an extensive trail system with more than seven miles of trails providing public access to the Watsonville Slough System.

- Peace Drive Park, located approximately 1.5 miles to the east, is a pocket park that provides a basketball court, picnic tables, and a children's playground.
- Ramsay Park, located approximately 2.5 miles to the east, is a community park that provides baseball/softball fields, basketball courts, bicycle pump track, children's playground, tennis courts, trails, skate park, soccer fields, and volleyball courts.

Additionally, the California State Park's Sunset State Beach and Manresa State Beach, located approximately 2 miles and 3 miles to the west, respectively, provide beach access and camping along the Pacific Ocean.

3.16.2 Regulatory Setting

This section describes the federal, state, and local plans, policies, and laws relevant to recreation.

Federal

No federal regulations related to recreation are applicable to the Project.

State

Quimby Act (1975)

The Quimby Act gives cities and counties the authority, by ordinance, to require the dedication of land or payment of in-lieu fees, or a combination of both, for park and recreation purposes as a condition of approval of a tract map or parcel map. The Quimby Act allows fees to be collected for up to 5 acres of parkland per 1,000 residents to serve the needs of residents of the subdivision and the greater public residing in the jurisdiction.

Local

Santa Cruz County General Plan/Local Coastal Program

The County General Plan/Local Coastal Program (LCP) provides a framework for development and growth in the County (Santa Cruz County 2024b). The Parks, Recreation, and Public Facilities Element includes objectives and policies for the adequate provision of public services to support existing and future populations. The park development policies and implementation strategies in this element address land uses related to recreation, set standards for parks, and address the provision of adequate park facilities, their funding, sharing with other jurisdictions, and equitable access. Relevant policies are listed below:

- **Policy PPF-1.2.2 (LCP), Intensity of Use.** Recognize an intensity of use as shown in Table 7-1 for existing public and private parks and recreational uses. The building intensities shown reflect the range of low and high intensity recreational uses allowed in the O-R designation, new development or increases in intensity of uses where consistent with infrastructure constraints, scenic, natural and agricultural resource protection.
- **Policy PPF-1.2.5 (LCP), Environmental Considerations for Commercial Recreational Development Proposals.** Regulate commercial recreational development through development permit controls to evaluate each development proposal on the basis of its particular site requirements, environmental impact, and appropriateness of the location for the proposed use. Encourage recreational uses in urban areas.

- **Policy PPF-2.1.1, Local Recreation Opportunities**. Provide a variety of local recreational facilities, which serve all segments of the population with priority given to facilities that can be utilized for youth recreation programs.
- **Policy PPF-2.1.2 (EJ) (LCP), Access to Recreation Facilities.** Provide physical access to all recreation facilities through provision of public transportation, trail system development, protection of prescriptive rights to beach and coastal access trails, and recreation programs.
- **Policy PPF-2.2.1 (LCP), Neighborhood Park Standard Acreage**. Provide neighborhood parks, at a standard of three net usable acres per 1,000 population, consisting of conveniently located, easily accessible parks serving local residential neighborhoods in the urban portion of the County. A park standard of four to six acres is considered adequate for a neighborhood park. Or, when a neighborhood park is combined with school grounds, two to three acres is sufficient. It should be recognized that park acreage standards are set as long-term goals rather than set objectives to be met.
- **Policy PPF-2.2.5, Community Parks**. Provide community recreation facilities as a standard of 2–3 net usable acres per 1,000 population consisting of 10–25 acres of land, including parks, cultural centers, and community complexes, in central locations in the urban areas, which will serve as focuses for community social, organizational, cultural and/or recreational activities. Recognize that park acreage standards are set as long-term goals rather than set objectives.
- **Policy PPF-2.2.10, Rural Parks**. Provide recreational facilities at a standard of 5–6 net usable acres per 1,000 persons consisting of varying sizes depending on the recreational opportunities and resources available: includes parks, cultural centers, and community complexes, in the unincorporated rural areas of the County. These facilities serve as the focus for community, social, organization, cultural, and/or recreational activities for extended rural areas.
- **Policy PPF-2.2.16, Recreation Within Converted Quarries and Landfills**. Develop abandoned quarries and closed sanitary landfill sites for recreational uses where appropriate.

Santa Cruz County Code

CHAPTER 15.01, PARK LAND DEDICATION OR IN-LIEU FEES

Santa Cruz County Code, Chapter 15.01, implements the park and recreation policies of the General Plan/LCP by providing for the orderly development of local park and recreation facilities to serve the residential communities of the County. The chapter sets forth requirements to ensure adequate parklands to serve land subdivisions and residential growth in the County. As stated therein, prior to condition of approval of a tentative subdivision map, "the subdivider is required to dedicate land, pay a fee in lieu thereof, or both for community, neighborhood, and rural park or recreational purposes." The chapter describes standards for functional parklands, a formula to determine dedication of land requirements, formula to calculate in-lieu fees, and the procedures for land dedication and parkland review.

CHAPTER 15.03, PARKS AND RECREATION DEVELOPMENT IMPACT FEES

Santa Cruz County Code, Chapter 15.03, requires that development project applicants pay a parks and recreation development impact fee or exaction (including, without limitation, payment of a fee, or arrangement of an approximately equivalent exaction) determined by the Board of Supervisors. The purpose of the parks and recreation development impact fee is to mitigate the demand for additional park and recreation facilities in the County generated by new development and to implement the park and recreation policies of the County General Plan/LCP. Parks and recreation

development impact fees and exactions collected under this chapter will be used to fund the acquisition of land and construction of improvements for neighborhood, community, rural, and regional parks, open spaces, trails, and coastal access facilities to mitigate the marginal demand created by new development.

3.16.3 Methodology and Significance Thresholds

Methodology

The analysis of recreation impacts follows the guidance and methodologies recommended in Appendix G of the California Environmental Quality Act (CEQA) Guidelines.

Significance Thresholds

The introduction in Chapter 3, Environmental Impact Analysis, states that the significance thresholds used in this analysis are based on Appendix G of the CEQA Guidelines, which provides a sample Initial Study checklist that includes a number of factual inquiries related to the subject of recreation and the other environmental topics.

For the purposes of this Environmental Impact Report (EIR), a significant impact would occur if implementation of the Project would:

A. Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.

B. Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.

3.16.4 Project Impact Analysis

For each impact, the overall conclusion or significance determination is presented at the end of the discussion, as well as in parentheses at the end of the numbered impact statement.

As described in Chapter 2, Project Description, the Project components include:

1. Transfer Stations (Transfer Station A and Transfer Station B)
2. Organics Diversion Facility (ODF Option 1 and ODF Option 2)
3. Landfill Closure and Revegetation
4. Optional Elements: a) Internal Access Road Improvements, b) Scale House Upgrades, c) Recycling Center Upgrades, d) Equipment Parking and Storage Area
5. General Plan/Local Coastal Program Land Use Designation and Zoning Map Amendments

Threshold A:	Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.

Impact REC-1 THE PROJECT WOULD NOT INCREASE THE USE OF EXISTING NEIGHBORHOOD AND REGIONAL PARKS OR OTHER RECREATIONAL FACILITIES SUCH THAT SUBSTANTIAL PHYSICAL DETERIORATION OF THE FACILITY WOULD OCCUR OR BE ACCELERATED. (NO IMPACT)

The Project does not include the development of uses, such as residential dwellings or office employment, that would place demands on or result in the use of nearby parks and recreation facilities. Therefore, the Project, including the primary components and optional improvements, as well as the

associated General Plan/LCP land use designation and zoning map amendments, would not increase the use of existing neighborhood and regional parks or recreational facilities such that substantial physical deterioration of the facilities would occur or be accelerated. There would be **No Impact**.

Threshold B:	Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.

Impact REC-2 THE PROJECT WOULD NOT INCLUDE RECREATIONAL FACILITIES OR REQUIRE THE CONSTRUCTION OR EXPANSION OF RECREATIONAL FACILITIES WHICH MIGHT HAVE AN ADVERSE PHYSICAL EFFECT ON THE ENVIRONMENT. (NO IMPACT)

The Project does not propose the construction of new or expanded recreational facilities, which could result in adverse physical effects to the environment. Furthermore, because implementation of the Project would not contribute to increased population or dwelling units that would drive demand for recreational facilities in the County, the Project would not result in the need for the construction or expansion of recreational facilities. Therefore, the Project, including the primary components and optional improvements, as well as the associated General Plan/LCP land use designation and zoning map amendments, would not include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment. There would be **No Impact**.

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3.17 Transportation

This section evaluates the potential environmental effects associated with implementation of the Buena Vista Landfill Redevelopment Project (Project) construction and operation. Existing transportation facilities within and near the Project area are identified to assess the impacts that the Project could have on the circulation system. Portions of the impact analysis contained herein are based on the Transportation Impact Assessment prepared by Kimley-Horn (**Appendix L**). A summary of the potential impacts related to transportation is presented in **Table 3.17-1**. All figures are presented at the end of Section 3.17.

Table 3.17-1. Summary of Project Impacts Related to Transportation

Impact	Significance before Mitigation	Mitigation	Significance after Mitigation
T-1. The Project would not conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities.	Less than Significant	None Required	Less than Significant
T-2. The Project would meet the screening criteria set by Santa Cruz County and thus would not conflict or be inconsistent with CEQA Guidelines, Section 15064.3(b).	Less than Significant	None Required	Less than Significant
T-3. Neither construction nor operation of the Project would substantially increase hazards due to a geometric design feature or incompatible use.	Less than Significant	None Required	Less than Significant
T-4. The Project would not result in inadequate emergency access.	Less than Significant	None Required	Less than Significant

Notes: The impact, significance determination, and mitigation apply to the Project as a whole, considering all Project components, unless otherwise noted.
CEQA = California Environmental Quality Act

3.17.1 Existing Conditions

Roadway Facilities

Regional access to the Project area is provided by State Route (SR)-1, located approximately 1 mile east of the Project area (**Figures 1-1 and 3.17-1**). SR-1, also called Cabrillo Highway and Highway 1, extends in a north–south direction through Santa Cruz County. SR-1 is a 4-lane highway as it extends from SR-17 in the City of Santa Cruz, past the Project area, to approximately SR-129 in the City of Watsonville.

Under existing conditions, access to the Buena Vista Landfill is via two primary vehicular access points. The main landfill entrance/exit used by the public and employees is located on Buena Vista Drive. Additionally, there is an employee entrance/exit on Rountree Lane, which is accessed via Harkin Slough Road; and there is an employee exit from the Old Landfill area onto Buena Vista Drive. Refer to **Figures 1-3, 2-1, and 3.17-1**.

Buena Vista Drive is a County of Santa Cruz two-lane collector street and provides access to the main entrance to the Project area and other rural residential and agricultural land uses. The

roadway has a posted speed limit of 35 mph. There are no sidewalks or bike lanes on either side of the street. The roadway is designated as a major collector street.

Harkins Slough Road is a County of Santa Cruz two-lane collector street and provides access to an employee entrance to the Project area, the Rountree Medium (Jail) Facility, Tierra Alta Affordable Housing, the Buena Vista Migrant Center (farmworker housing and childcare facility), and several private residential land uses. There is no posted speed limit sign on this road. There are no sidewalks or bike lanes on either side of the street. The roadway is designated as a local collector street.

Transit Facilities

The Santa Cruz Metropolitan Transit District provides public transit within Santa Cruz County. Although there are bus routes along SR-1, there are no bus stops or transit facilities near the Project area, along Buena Vista Drive or Harkins Slough Road, or near the Highway 1/Buena Vista Drive exit (refer to **Appendix L**, Figure 2).

The Monterey Salinas Transit provides service in the Monterey County area to the south, but there are two bus routes (28 and 29) that extend to the Watsonville Transit Center.

Bicycle and Pedestrian Facilities

There are no bike lanes or sidewalks along Buena Vista Drive or Harkins Slough Road. The closest bicycle facility to the Project area is a Class II Bike Lane on San Andreas Road, approximately 1.2 miles from the Project area (**Figure 3.17-1**).

Rail Facilities

The Santa Cruz Branch Rail Line (SCBRL), which is owned by the Santa Cruz County Regional Transportation Commission (RTC), extends along the southern boundary of the Project area, between the Old Landfill site and the Watsonville Landfill (**Figure 2-1**). The 32-mile SCBRL is designated as active and spans the County from Davenport on the north to Watsonville on the south. There is currently limited freight operation.

3.17.2 Regulatory Setting

This section describes the federal, state, regional, and local plans, policies, and laws relevant to transportation for the Project. This section also includes technical guidance at the state and local level for evaluating transportation impacts based on vehicle miles traveled, in accordance with Senate Bill 743.

Federal

There are no relevant federal regulations related to transportation for the Project.

State

Senate Bill 743

Senate Bill (SB) 743 (2013) changed the way that public agencies evaluate the transportation impacts of projects under the California Environmental Quality Act (CEQA), recognizing that roadway congestion, while an inconvenience to drivers, is not itself an environmental impact (refer to California Public Resources Code, Section 21099[b][2], “Automobile delay, as described solely by

level of service or similar measures of vehicular capacity or traffic congestion shall not be considered a significant impact on the environment pursuant to [CEQA]").

Under SB 743, the Governor's Office of Planning and Research (OPR), now called the Governor's Office of Land Use and Climate Innovation, established vehicle miles traveled (VMT) as the most appropriate metric to determine the significance of transportation impacts in place of vehicle level of service (LOS) or related measures thereof. The use of VMT for determining the significance of transportation impacts has become commonplace since the certification of this provision and the release of the OPR's Technical Advisory on Evaluating Transportation Impacts in CEQA in December 2018 and, as of July 1, 2020, is the required metric statewide (OPR 2018).

SB 743 provides opportunities to streamline CEQA for qualifying multimodal transportation networks that provide clean, efficient access to destinations and improve public health through active transportation. A multimodal transportation or active transportation Project can be exempt from CEQA if it is consistent with a Specific Plan for which an Environmental Impact Report was prepared and is also consistent with the use, intensity, and policies of a Sustainable Communities Strategy (SCS) or Alternative Planning Strategy that is certified by the California Air Resources Board as meeting its greenhouse gas reduction targets. Furthermore, under SB 743, parking impacts are no longer considered significant impacts on the environment for select development projects within infill areas with nearby frequent transit service.

Governor's Office of Planning and Research Technical Advisory

Following the adoption of SB 743 in 2013, the OPR released technical guidance on addressing VMT in CEQA documents in its Technical Advisory on Evaluating Transportation Impacts in CEQA (OPR 2018). The OPR's technical guidance identifies several criteria that may be used to identify types of projects that are unlikely to have a significant VMT impact and can thus be "screened" from further analysis. The OPR recommends a per-capita or employee VMT that is 15 percent below that of existing development as an achievable target for a variety of Project types (OPR 2018). The OPR also recommends several screening thresholds for land use projects, including the following:

- **Small Project Screening:** Projects that generate or attract fewer than 110 vehicular trips per day
- **Map-Based Screening:** Projects located in areas of low VMT that incorporate similar features
- **Transit Screening:** Projects located within one-half mile of a major transit stop, or a stop along a high-quality transit corridor, pursuant to state definitions for such facilities, unless any of the following factors are exhibited by the Project:
  - □ Floor area ratio (FAR) of less than 0.75
  - □ Inconsistent with the applicable SCS
  - □ Provides more parking than required by the jurisdiction
  - □ Replaces affordable housing with a fewer number of moderate- or high-income residential units
- **Retail Project Screening:** Projects that are less than 50,000 square feet shall be presumed to have a less than significant VMT impact if the retail is locally serving
- **Affordable Housing Screening:** Projects with 100 percent affordable housing

The OPR also provides a list of projects that are not likely to lead to a substantial or measurable increase in vehicle travel and do not require an induced travel analysis, including the following:

- Rehabilitation, maintenance, replacement, safety, and repair Projects designed to improve the condition of existing transportation assets (e.g., highways; roadways; bridges; culverts; Transportation Management System field elements such as cameras, message signs, detection, or signals; tunnels; transit systems; and assets that serve bicycle and pedestrian facilities) and that do not add additional motor vehicle capacity
- Roadside safety devices or hardware installation such as median barriers and guardrails
- Roadway shoulder enhancements to provide "breakdown space," dedicated space for use only by transit vehicles, to provide bicycle access, or to otherwise improve safety, but which will not be used as automobile vehicle travel lanes
- Installation, removal, or reconfiguration of traffic lanes that are not for through traffic, such as left, right, and U-turn pockets, two-way left-turn lanes, or emergency breakdown lanes that are not utilized as through lanes
- Addition of roadway capacity on local or collector streets provided the Project also substantially improves conditions for pedestrians, bicyclists, and, if applicable, transit
- Grade separation to separate vehicles from rail, transit, pedestrians or bicycles, or to replace a lane in order to separate preferential vehicles (e.g., HOV [high-occupancy vehicles], HOT [high-occupancy toll lanes], or trucks) from general vehicles
- Installation of traffic metering systems, detection systems, cameras, changeable message signs, and other electronics designed to optimize vehicle, bicycle, or pedestrian flow
- Timing of signals to optimize vehicle, bicycle, or pedestrian flow
- Addition of new or enhanced bike or pedestrian facilities on existing streets/highways or within existing public rights-of-way
- Addition of Class I bike paths, trails, multiuse paths, or other off-road facilities that serve non-motorized travel

California Code of Regulations, Title 14 (CEQA Guidelines), Section 15064.3

Section 15064.3, Determining the Significance of Transportation Impacts, states that VMT is the most appropriate measure of transportation impacts, effective July 1, 2020. Other relevant considerations may include the effects of the Project on transit and non-motorized travel.

Subdivision (b), Criteria for Analyzing Transportation Impacts, states that for land use projects, VMT exceeding an applicable threshold of significance may indicate a significant impact, and that a lead agency has discretion to choose the most appropriate methodology to evaluate a project's VMT.

California Department of Transportation Guidance

The California Department of Transportation (Caltrans) released its own framework for transportation analysis in September 2020 to guide the implementation of SB 743 (Caltrans 2020a). The framework heavily relies on the OPR's recommendations. However, according to the guidance document, the use of VMT as the CEQA transportation metric would impact only capacity-increasing projects. If a Project is unlikely to induce travel, then a qualitative narrative can be presented to screen out the Project from further analysis. A quantitative analysis would not be warranted for the Project because the type of Project is expected to decrease or have no impact on VMT. Caltrans Transportation Impact Study Guide similarly relies on the OPR's recommendations. The Transportation Impact Study Guide also includes bicycle and pedestrian facilities improvements as examples of mitigation to reduce Project VMT (Caltrans 2020b).

Regional

2045 Association of Monterey Bay Area Governments Metropolitan Transportation Plan/Sustainable Communities Strategy

The Sustainable Communities and Climate Protection Act, also known as SB 375, was passed by the California Legislature in 2008. SB 375 requires each Metropolitan Planning Organization to develop an SCS to demonstrate how the region will meet greenhouse gas reduction targets set by the state. In 2022, the Association of Monterey Bay Area Governments (AMBAG) adopted the 2045 Metropolitan Transportation Plan/SCS (2045 MTP/SCS). The 2045 MTP/SCS is built on a set of integrated policies, strategies, and investments to maintain and improve the transportation system to meet the diverse needs of the region through 2045. The 2045 MTP/SCS plans more focused growth in high-quality transit corridors and more travel choices, as well as a safe and efficient transportation system with improved access to jobs and education.

The RTC, Transportation Agency for Monterey County, and San Benito County Council of Governments are the three Regional Transportation Planning Agencies under AMBAG; Regional Transportation Planning Agencies have a critical role in development of the MTP/SCS and are also responsible for implementing a regional transportation plan (RTP) for their respective county (AMBAG 2022).

Local

2045 Santa Cruz County Regional Transportation Plan

As discussed above, as a Regional Transportation Planning Agency under AMBAG, the RTC is responsible for developing an RTP for Santa Cruz County. The 2045 RTP, adopted on June 16, 2022, is intended to guide transportation planning decisions in Santa Cruz County. The RTP includes broad transportation goals and policies, a program of short- and long-range transportation projects, and a financial plan for funding projects.

The 2045 RTP identifies the following improvements along Buena Vista Drive and Harkin Slough Road within the vicinity of the Project area:

- Buena Vista Drive from San Andreas to Freedom Boulevard (ID – CO-P26e): Roadway and roadside improvements include bike lanes, sidewalks, transit turnouts, left-turn pockets, merge lanes and intersection improvements.
- Harkin Slough Road from Buena Vista Drive to SR-1 (CO-P32c): Improvements include left lane pockets, sidewalks, bike lanes, and transit turnouts.

Santa Cruz County General Plan/Local Coastal Program

The Access and Mobility Element of the County General Plan/Local Coastal Program (LCP) was adopted in 2024 (Santa Cruz County 2024). Key access and mobility policies relevant to the Project are listed below:

- **AM-5.1.1: Corridor Design Guidelines.** Incorporate the Santa Cruz County Design Guidelines as well as any location-specific design guidelines in all new development and roadway improvements.
- **AM-5.2.2: Environmental Alignment.** Account for the constraints that affect a project's corridor to minimize impacts to physical environmental conditions. Locate and design public and private roads to avoid or minimize, if necessary, impacts to significant biological, visual and other environmental resources**.**

- **AM-5.2.4: Commercial Traffic**. Whenever feasible, heavy commercial traffic should be routed away from residential neighborhoods.
- **AM-5.2c: Implementation Policy.** Avoid locating new roads through floodplains to minimize impacts on habitats and limit the need for constructing flood control measures. Design new roads to maintain wildlife movement and retrofit existing roads where feasible for that purpose.
- **AM-5.2e: Implementation Policy.** Incorporate buffers or other noise reduction measures consistent with standards established in the Noise Element into the siting and design of roads located next to sensitive noise receptors to minimize adverse impacts from rail and vehicle traffic noise. Consider reduction measures such as alternative road design, reduced speeds, alternative paving, setbacks or buffers, and modifications to buildings affected by roadway or rail noise, prior to berms and walls.
- **AM-6.1.1: Fire and Emergency Response Access**. Design adequate roadway infrastructure for fire and emergency response safety including safe access by emergency response vehicles, visible street signs, and water supplies for structural fire suppression.
- **AM-6.2.1: Level of Service Criteria.** Require development projects to provide multimodal roadway improvements necessary to achieve a minimum level of service (LOS) of "D," except for those where a lesser LOS has been accepted by the County pursuant to the criteria specifically identified in Table 3-2. When development is proposed on roads where a LOS E or F standard has been accepted, require feasible mitigation in the form of road improvements, a fair share contribution to a road improvement program, or other in-lieu mitigation for the transportation system.

County of Santa Cruz VMT Guidelines

The County adopted VMT guidelines within the SB 743 Implementation Guidelines for the County of Santa Cruz, Analyzing Vehicle Miles Traveled for CEQA Compliance (Santa Cruz County 2025). Although the County guidelines closely follow the OPR's recommendations, they include additional screening criteria requirements specific to the County. The County's screening criteria are as follows:

- **Small Projects:** Projects that generate fewer than 110 net new vehicular trips per day and are also consistent with the SCS, as determined by Santa Cruz County.
- **Projects Near High-Quality Transit:** Projects that are located within one-half mile of an existing major transit stop. The County's 2025 Guidelines note that a major transit stop includes the intersection of two or more major bus routes with a frequency of service interval of 20 minutes or less during the morning and afternoon peak periods.[1] Based on the current Santa Cruz METRO service pattern, the closest major transit stop is the Watsonville Transit Center, located 3–4 miles southeast of the Buena Vista Landfill.
- **Local-Serving Retail:** Projects that include a single store on-site which does not exceed 50,000 square feet and is local-serving as determined by Santa Cruz County. Local-serving retail Projects may not be regionally focused, as determined by Santa Cruz County.
- **Affordable Housing**: Projects that provide a high percentage of affordable housing. Projects do not need to be 100 percent affordable housing, but a high percentage must be affordable as determined by the City or County Planning Department.

[1] Analyzing VMT for CEQA Compliance, SB 743 Implementation Guidelines for the County of Santa Cruz, Updated July 2025 (Santa Cruz County 2025). Refer to Exhibit 2, Table Note 2, on page 6.

- **Local Essential Service:** Projects that include local essential services such as a daycare center, public K–12 school, police or fire facility, local-serving medical/dental office, or government office. Local essential services projects may not be regionally focused, as determined by Santa Cruz County.
- **Map-Based Screening:** Projects located within an area of development that is under the VMT threshold as shown on a County screening map and as allowed by Santa Cruz County.
- **Redevelopment Projects:** Projects that replace an existing VMT-generating land use and do not result in a net overall increase in VMT.

Santa Cruz County Active Transportation Plan

The County Active Transportation Plan (ATP) was adopted by the County in May 2022 as an update to the 2011 Santa Cruz County Bicycle Plan. The ATP is intended to provide community-identified needs and recommendations for infrastructure projects or programs that support walking and bicycling in unincorporated Santa Cruz County. Overall, the ATP aims to support a healthy community, improve affordable transportation options for low-income and vulnerable residents, and help the County achieve statewide goals to address climate change by reducing VMT (Santa Cruz County 2022).

Other relevant regional documents were consulted as part of the ATP development to ensure consistency with their recommendations, such as the RTC's Monterey Bay Sanctuary Scenic Trail Network Master Plan, which includes the Coastal Rail Trail along the SCBRL, primarily within the rail corridor (Santa Cruz Conty Regional Transportation Commission 2014). The ATP details the Coastal Rail Trail as a current project consisting of a paved multiuse (bicycle/pedestrian) path that will span the County from Davenport to the Monterey County line. The SCBRL extends along the southern boundary of the Project area, between the Old Landfill site and the Watsonville Landfill (**Figure 2-1**). Although the Monterey Bay Sanctuary Scenic Trail Network Master Plan identifies the multiuse path within the SCBRL corridor in this area, the RTC is considering realigning this portion of the multiuse path to extend along San Andreas Road, from the San Andreas Road/Buena Vista Drive intersection to Lee Road/SCBRL intersection (Blakeslee, pers. comm. 2025).

The ATP includes corridor recommendations for entire roadways or long stretches of roadways. The recommendations are categorized into seven typologies, which include a menu of treatments that can be used to create safe facilities for people walking and biking. In the Project area, Buena Vista Drive is identified as a Class III Long-Distance Rural Route typology. This typology would alert drivers and bicyclists (e.g., with signage and share-lane markings or sharrows) that they will be sharing the road and reminds drivers to watch for people on bikes. (RTC May 2022, Pedestrian and Bicycle Plan page 67 and79, Map 9e).

The ATP also identifies top-priority projects. In the Project area, the only top-priority project identified is the RTC's Coastal Rail Trail.

3.17.3 Methodology and Significance Thresholds

Methodology

This analysis considers the potential impacts of the Project on transportation resources in the Project area, based on the Significance Thresholds A-D identified below.

To assess potential conflicts with a program, plan, ordinance or policy addressing the circulation system (Threshold A), the analysis considers the relevant plans and policies in the Regulatory Setting

above. This includes Policy AM-6.2.1, Level of Service Criteria, in the Access and Mobility Element of the County General Plan/LCP.

To assess conflict or inconsistency with CEQA Guidelines, Section 15064.3(b), which states that generally VMT is the most appropriate measure of transportation impacts (Threshold B), the analysis is based on the County of Santa Cruz VMT Guidelines.

As stated in the Regulatory Setting above, the County adopted VMT guidelines within the SB 743 Implementation Guidelines for the County of Santa Cruz, Analyzing Vehicle Miles Traveled for CEQA Compliance (Santa Cruz County 2025). Although the County guidelines closely follow the OPR's recommendations, the screening criteria requirements have been tailored to the County as follows:

- **Small Projects:** Projects that generate fewer than 110 net new vehicular trips per day and are also consistent with the SCS, as determined by Santa Cruz County.
- **Projects Near High-Quality Transit:** Projects that are located within one-half mile of an existing major transit stop. Under the County's current interpretation of major transit stops (MTSs), the only MTSs currently in the unincorporated County are along the Soquel Drive corridor, located over 10 miles north of the Buena Vista Landfill.
- **Local-Serving Retail:** Projects that include a single store on-site which does not exceed 50,000 square feet and is local-serving as determined by Santa Cruz County. Local-serving retail Projects may not be regionally focused, as determined by Santa Cruz County.
- **Affordable Housing**: Projects that provide a high percentage of affordable housing. Projects do not need to be 100 percent affordable housing, but a high percentage must be affordable as determined by the City or County Planning Department.
- **Local Essential Service:** Projects that include local essential services such as a daycare center, public K–12 school, police or fire facility, local-serving medical/dental office, or government office. Local essential services projects may not be regionally focused, as determined by Santa Cruz County.
- **Map-Based Screening:** Projects located within an area of development that is under the VMT threshold as shown on a County screening map and as allowed by Santa Cruz County.
- **Redevelopment Projects:** Projects that replace an existing VMT-generating land use and do not result in a net overall increase in VMT.

To assess increases in design hazards due to a geometric design feature or incompatible use (Threshold C), the analysis is based on if the Project would introduce features that could increase hazards in the area.

To assess impacts to emergency access (Threshold D), the analysis considers changes to the existing emergency access routes.

Significance Thresholds

The introduction in Chapter 3, Environmental Impact Analysis, explains that the significance thresholds used in this analysis are based on Appendix G of the CEQA Guidelines, which provides a sample Initial Study checklist that includes a number of factual inquiries related to the subject of transportation along with the other environmental topics. Thus, the letters and thresholds presented below correspond with the questions in the Appendix G Initial Study checklist.

For the purposes of this Environmental Impact Report, a significant transportation impact would occur if implementation of the Project resulted in any of the following conditions:

A. Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities.
B. Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b).
C. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).
D. Result in inadequate emergency access.

3.17.4 Project Impact Analysis

For each impact, the discussion is separated into Project construction, Project operation, and Project components as needed to describe the potential impact. The overall conclusion or significance determination is presented at the end of the discussion, as well as in parentheses at the end of the numbered impact statement.

As described in Chapter 2, Project Description, the Project components include:

1. Transfer Stations (Transfer Station A and Transfer Station B)
2. Organics Diversion Facility (ODF Option 1 and ODF Option 2)
3. Landfill Closure and Revegetation
4. Optional Improvements: a) Internal Access Road Improvements, b) Scale House Upgrades, c) Recycling Center Upgrades, d) Equipment Parking and Storage Area
5. General Plan/Local Coastal Program Land Use Designation and Zoning Map Amendments

Threshold A:	Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities.

Impact T-1 THE PROJECT WOULD NOT CONFLICT WITH A PROGRAM, PLAN, ORDINANCE OR POLICY ADDRESSING THE CIRCULATION SYSTEM, INCLUDING TRANSIT, ROADWAY, BICYCLE AND PEDESTRIAN FACILITIES. (LESS THAN SIGNIFICANT IMPACT)

2045 Santa Cruz County Regional Transportation Plan

As described above, the RTP identifies improvements along Buena Vista Drive and Harkins Slough Road that include bike lanes, sidewalks, and transit turnouts. The Project would not conflict or otherwise preclude the RTC and County from implementing the improvements identified in the RTP for Buena Vista Drive or Harkins Slough Road. If implemented, the RTC and County Roads would coordinate design and implementation to ensure relevant design and safety requirements are met.

Under current conditions, Buena Vista Drive and Harkins Slough Road are single lane facilities without any bike lanes or sidewalks. There is currently limited room along these roadways and within the road right-of-way, as well as other constraints (e.g., drainages and sensitive habitat), that complicates adding bike lanes, sidewalks, and other improvements.

The Project includes constructing Transfer Station A and realigning Harkins Slough Road around the transfer station, so it remains on the exterior of landfill activities. The Project also includes modifying the culvert at the main landfill entrance off Buena Vista Drive. However, these Project components would not exacerbate the existing constraints or otherwise preclude the County from implementing the improvements identified in the RTP.

Additionally, the Project would not conflict with or otherwise preclude the RTC from implementing the Coastal Rail Trail, which is identified as a top-priority project in the RTP, because the multiuse path would be constructed either within the SCBRL rail corridor south of the Project area or along San Andreas Road located approximately 1 mile southwest of the Project area. Project construction or operation would not conflict with the Coastal Rail Trail.

Santa Cruz County General Plan/Local Coastal Program, Access and Mobility Element

The Project would not conflict with the access and mobility policies for the reasons described in **Table 3.17-2**.

Table 3.17-2. Project Consistency with County General Plan/Local Coastal Program Access and Mobility Element

County General Plan/Local Coastal Program Access and Mobility Element Policies	Project Consistency
AM-5.1.1 Corridor Design Guidelines. Incorporate the Santa Cruz County Design Guidelines as well as any location-specific design guidelines in all new development and roadway improvements.	The Harkins Slough Road realignment, as well as improvements at the main entrance off Buena Vista Drive and internal roadway improvements, would be designed and constructed in accordance with Santa Cruz County Design Guidelines and other relevant requirements.
AM-5.2.2 Environmental Alignment. Account for the constraints that affect a project's corridor to minimize impacts to physical environmental conditions. Locate and design public and private roads to avoid or minimize, if necessary, impacts to significant biological, visual and other environmental resources**.**	The Harkins Slough Road realignment was designed in coordination with qualified biologists to minimize impacts to adjacent biological and environmental resources. As described in Section 2.4, the portion of the realigned road extending along the east side near the transfer station entrance would be adjacent to a steep slope with oak woodland, requiring construction of a 2:1 slope where the realigned road crosses over this slope. This 2:1 slope would provide stability for the road while minimizing required tree removal. Several design options were considered, including a 3:1 slope and larger retaining wall with minimal slope, and it was determined a 2:1 slope at the road base would result in the least amount of tree removal. Additionally, the portion of the realigned road extending along the north side of the transfer station would avoid the existing drainage ditch. Further, the west portion of this drainage ditch (that extends toward Buena Vista Drive) would be restored to improve water/sediment flow conditions, replace non-native eucalyptus trees with native riparian vegetation on the upslope/north side to restore, and function like a self-sustaining intermittent creek.

Table 3.17-2. Project Consistency with County General Plan/Local Coastal Program Access and Mobility Element

County General Plan/Local Coastal Program Access and Mobility Element Policies	Project Consistency
AM-5.2.4 Commercial Traffic. Whenever feasible, heavy commercial traffic should be routed away from residential neighborhoods.	The traffic in the Project area, which includes heavy commercial vehicles traveling to and from the area, would be similar to existing conditions. The purpose of realigning Harkins Slough Road is to maintain separation of public traffic using the road to access the Buena Vista Migrant Center (farmworker housing and childcare facility), Tierra Alta Affordable Housing, and Rountree Medium (Jail) Facility located south of the landfill. The additional trucks required for transferring solid waste to the regional facility would follow similar patterns using Buena Vista Drive to access SR-1 to the regional facility farther south. Trucks would not be routed near residential neighborhoods.
AM-6.1.1 Fire and Emergency Response Access. Design adequate roadway infrastructure for fire and emergency response safety including safe access by emergency response vehicles, visible street signs, and water supplies for structural fire suppression.	The Harkins Slough Road realignment, as well as improvements at the main entrance off Buena Vista Drive and internal roadway improvements, would be designed and constructed in accordance with applicable standards allowing for fire and emergency response access. As described in Section3.19, Utilities and Service Systems new water service lines for operational use and fire suppression would be extended to Transfer Station A and B. In addition, both Transfer Stations A and B would include a fire detection and suppression system.
AM-6.2.1 Level of Service Criteria. Require development projects to provide multimodal roadway improvements necessary to achieve a minimum level of service (LOS) of "D," except for those where a lesser LOS has been accepted by the County pursuant to the criteria specifically identified in Table 3-2. When development is proposed on roads where a LOS E or F standard has been accepted, require feasible mitigation in the form of road improvements, a fair share contribution to a road improvement program, or other in-lieu mitigation for the transportation system.	As described in **Appendix L**, Transportation Impact Analysis, all study intersections are anticipated to operate at an acceptable LOS during the AM and PM peak hour, and the Project is not anticipated to create a significant traffic adverse effect, under all the conditions evaluated, including: Existing, Interim (2032), Interim (2032) Plus Project, Cumulative (2045), and Cumulative (2045) Plus Project. Additionally, there is sufficient queuing storage for all movements at study intersections. The Project is not anticipated to increase the vehicle queue and create an adverse effect to the study intersections during AM and PM peak hours.

Notes: LOS = level of service; SR = State Route

In summary, the Project, including the primary components and optional improvements described above, as well as the associated General Plan/LCP Land Use Designation and Zoning Map Amendments, would not conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadways, bicycle and pedestrian facilities. The impact would be **Less than Significant**. No mitigation is required.

Threshold B:	Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b).

Impact T-2 THE PROJECT WOULD MEET THE SCREENING CRITERIA SET BY SANTA CRUZ COUNTY AND THUS WOULD NOT CONFLICT OR BE INCONSISTENT WITH CEQA GUIDELINES, SECTION 15064.3(B). (LESS THAN SIGNIFICANT IMPACT)

As described in Section 3.17.2, CEQA Guidelines, Section 15064.3(b), states that VMT is the most appropriate measure of transportation impacts; that for land use projects, VMT exceeding an applicable threshold of significance may indicate a significant impact; and that a lead agency has discretion to choose the most appropriate methodology to evaluate a project's VMT.

The thresholds of significance, as currently adopted by Santa Cruz County, are summarized in **Table 3.17-3**. The County considers the proposed redevelopment operations (e.g., transfer stations) to be "Office or Service" land use; thus, the threshold of significance is based on the VMT per employee efficiency metric identified for this land use in **Table 3.17-3**.

Under existing conditions, there are currently 40–45 employees working at the Buena Vista Landfill, working from and reporting to the existing maintenance/office building. With implementation and operation of the Project, the number of employees is expected to remain the same or very similar. However, instead of the employees managing solid waste disposal, they would be managing solid waste transfer (as well as continued operation of the recycling center, household hazardous materials, and organics diversion) from the transfer station offices. The landfill operation schedule is expected to remain unchanged and would be from 7:30 a.m. to 3:30 p.m. (Monday to Tuesday and Thursday to Saturday) and from 7:30 a.m. to 2:30 p.m. on Wednesday. All employees would work on a single shift, arriving in the morning and leaving in the afternoon. Thus, there would be no net increase in employee trips or VMT. Nonetheless, the County applied the screening criteria to identify if the proposed land use Project is anticipated to result in a less than significant VMT impact without conducting a more detailed VMT analysis. In accordance with the applicable VMT metric, transfer truck trips are not included in the VMT calculation for this analysis.

Table 3.17-3. Vehicle Miles Traveled Analysis Inputs

Land Use	VMT Threshold	Basis
Residential	8.9 VMT/capita	15% below existing County-wide average VMT per capita
Office or Service	7.4 Work VMT/Employee	15% below existing County-wide average Work VMT per employee
Retail	Net regional change	Using the County as the basis (instead of the Tri-County region)
Other Employment	Work VMT/Employee	15% below existing County-wide average Work VMT per employee for similar land uses
Other Customer	Net regional change	Using the County as the basis

Source: Appendix L.
Notes: VMT = vehicle miles traveled

Vehicle Miles Traveled Screening

A VMT screening was conducted for the Project. The County's VMT Guidelines provide details on appropriate screening thresholds that can be used to identify when a proposed land use project is anticipated to result in a less than significant VMT impact without conducting a more detailed VMT analysis. Screening thresholds are broken down into different project types under the presumption that they would result in a less than significant transportation impact. The following applicable screening thresholds were evaluated for the Project.

Small Projects

This screening criteria applies to projects with low trip generation per existing CEQA exemptions. Projects generating less than 110 net new trips per day are presumed to have a less than significant VMT impact.

The Project can be screened out of VMT analysis based on Small Projects screening criteria and presumed to have a less than significant impact based on the office space within Transfer Station A (1,500 square feet) and Transfer Station B (3,800 square feet). The employee daily trip estimates from Institute of Transportation Engineers (ITE), 11th Edition for Small Office Building (ITE 712) are summarized in **Table 3.17-4**.

Table 3.17-4. Project Trip Generation – Based on Office Square Footage

Land Use/Description[1,2]	Project Size		Weekday Total Daily Trips
Trip Generation Rates (ITE)			
Small Office Building (ITE 712)	Per	1,000 sq ft	16.19
Future Vehicle Trips			
Buena Vista Landfill (Transfer Station A Office)	1,500	1,000 sq ft	24
Buena Vista Landfill (Transfer Station B Office)	3,800	1,000 sq ft	62
		Project Vehicle Trips	**86**

Source: Appendix L.
Notes:
[1] Based on latest project description.
[2] Daily, a.m. and p.m. trips based on average land use rates from the Institute of Transportation Engineers (ITE) Trip Generation 11th Edition.

As per ITE 11th Edition, the Project office space is expected to generate 86 daily trips related to office space. This threshold indicates a level of vehicle activity unlikely to result in significant transportation impacts. It should be noted that this is a conservative estimate because there are currently 40-45 staff working at the Buena Vista site, and it is anticipated there would be similar staffing levels with Project implementation.

Since the number of net new daily employee trips is less than 110 daily trips, the Project is presumed to result in a Less than Significant transportation impact concerning VMT related to employee trips and is screened from further analysis based on the number of employee vehicle trips generated.

The other trips associated with the Project involve transfer trucks which are commercial semi-trucks hauling 40- to 55-foot enclosed trailers. The purpose of the transfer trucks is to consolidate waste into larger trucks and reduce the total truck VMT required for disposal, whereas without the transfer stations, there would be more individual truck trips by self-haulers and franchise haulers

(refer to Chapter 5, Project Alternatives, under Alternative 2, No Project). These transfer trucks would transfer the consolidated large solid waste from the Project area to the ReGen Monterey Landfill facility located 19 miles south in the City of Marina. The amount of anticipated waste arriving at the Project area is expected to increase with the increase in population and employment within Santa Cruz County. This increase in waste would be associated with an increase in trips to the Project area. However, it should be noted that the Project itself would not generate this additional traffic and as such would not cause any increase in VMT. Therefore, no VMT transportation impacts are anticipated with the Project, and the truck trips below are provided for informational purposes.

The primary goal of using VMT in CEQA is to assess the environmental impact of light duty and passenger vehicle traffic generated by a project, not the impact of commercial trucks. As discussed above, since the number of employees will not change as a result of the Project, resulting in less than 110 net new daily employee trips, the Project has been screened from further analysis based on the number of employee vehicle trips generated. The following transfer truck information is being provided for informational purposes only. During the Interim (2032) Conditions, a total of approximately 472 tons of waste is anticipated to arrive at the Project area; and during Cumulative (2045) Conditions, a total of approximately 450 tons of waste is anticipated. The waste would be transferred to the regional facility (ReGen Monterey Landfill in Marina) using 24 daily transfer trucks during the Interim (2032) Conditions and 23 daily trucks during the Cumulative (2045) Conditions. The number of daily truck trips during the Interim (2032) Conditions and during Cumulative (2045) Conditions can be found in **Appendix L** (Table 13).

In summary, the Project meets the VMT screening criteria set by Santa Cruz County and thus is anticipated to result in a less than significant VMT impact without conducting a more detailed VMT analysis. Therefore, the Project, including the primary components and optional improvements described above, as well as the associated General Plan/LCP Land Use Designation and Zoning Map Amendments, would not conflict or be inconsistent with CEQA Guidelines, Section 15064.3(b). The impact would be **Less than Significant**. No mitigation is required.

Threshold C:	Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).

Impact T-3 NEITHER CONSTRUCTION NOR OPERATION OF THE PROJECT WOULD SUBSTANTIALLY INCREASE HAZARDS DUE TO A GEOMETRIC DESIGN FEATURE OR INCOMPATIBLE USE. (LESS THAN SIGNIFICANT IMPACT)

The Project proposes to use the existing driveways into the secure landfill property (including the main entry/exit from Buena Vista Drive, the non-public egress onto Buena Vista Drive, and the employee entry/exit from Rountree Lane), and would not introduce any new driveways at other locations.

The Project may include improvements to internal roadways (e.g., paving currently unpaved roads) within the existing facility, and any roadway improvements would be implemented in accordance with applicable County design and safety standards to avoid creating a geometric design hazard or incompatible uses.

This impact discussion focuses on potential hazards due to the realignment of Harkins Slough Road and transfer truck queues at the Buena Vista Drive/SR-1 ramps extending to the freeway mainline. The other Project components would not increase hazards due to a geometric design feature or incompatible use.

Harkins Slough Road Realignment

Harkins Slough Road is currently located between the proposed Transfer Station A site and the fenced-in active landfill area. Construction and operation of the transfer stations requires the realignment of Harkins Slough Road to accommodate existing traffic use, keep public traffic outside the active operations area, and contain all solid waste operational traffic on internal roadways,

The Project would realign Harkin Slough Road to the northeast perimeter of the Project area, adjacent to the north and east property lines, so it would be outside the Transfer Station A operating area (**Figure 2-1**). This realignment would keep the local public traffic on Harkins Slough Road, outside the facility fence. These improvements are intended to maintain traffic flow on Harkins Slough Road and avoid conflict between facility operations (e.g., hauling trucks) and passenger vehicles not accessing the solid waste management facility.

The realignment would result in a 90-degree turn with stop signs at the far northeast corner (**Figure 2-1**) to control traffic in each direction. The County of Santa Cruz Public Works Division, Roads & Transportation, approved the proposed realignment of Harkins Slough Road and the addition of stop signs at this location, and determined it would not present a design hazard or disrupt traffic flow because of the relatively low volume of vehicle trips to land uses on this portion of Harkins Slough Road. Land uses that are accessed by Harkins Slough Road include the Buena Vista Migrant Center (farmworker housing and childcare facility), Tierra Alta Affordable Housing, and Rountree Medium (Jail) Facility, and landfill employees. Therefore, the Harkins Slough Road realignment would not increase hazards due to a geometric design feature.

Buena Vista Drive/State Route 1 Ramp Queuing

The trucks transferring the waste from the Project area to ReGen Monterey Landfill facility would use the Caltrans SR-1 ramp intersections with Buena Vista Drive. Therefore, ramp queuing analysis was conducted to verify queues do not extend to the freeway mainline. Ramp queuing analysis was performed for the weekday AM peak hour analysis only, as no trucks are added during the PM peak hour. The current working timings at the Buena Vista Landfill are from 7:30 AM to 3:30 PM and are expected to remain unchanged with the Project.

Ramp queuing analysis for the following intersections:

- SR-1 Northbound (NB) Ramps/Buena Vista Drive
- SR-1 Southbound Ramps/Buena Vista Drive

The above ramp intersections currently operate as an unsignalized intersections with Side Street Stop Control and were analyzed as Side Street Stop Control intersections with the Project.

The following scenarios were analyzed:

- Existing Conditions
- Interim (2032) Conditions
- Interim (2032) Plus Project Conditions
- Cumulative (2045) Conditions
- Cumulative (2045) Plus Project Conditions

For each scenario, SimTraffic 12 simulated the ramp queuing to study the sufficiency of each ramp's storage capacity and to verify queues do not extend to the freeway mainline. The analysis used SimTraffic 12 with a 10-minute seeding period, four 15-minute periods and 5 runs. The 95th-percentile queues for each of the five runs were averaged and shown in **Table 3.17-6.**

Table 3.17-6. Ramp Queuing Analysis

#	Intersection Name	Approach	Direction	Total Storage (ft/in)	Existing Conditions		Interim 2032 Conditions		Interim 2032 Plus Project Conditions		Cumulative 2045 Conditions		Cumulative 2045 Plus Project Conditions	
					95th Percentile Queue Lenth (feet)[2]	Sufficient Storage?	95th Percentile Queue Lenth (feet)[2]	Sufficient Storage?	95th Percentile Queue Lenth (feet)[2]	Sufficient Storage?	95th Percentile Queue Lenth (feet)[2]	Sufficient Storage?	95th Percentile Queue Lenth (feet)[2]	Sufficient Storage?
1	SR-1 NB Ramps/ Buena Vista Dr.	SR-1 NB Ramps	WBL	125	73	Yes	87	Yes	89	Yes	101	Yes	118	Yes
			WBR	1,098	0	Yes	0	Yes	0	Yes	0	Yes	6	Yes
2	SR-1 Southbound Ramps/ Buena Vista Dr.	SR-1 Southbound Ramps	EBL/T	1,856	64	Yes	67	Yes	70	Yes	77	Yes	81	Yes
			EBR	100	0	Yes	0	Yes	0	Yes	0	Yes	0	Yes

Notes: 95th Percentile Queue Length in Feet (Assumption: 1 Vehicle – 25 feet); NBR = Northbound Right; SBR = Southbound Right; SBL = Southbound Left; WBR = Westbound Right; WBL = Westbound Left; EBR = Eastbound Right; EBL = Eastbound Left; EBL/T = Eastbound Left/Through; SR = State Route
Analysis is performed using Highway Capacity Manual, 7th Edition, methodologies.
Single line approach in Northbound (NB) and Southbound direction QUEUEs reported for the lane group.
Ramp Queuing (Intersection 1 and 2) results are based on SimTraffic runs.

As shown in **Table 3.17-6**, all ramp queuing under Existing Conditions, Interim (2032) Conditions, Interim (2032) Plus Project Conditions, Cumulative (2045) Conditions, and Cumulative (2045) Plus Project Conditions is within each ramp's storage capacity and does not extend to the freeway mainline. Therefore, no Project safety mitigations are required.

In summary, neither construction nor operation of the Project, including the primary components and optional improvements described above, as well as the associated General Plan/LCP Land Use Designation and Zoning Map Amendments, would substantially increase hazards due to a geometric design feature or incompatible use. Therefore, the impact would be **Less than Significant**. No mitigation is required.

Threshold D: Result in inadequate emergency access.

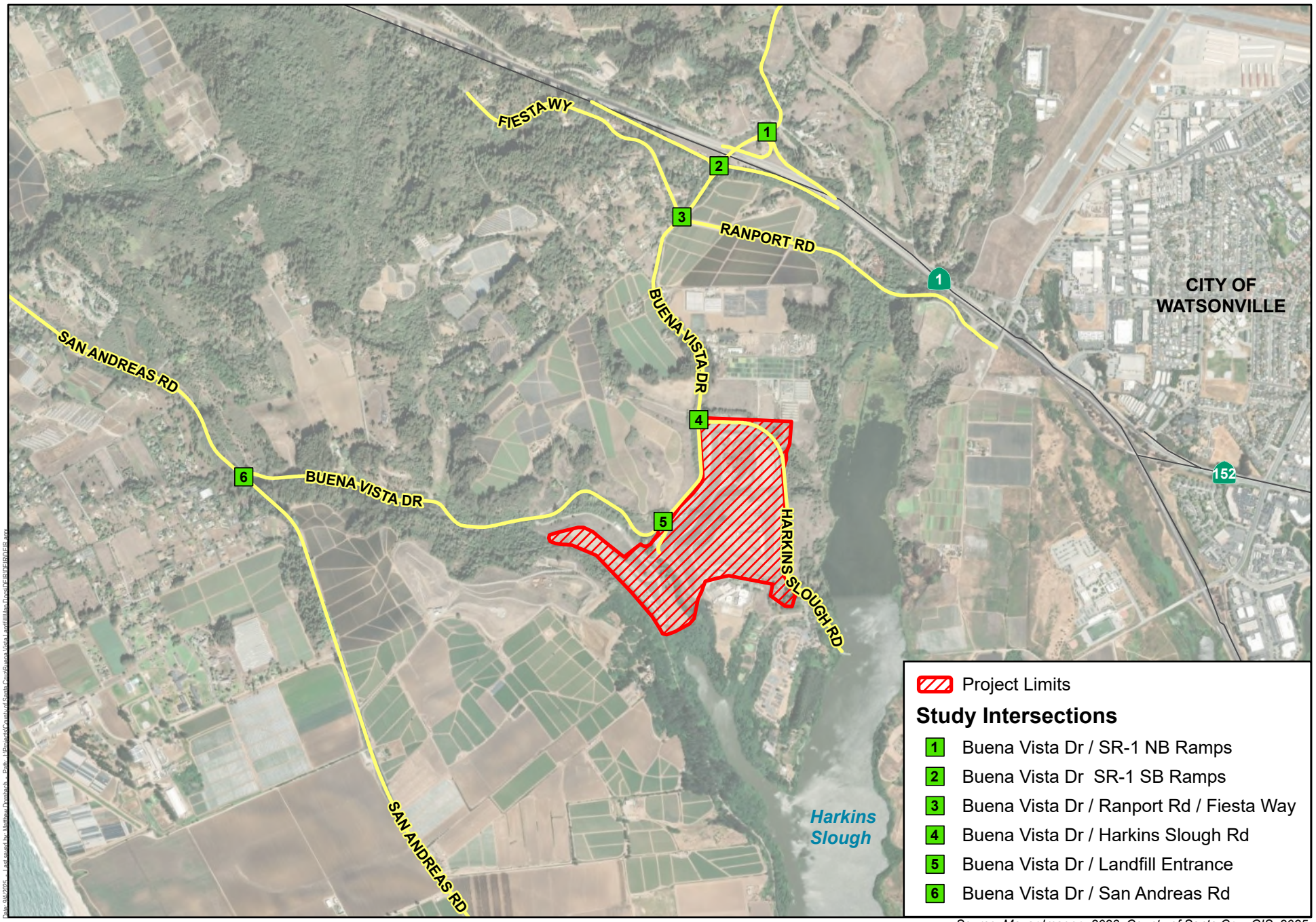
Impact T-4 THE PROJECT WOULD NOT RESULT IN INADEQUATE EMERGENCY ACCESS. (LESS THAN SIGNIFICANT IMPACT)

During construction of all Project components, emergency access along Buena Vista Drive and Harkins Slough Road to surrounding land uses and to the Project area would be retained. Emergency vehicles would access the Project area from Buena Vista Drive (either the main entrance driveway or the egress driveway to the south) or from Harkins Slough Road to Rountree Lane (which provides access to the employee entrance at the proposed location for Transfer Station B). During the culvert replacement at the main entrance, emergency access would be available from the other two driveways. The existing internal roads are sufficient to provide emergency access within the Project area.

During construction of the Harkins Slough Road realignment, the existing Harkins Slough Road would remain open and accessible until the realigned roadway is complete and operational, such that emergency access to the land uses at the end of Harkins Slough Road is retained.

Once operational, the emergency access to the Project area and surrounding land uses would be similar to existing conditions.

The Project, including the primary components and optional improvements described above, as well as the associated General Plan/LCP Land Use Designation and Zoning Map Amendments, would not result in inadequate emergency access during construction or operation. The impact would be **Less than Significant**. No mitigation is required.



Source: Maxar Imagery 2023; County of Santa Cruz GIS, 2025.

Harris & Associates

N

0 1,200 2,400

Feet

Figure 3.17-1

Project Location and Study Intersections

Buena Vista Landfill Redevelopment Project

3.18 Tribal Cultural Resources

This section evaluates the potential impacts on Tribal Cultural Resources (TCRs) resulting from Buena Vista Landfill Redevelopment Project (Project) construction and operation. The analysis of TCRs provided in this section is based on the 2024 Phase I Cultural Resource Inventory for the Buena Vista Landfill Redevelopment Project, Santa Cruz County, California, prepared by Albion Environmental, Inc. (Albion 2024), and the 2025 Extended Phase I Archaeological Assessment for the Buena Vista Landfill Redevelopment Project Santa Cruz County, California, prepared by Albion Environmental, Inc. (Albion 2025). **Table 3.18-1** summarizes identified impacts related to TCRs.

Table 3.18-1. Summary of Project Impacts Related to Tribal Cultural Resources

Impact	Significance before Mitigation	Mitigation	Significance after Mitigation
TCR-1. The Project may cause a substantial adverse change in the significance of a Tribal Cultural Resource.	Potentially Significant	CR-2a, CR-2b	Less than Significant

Notes: The impact, significance determination, and mitigation apply to the Project as a whole, considering all Project components, unless otherwise noted.

3.18.1 Existing Conditions

Refer to Section 3.5.1, Existing Conditions, in Section 3.5, Cultural Resources, for a description of the precontact setting and ethnographic setting of the Project area.

3.18.2 Regulatory Setting

This section describes California law and local policies relevant to TCRs for the Project. Also refer to Section 3.5 for the regulatory setting of cultural resources, including archaeological resources and human remains, including those of Native American origin.

Federal

There are no relevant federal regulations related to TCRs, as the term was created by the California Legislature when Assembly Bill (AB) 52 was approved in 2015 and applies to projects undergoing environmental review under the California Environmental Quality Act (CEQA).

State

Assembly Bill 52

The intent of AB 52 was to include California Native American Tribes early in the environmental review process and to establish a new category of resources related to Native Americans, known as TCRs, that require evaluation for CEQA compliance.

AB 52 established that "a project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment" (PCR Section 21084.2). It further stated that the lead agency shall establish measures to avoid impacts that would alter the significant characteristics of a TCR when feasible (PRC Section 21084.3). California Public Resources Code (PRC), Sections 21074(a)(1)(A) and 21074(a)(1)(B), define

TCRs as "sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe" and that meet either of the following criteria:

1. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k).
2. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

Section 1 of the bill states the legislature's intent as follows: In recognition of California Native American tribal sovereignty and the unique relationship of California local governments and public agencies with California Native American tribal governments and with respect to the interests and roles of project proponents, it is the intent of AB 52 to accomplish all of the following:

1. Recognize that California Native American prehistoric, historic, archaeological, cultural, and sacred places are essential elements in Tribal cultural traditions, heritages, and identities.
2. Establish a new category of resources in CEQA called "Tribal Cultural Resources" that considers the Tribal cultural values in addition to the scientific and archaeological values when determining impacts and mitigation.
3. Establish examples of mitigation measures for Tribal Cultural Resources that uphold the existing mitigation preference for historical and archaeological resources of preservation in place, if feasible.
4. Recognize that California Native American tribes may have expertise with regard to their Tribal history and practices, which concern the Tribal Cultural Resources with which they are traditionally and culturally affiliated. Because CEQA calls for a sufficient degree of analysis, Tribal knowledge about the land and Tribal Cultural Resources at issue should be included in environmental assessments for projects that may have a significant impact on those resources.
5. In recognition of their governmental status, establish a meaningful consultation process between California Native American Tribal governments and lead agencies, respecting the interests and roles of all California Native American tribes and project proponents, and the level of required confidentiality concerning Tribal Cultural Resources, early in the CEQA environmental review process, so that Tribal Cultural Resources can be identified, and culturally appropriate mitigation and mitigation monitoring programs can be considered by the decision-making body of the lead agency.
6. Recognize the unique history of California Native American tribes and uphold existing rights of all California Native American tribes to participate in, and contribute their knowledge to, the environmental review process pursuant to CEQA.
7. Ensure that local and Tribal governments, public agencies, and project proponents have information available, early in CEQA environmental review process, for purposes of identifying and addressing potential adverse impacts to Tribal Cultural Resources and to reduce the potential for delay and conflicts in the environmental review process.
8. Enable California Native American tribes to manage and accept conveyances of, and act as caretakers of, Tribal Cultural Resources.
9. Establish that a substantial adverse change to a tribal cultural resource has a significant effect on the environment.

AB 52 also established a formal consultation process for California Tribes regarding those resources. The consultation process must be completed before a CEQA document can be certified. AB 52 requires that lead agencies "begin consultation with a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project." Native American Tribes to be included in the process are those that have requested notice of projects proposed in the jurisdiction of the lead agency. As of this writing, no California Native American Tribes traditionally and culturally affiliated with the region have formally requested consultation with the County (as the lead agency under CEQA) regarding TCRs.

The first published opinion interpreting AB 52 was issued by the California Court of Appeal for the First District on March 14, 2025, in Koi Nation of Northern California v. City of Clearlake (Cal. Ct. App., Mar. 14, 2025, No. A169438). The court held that a lead agency's consultation with a California Native American Tribe must be "meaningful" and be documented.

Local

Santa Cruz County General Plan/Local Coastal Program

The Agriculture, Natural Resources and Conservation Element of the County General Plan includes objectives and policies to identify and protect the cultural heritage of Santa Cruz County, including Native American (Tribal) cultural resources. Key policies and implementation strategies from the County General Plan pertaining to TCRs are listed below (County of Santa Cruz 2024):

- **Policy ARC-8.1.1 (Local Coastal Program [LCP]), Evaluation of Native American Cultural Sites.** Protect all archaeological resources until they can be evaluated. Prohibit any disturbance of Native American Cultural Sites, archaeological sites, or identified tribal cultural resources without an appropriate permit. Maintain the Native American Cultural Sites ordinance.
- **Policy ARC-8.1.6 (LCP), Environmental Review.** Environmental review shall be required for any project with the potential to significantly impact archaeological or tribal cultural resources.
- **Policy ARC-8.1.7 (LCP), Consultation for Discretionary Projects.** The County shall consult with any California Native American Tribe that requests notice of projects in the geographic area traditionally affiliated with the Tribe prior to the release of a Negative Declaration or Environmental Impact Report, pursuant to Public Resources Code sections 21073 and 21080. If tribal cultural resources are identified, the County shall work with the affected Tribe to identify appropriate mitigation measures to protect the resource.
- **Policy ARC-8.1.8 (LCP), Consultation for General Plan Amendments.** The County shall consult with California Native American tribes as identified by the California Native American Heritage Commission (NAHC) prior to an amendment or update to the General Plan and prior to the designation of open space in order to identify and protect Native American cultural resources on land affected by the proposal, pursuant to California Government Code Section 65352.3.
- **Implementation Strategy ARC-8.1b.** Consult with local Tribes as identified by the NAHC to identify tribal cultural resources, archaeological sites, and other resources and preserve confidentiality.
- **Implementation Strategy ARC-8.1c.** Review and update County policies, regulations and procedures to ensure consistency with state and federal laws regarding Tribal consultations, CEQA review of archaeological resources and tribal cultural resources, NAHC recommendations for cultural resources assessments, and other laws protecting Native American cultural resources.
- **Implementation Strategy ARC-8.1g.** Include appropriate archaeological resources, tribal cultural resources, and other California Native American prehistoric, archaeological, cultural, spiritual, and ceremonial places in the public domain through donations or through purchase as part of

open space and other programs. Consult with Native American tribes as identified by the NAHC prior to designating any Native American resources as open space in order to treat the resource appropriately and preserve confidentiality, in accordance with California Government Code Section 65562.5.

- **Implementation Strategy ARC-8.1h.** Encourage educational programs on the need for preservation of archaeological resources and tribal cultural resources, consulting with local Tribes as appropriate.

Santa Cruz County Code

The Santa Cruz County Code, Title 16, Environmental and Resource Protection, includes regulations to implement policies in the County General Plan/LCP. Chapter 16.40, Native American Cultural Sites, identifies when archaeological surveys and reports are required and outlines criteria for Native American cultural studies. Section 16.40.040 identifies the necessary actions when Native American cultural sites or human remains are discovered during the review of a proposed project or during excavation or other ground-disturbing activities. Refer to Section 3.5.2, Regulatory Setting, for additional information.

3.18.3 Methodology and Significance Thresholds

Methodology

The analysis of TCRs is based on the Phase I cultural resource inventory of the Project area between 2022 and 2024 that included archival research and a background records search at the Northwest Information Center at Sonoma State University, NAHC Sacred Lands File search, outreach to Native American Tribes identified by the NAHC, and a pedestrian survey of the Project area (Albion 2024).

Based on these results, Albion completed an extended Phase I study of three areas, which included a review of the ethnographic setting of the Project area and a consideration of the results of AB 52 consultation between the County and local Native Americans (Albion 2025).

On August 3, 2023, the NAHC provided a list of seven Tribal representatives who may have knowledge of TCRs in the Project area. The County submitted outreach letters via mail or email to those Tribal organizations in 2024 as follows:

- Amah Mutsun Tribal Band of Mission San Juan Bautista
- Amah Mutsun Tribal Band
- Indian Canyon Mutsun Band of Costanoan
- Costanoan Ohlone Rumsen-Mutsen Tribe
- Wuksachi Indian Tribe/Eshom Valley Band

Although Native American outreach was conducted in 2024, Albion also assisted the County with formal AB 52 consultation, which was requested by one of the Tribal representatives. Albion sent AB 52 consultation request letters on June 12, 2025, containing a brief Project description and maps of the Project area of potential effects to the individuals/Tribes on the above list, as identified by the NAHC.

Additionally, on April 21, 2026, in response to the County's request for Senate Bill 18 support (in light of the proposed General Plan amendments), the NAHC provided a list of 11 tribal representatives who may have knowledge of potential impacts to traditional lands or places located in the geographic area. The County submitted letters via mail and/or email to those Tribal organizations in 2026 as follows:

- Amah Mutsun Tribal Band of Mission San Juan Bautista
- Amah Mutsun Tribal Band
- Indian Canyon Mutsun Band of Costanoan
- Costanoan Rumsen Carmel Tribe
- Costanoan Ohlone Rumsen-Mutsen Tribe
- Wuksachi Indian Tribe/Eshom Valley Band

Significance Thresholds

The introduction in Chapter 3, Environmental Impact Analysis, states that the significance thresholds used in this analysis are based on Appendix G of the CEQA Guidelines, which provides a sample Initial Study checklist that includes several factual inquiries related to the subject of TCRs and the other environmental topics. Thus, the thresholds presented below correspond with the questions in the Appendix G Initial Study checklist.

For the purposes of this Environmental Impact Report, a significant impact would occur if implementation of the Project would:

A. Cause a substantial adverse change in the significance of a Tribal Cultural Resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American Tribe, and that is:
    1. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or
    2. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code section 5024.1, the lead agency shall consider the significance of the resource to a California Native American Tribe.

3.18.4 Project Impact Analysis

For this impact analysis, the discussion is of all actions, including construction and operation, and components of the Project were considered. The overall conclusion or significance determination is presented at the end of the discussion, as well as in parentheses at the end of the numbered impact statement.

As described in Chapter 2, Project Description, the Project components include:

1. Transfer Stations (Transfer Station A and Transfer Station B)
2. Organics Diversion Facility (ODF Option 1 and ODF Option 2)
3. Landfill Closure and Revegetation
4. Optional Improvements: a) Internal Access Road Improvements, b) Scale House Upgrades, c) Recycling Center Upgrades, d) Equipment Parking and Storage Area
5. General Plan/Local Coastal Program Land Use Designation and Zoning Map Amendments

Threshold A:	Cause a substantial adverse change in the significance of a Tribal Cultural Resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American Tribe, and that is: 1. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or 2. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code section 5024.1, the lead agency shall consider the significance of the resource to a California Native American Tribe.

Impact TCR-1 THE PROJECT MAY CAUSE A SUBSTANTIAL ADVERSE CHANGE IN THE SIGNIFICANCE OF A TRIBAL CULTURAL RESOURCE. (LESS THAN SIGNIFICANT IMPACT WITH MITIGATION)

Project construction requires ground disturbance for the primary Project components (transfer stations, organic diversion facility, and landfill closure) and the optional improvements (internal road improvements, scale house and recycling center upgrades, and equipment parking and storage area). Ground-disturbing activities may unearth or adversely affect previously undiscovered TCRs, similar to Impact CR-2, Ground-Disturbing Activities during Project Construction May Unearth or Adversely Impact Subsurface Archaeological Resources, discussed in Section 3.5.

Albion conducted a Phase I cultural resource inventory of the Project area between 2022 and 2024 that included archival research and a background records search at the Northwest Information Center at Sonoma State University, NAHC Sacred Lands File search, outreach to identified Native American Tribes, and a pedestrian survey of the Project area (Albion 2024).

The records search indicated that three cultural resource studies were conducted within the Project area, and six studies within a 0.25-mile radius of it. No previously recorded cultural resources were identified within the Project area, although four were identified within a 0.25-mile radius. No cultural resources were observed during the visual inspection of the Project area. However, ground visibility was poor to moderate, and much of the area was obscured by the built environment or dense underbrush (paved roads, active waste facility).

The NAHC Sacred Lands File search was positive and identified a list of Tribal stakeholders. Albion conducted Native American outreach and consultation in three phases. The first phase included the cultural resources inventory completed in 2024 (Albion 2024), the second phase took place in 2025, and the third phase took place in 2026.

During the first phase, Albion contacted the list of Tribal stakeholders on August 3, 2023, and was able to communicate with representatives from four Tribal groups, share the information gathered to date about the archaeology within the Project area, and document the Native American community's concerns about the cultural resource sensitivity of the Project area and vicinity, as well as potential Project impacts. All four Tribal groups provided a variety of recommendations for measures to protect cultural resources, including a cultural resource awareness training, construction monitoring by a qualified archaeologist and member from the local Native American community, and AB 52 Tribal consultation.

During the second phase, AB 52 consultation notification letters were mailed via the U.S. Postal Service to the Tribes listed above on June 12, 2025. The letters contained a brief Project description and maps of the Project area of potential effects. Follow-up emails were sent on June 16, 2025. Albion also reached out to the Costanoan Rumsen-Mutsen Tribe via phone on August 12 and 14, 2025; however, no reply was received.

Albion received one response to the AB 52 consultation notification letter from the Amah Mutsun Tribal Band requesting consultation on the Project. The consultation meeting was conducted on August 4, 2025. Consultation largely covered the current Project description, Project alternatives under consideration, and the known cultural resources in the vicinity. The Tribe conveyed that the Project area is generally highly sensitive for cultural resources, and there is a need for monitoring in areas where cultural resources are present and where they are likely to be present. No TCRs were identified within the Project area during the consultation process or as part of the cultural resource studies prepared for the Project.

In April 2026, as part of the Senate Bill 18 tribal consultation process, a new tribal contact list was requested from the NAHC, which provided a list of six tribal organizations (as listed above). On May 15, 2026, the County mailed notification letters containing a brief description and a map of the Proposed Project and the Alternative 3 to the six tribal organizations; and follow-up emails were sent on May 18, 2026. The County received one response to the Senate Bill 18 letter from the Indian Canyon Mutson Band of Costanoan requesting consultation, and a consultation meeting was conducted on July 14, 2026. No TCRs were identified within the area during the consultation process or as part of the cultural resource studies.

Although no TCRs have been identified within the Project area, the positive Sacred Lands File results received from the NAHC indicate that Santa Cruz County in general has a high sensitivity to containing Native American habitation sites; and during Tribal consultation, the Tribal representative conveyed the Project area is generally highly sensitive for cultural resources. Ground disturbance during Project construction has the potential to encounter unknown TCRs. Therefore, the Project has the potential to impact TCRs through ground disturbance and subsequent damage that could result a substantial adverse change in the significance of the resource.

This potentially significant impact would be reduced to a less than significant level by complying with Santa Cruz County Code, Section 16.40.040, which identifies the necessary actions when Native American cultural sites or human remains are discovered during ground-disturbing activities, and by implementing Mitigation Measure CR-2a (Stop Work if Inadvertent Encounter of Undiscovered Archaeological Resources during Ground-Disturbing Activities) and Mitigation Measure CR-2b (Archaeologist and Native American Monitoring during Initial Ground-Disturbing Activities in Specific Areas).

In summary, the Project, including the primary components and optional improvements described above, as well as the associated General Plan/LCP Land Use Designation and Zoning Map Amendments, would not result in a substantial adverse change in the significance of a TCR, with Santa Cruz County Code, Section 16.40.040, compliance and implementation of the mitigation measures to stop work if resources are discovered during construction (Mitigation Measure CR-2a) and to monitor in the three identified areas (Mitigation Measure CR-2b). Therefore, the impact on TCRs would be **Less than Significant with Mitigation** (Mitigation Measures CR-2a and CR-2b).

Mitigation Measure CR-2a: Stop Work if Inadvertent Encounter of Undiscovered Archaeological Resources during Ground-Disturbing Activities

Refer to the complete description in Section 3.5.4, Project Impact Analysis, under Impact CR-2.

Mitigation Measure CR-2b: Archaeologist and Native American Monitoring during Initial Ground-Disturbing Activities in Specific Areas

Refer to the complete description in Section 3.5.4 under Impact CR-2.

3.19 Utilities and Service Systems

This section describes existing utilities and service systems, outlines the regulatory framework applicable to utilities and service systems, and evaluates impacts related to utilities and service systems as a result of the Buena Vista Landfill Redevelopment Project (Project) construction and operation. Whereas wastewater conveyance and water supply are evaluated in this section, Section 3.10, Hydrology and Water Quality, provides a more detailed analysis of runoff patterns and surface water quality. **Table 3.19-1** presents a summary of potential impacts related to utilities and service systems.

Table 3.19-1. Summary of Project Impacts Related to Utilities and Service Systems

Impact	Significance before Mitigation	Mitigation	Significance after Mitigation
UTIL-1. The Project would require the relocation or replacement of water, wastewater, stormwater, and electricity conveyance infrastructure.	Less than Significant	None Required	Less than Significant
UTIL-2. Sufficient water supplies are available to serve construction and operation of the Project.	Less than Significant	None Required	Less than Significant
UTIL-3. The Project would not generate wastewater in excess of existing treatment capacity.	Less than Significant	None Required	Less than Significant
UTIL-4. The Project would not generate solid waste in excess of local landfill capacity and would comply with applicable regulations related to solid waste.	Less than Significant	None Required	Less than Significant

Notes: The impact, significance determination, and mitigation apply to the Project as a whole, considering all Project components, unless otherwise noted.

3.19.1 Existing Conditions

Water Supply

Santa Cruz County's (County's) water supply is derived from local surface water (streams and reservoirs – 20 percent of supply) and groundwater (80 percent of supply), which are fed entirely by precipitation and do not receive any imported water. A small amount of recycled water is produced for irrigation (4 percent) (Santa Cruz County 2020).

Domestic supply within the region is provided by five large public agencies, four medium water systems, 115 small water systems, and some 8,000 individual wells (Santa Cruz County 2024a). Within the County, drinking and recycled water services are provided by other agencies, including the City of Santa Cruz, Soquel Creek Water District, Scotts Valley Water District, San Lorenzo Valley Water District, Pajaro Valley Water Management Agency (PV Water), City of Watsonville, and Central Water District.

The Project area is located within the Pajaro Valley groundwater basin managed by PV Water. The landfill receives potable water from the Rountree Well #1/No. 1022 at the County Rountree Medium (Jail) Facility that is maintained by County Sanitation. The landfill uses non-potable from Roundtree Well #2/No.1021 for dust control application. The pumps for this non-potable water well are maintained by landfill employees. The County pays a water augmentation fee to PV Water for use of groundwater within the basin.

Pajaro Valley Water Management Agency

The Project area is located within the PV Water service area (Division A) (PV Water 2022). PV Water is a state-chartered water management agency formed in 1984 to achieve a sustainable groundwater basin. PV Water aims to efficiently and economically manage existing and supplemental water supplies to prevent further increases in and to accomplish the continuing reduction of long-term groundwater over-draft. PV Water manages about 120 square miles of the 1,300-square-mile Pajaro Valley Watershed (PV Water 2024). The metered well numbers on the Project area used by PV Water are No. 1021 for the landfill well and No. 1022 for the metered well used for potable water (Meusel, pers. comm. 2023).

Potable water at the Buena Vista Landfill comes from a shared well with the Rountree Medium Facility (Jail). A water well in the Project area is also used for dust suppression water.

Wastewater

County Sanitation, which is part of the Santa Cruz County Community Development & Infrastructure Department, is responsible for environmental compliance and collection of wastewater (sewage) within three sanitation districts and five County sewer service areas**.** The Project area and surrounding area are outside the County Sanitation's service areas and use septic and wastewater holding tanks. Wastewater at the Buena Vista Landfill is held in on-site underground holding tanks, pumped out by a private vendor, and taken to the Watsonville Wastewater Treatment Facility as needed (Pruitt, pers. comm. 2025).

Stormwater Drainage

The County prepares a Stormwater Management Program in response to the National Pollutant Discharge Elimination System (NPDES) General Permit for agencies designated by the State Water Resources Control Board. Under this general permit, the agencies are mandated to implement specific types of urban runoff pollutant control measures and submit annual reports to the Central Coast Regional Water Quality Control Board.

At the Buena Vista Landfill, drainage control facilities consist of perimeter and bench ditches and downdrains. Stormwater management consists of water quality units with bypass features. A water quality unit is located at the north end of the entrance facility. Outer landfill slopes and temporary excavation cut slopes are hydroseeded annually as needed. Storm flows from these areas are conveyed directly to the perimeter ditch, which includes check dams to slow water velocity before discharging to roadside drainage conveyances. Runoff from surrounding roads is also intercepted by these perimeter drainage conveyances. Additional detail on stormwater drainage can be found in Section 3.10.

Electricity and Natural Gas

Central Coast Community Energy provides electrical service in the County, including the Buena Vista Landfill, using infrastructure provided by Pacific Gas & Electric Company (PG&E).

Natural gas service is provided in the County, including the Buena Vista Landfill, by PG&E.

It should also be noted that, from approximately 2004 to 2026, the County had been working with Ameresco Inc. (Ameresco) to operate a gas-to-renewable energy facility at the Buena Vista Landfill, whereby landfill gas (a byproduct of the natural decomposition of solid waste) is converted to

electricity, which Ameresco sold to users outside the County, such as the City of Palo Alto. The County is seeking a new energy reuse partner.

Solid Waste

Recycling and Solid Waste Services, a division of the Santa Cruz County Community Development & Infrastructure Department, sponsors a range of recycling and waste reduction programs that have resulted in significant diversion of waste from landfill disposal. Recycling and Solid Waste Services is responsible for the operation and administration of solid waste diversion and disposal in the unincorporated areas of Santa Cruz County. Recycling and Solid Waste Services operates the County's two solid waste facilities, the Ben Lomond Transfer Station in north County and the Buena Vista Landfill in south County. Both facilities include household hazardous waste collection sites, organics processing and transfer sites, recycling centers, and waste disposal sites for County residents, businesses, and commercial waste haulers. Materials recycling efforts include metals, glass, plastics, paper, cardboard, mattresses, e-waste, tires, carpets, construction and demolition materials, appliances, and batteries. Organics diversion for reuse includes wood waste, yard waste, food waste, pallets, sheetrock, and other compostable materials. Regulations continue to evolve and expand the materials that must be diverted from the waste stream.

The Ben Lomond Transfer Station was built in 1990 adjacent to the former Ben Lomond Landfill as a resource for north County residents to continue to recycle and dispose of their solid waste after the Ben Lomond Landfill closed. The Ben Lomond Transfer Station also includes a household hazardous waste facility. Recyclables, organics, and solid waste are sorted and transported from the Ben Lomond Transfer Station to a recycling facility, an organics composting facility, or a landfill. Refuse is taken to the Monterey Regional Waste Management District's ReGen Monterey Landfill in Marina, California, under an agreement with the Monterey Regional Waste Management District. ReGen Monterey Landfill is expected to have capacity for approximately 90 more years, and future developments in recycling and diversion are anticipated to extend the life expectancy beyond 90 years (Santa Cruz County 2022).

The Buena Vista Landfill is a Class III municipal solid waste landfill that receives non-hazardous solid waste and is a center for waste handling, recycling collection, organics diversion, and other waste reduction activities necessary to comply with state and federal laws. Additionally, there is a household hazardous waste collection facility that accepts materials to be transferred for appropriate off-site recycling and disposal. As discussed in Chapter 1, Introduction, the Buena Vista Landfill is currently permitted to reach a maximum elevation of 200 feet and, as of November 2022, has an estimated remaining capacity or site life ranging from 6 to 16 years (2028–2038)

3.19.2 Regulatory Setting

This section describes the federal, state, regional, and local plans, policies, and laws relevant to utilities and service systems for the Project.

Federal

Clean Water Act

The primary goals of the federal Clean Water Act (CWA) (33 USC 1251, et seq.) are to restore and maintain the chemical, physical, and biological integrity of the nation's waters and to make all surface waters fishable and swimmable. The CWA forms the basic national framework for the

management of water quality and the control of pollutant discharges. The CWA sets objectives to achieve the above-mentioned goals. The CWA objectives include regulating pollutant and toxic pollutant discharges; providing for water quality that protects and fosters the propagation of fish, shellfish, and wildlife; developing waste treatment management plans; and developing and implementing programs to control non-point sources of pollution.

National Pollutant Discharge Elimination System

The NPDES permit program was established in 1972 under the federal CWA to regulate municipal and industrial discharges to surface waters of the United States. Federal NPDES permit regulations have been established for broad categories of discharges, including point source municipal waste discharges and non-point source stormwater runoff. NPDES permits generally identify effluent and receiving water limits on allowable concentrations and mass emissions of pollutants contained in the discharge; prohibitions on discharges not specifically allowed under the permit; and provisions that describe required actions by the discharger, including industrial pretreatment, pollution prevention, self-monitoring, and other activities. Wastewater discharge is regulated under the NPDES permit program for direct discharges into receiving waters and by the National Pretreatment Program for indirect discharges to a sewage treatment plant.

The Municipal NPDES program is administered by the State Water Resources Control Board (SWRCB) through the Regional Water Quality Control Boards (RWQCBs) and requires municipalities to obtain permits that outline programs and activities to control wastewater and stormwater pollution. The federal CWA prohibits stormwater discharge from construction projects unless the discharge complies with an NPDES permit. The SWRCB is the permitting authority in California and adopted an NPDES General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit) (Order 2022-0057-DWQ). Containment and spill cleanup requirements are encompassed in the Project Stormwater Pollution Prevention Plan, developed for the Construction General Permit. The Stormwater Pollution Prevention Plan also includes inspections for spills, a requirement that chemicals be stored in watertight containers with secondary containment to prevent spillage or leakage, and procedures for addressing hazardous and non-hazardous spills, including a spill response and implementation procedure, on-site equipment for cleanup and spills, and spill training for construction personnel.

Safe Drinking Water Act

The Safe Drinking Water Act, enacted in 1974, ensures drinking water quality. The law requires actions to protect drinking water and its sources (e.g., rivers, lakes, reservoirs, springs, and groundwater wells) and applies to public water systems with at least 15 service connections or that serve at least 25 people for at least 60 days a year. It authorizes the U.S. Environmental Protection Agency to set national standards for drinking water to protect against health effects from exposure to naturally occurring and human-made contaminants. In addition, the U.S. Environmental Protection Agency works with states, localities, and water suppliers that implement the standards. The U.S. Environmental Protection Agency standards are set under the National Primary Drinking Water Regulations, which include legally enforceable primary standards and treatment techniques that apply to public water systems.

State

Water

Drinking water quality in California is regulated by the California Department of Public Health, the SWRCB, and the nine RWQCBs. The Project area is within the boundaries of the Central Coast RWQCB. The California Code of Regulations, Title 22 (State Drinking Water Standards), is the primary body of state legislation providing water system standards, including those for water supply, storage capacity, and water quality. Other considerations include the Porter-Cologne Water Quality Control Act, the Safe Drinking Water Act, and the SWRCB Non-degradation Policy. For additional information, refer to Section 3.8.2, Regulatory Setting, in Section 3.8, Greenhouse Gas Emissions.

Senate Bill (SB) 610 (2002) amended the California Water Code to require detailed analysis of water supply availability for certain development Projects. The primary purpose of SB 610 is to improve the linkage between water and land use planning by ensuring greater communication between water providers and local planning agencies, and that land use decisions for certain types of development projects are fully informed as to whether sufficient water supplies are available to meet project demands. SB 610 requires the preparation of a Water Supply Assessment for a project that is subject to the California Environmental Quality Act (CEQA) and involves any of the following:

- Residential development of 500 or more dwelling units
- Shopping centers or businesses employing more than 1,000 people or having more than 500,000 square feet of floor space
- Commercial office building employing more than 1,000 people or having more than 250,000 square feet of floor space
- Hotel, motel, or both having more than 500 rooms
- Industrial, manufacturing, or processing facility or industrial park planned to house more than 1,000 people, occupying more than 40 acres of land, or having more than 650,000 square feet of floor space
- Mixed-use project including one or more of the projects specified in California Water Code, Section 10910
- Any project that would demand an amount of water equivalent to, or greater than, the amount of water required by a 500-dwelling unit Project

Because the Project does not fall under any of the above screening criteria, the requirements under SB 610 do not apply.

Assembly Bill (AB) 1881, the Model Water Efficient Landscape Ordinance, required cities and counties to adopt landscape water conservation ordinances by January 31, 2010, or to adopt a different ordinance that is at least as effective in conserving water as the Water Efficient Landscape Ordinance. The County adopted the Water Conservation – Water Efficient Landscaping Ordinance, Chapter 13.13 of the County Code, pursuant to AB 1881. Executive Order B-29-15 required the state to revise the Model Water Efficient Landscape Ordinance to increase water efficiency standards for new and retrofitted landscapes through more efficient irrigation systems, gray water usage, and on-site stormwater capture and by limiting the portion of a landscape that can be covered in turf. Executive

Order B-29-15 also requires reporting on the implementation and enforcement of local ordinances. However, the Project does not include landscaping.[1] Therefore, AB 1881 would not apply.

Wastewater

The RWQCBs set specific requirements for community and individual wastewater treatment, disposal, and reuse facilities by issuing waste discharge requirements under the California Water Code, Section 13260. Requirements for disposal are set to protect present and potential beneficial uses of the water that receives the treated effluent. The California Department of Public Health sets specific requirements for treated effluent reuse, or recycled water, through Title 22 of the California Code of Regulations. These requirements are primarily set to protect public health.

California Code of Regulations, Title 22, Division 4, Chapter 3, Sections 60301 through 60355, are used to regulate recycled wastewater and are administered jointly by the California Department of Public Health and the RWQCBs. Title 22 contains effluent requirements for four levels of wastewater treatment, from non-disinfected secondary recycled water to disinfected tertiary recycled water. Higher levels of treatment have higher effluent standards, allowing for a greater number of uses under Title 22, including irrigation of freeway landscaping, pasture for dairy animals, parks and playgrounds, and vineyards and orchards for disinfected tertiary recycled water.

Solid Waste

The California Integrated Waste Management Act of 1989 (AB 939) set a requirement for cities and counties throughout the state to divert 50 percent of all solid waste from landfills by January 1, 2000, through source reduction, recycling, and composting. To help achieve this, the act required that each city and county prepare and submit a Source Reduction and Recycling Element. AB 939 also established the goal for all California counties to provide at least 15 years of ongoing landfill capacity.

In 2007, SB 1016 subsequently amended AB 939 such that it now entails the 50 percent diversion requirement to be calculated in a per capita disposal rate equivalent. The California Department of Resources Recycling and Recovery (CalRecycle) sets a target per capita disposal rate for each jurisdiction, and each jurisdiction must submit an annual report to CalRecycle with an update of its progress in implementing diversion programs and its current per capita disposal rate. AB 341 was passed in 2011, setting a state policy goal whereby no less than 75 percent of solid waste generated would be source reduced, recycled, or composted by 2020.

In 2008, the California Building Standards Commission adopted the nation's first green building standards. The California Green Building Standards Code (Part 11, Title 24, known as "CALGreen") was adopted as part of the California Building Standards Code. Section 4.408, Construction Waste Reduction Disposal and Recycling, mandates that in the absence of a more stringent local ordinance, a minimum of 50 percent of non-hazardous construction and demolition debris must be recycled or salvaged. The code requires the applicant to have a waste management plan for on-site sorting or construction debris that is submitted to the County for approval.

[1] Areas disturbed by construction activities would be revegetated with native species and watered periodically until established (e.g., by hand or small water truck) in accordance with recommendations made by a qualified biologist.

Local

Santa Cruz County General Plan/Local Coastal Program

The Parks, Recreation, and Public Facilities and the Agriculture, Natural Resources, and Conservation Elements of the County General Plan/Local Coastal Program (LCP), adopted in 2022 and certified in 2024, include objectives and policies relating to the use and provision of public utilities (Santa Cruz County 2024b). Key policies relevant to the Project are listed below:

- **PPF-4.1.1 (LCP), Linking Growth to Water Supplies.** Coordinate with all water purveyors and water management agencies to ensure that land use and growth management decisions are linked directly to the availability of adequate, sustainable public and private water supplies.
- **PPF-4.1.2 (LCP), Written Commitments Confirming Water Service Required for Permits.** Concurrent with project application, or prior to issuance of a building permit as authorized by the Planning Director, require a written commitment from the water agency that verifies the capability of the system to serve the development. Projects shall not be approved, or building permits shall not be issued, in areas that do not have a proven, adequate water supply. A written commitment is a letter from the agency guaranteeing that the required level of service for the project will be or is available, prior to the issuance of building permits, or in the case of a subdivision, prior to filing the Final Map or Parcel Map. The County decision making body shall not approve any development project unless it determines that such Project has adequate water supply available.
- **ARC-4.2.12 (LCP), Drainage Design.** Require retention of stormwater runoff from impervious surfaces for all new development and redevelopment.
- **PPF-4.4.1 (LCP), New Development and Redevelopment.** Require runoff levels to be maintained at predevelopment rates for a minimum design storm as determined by County Design Criteria by requiring projects to provide both on and off-site improvements, including on-site percolation methods. Utilize on-site detention methods only where percolation methods are not feasible. In addition, development and use permits shall comply with any and all relevant stormwater program requirements under the State Water Resources Control Board Agriculture, Cannabis Cultivation, Wastewater, and other regulatory programs.
- **PPF-4.4.5 (LCP), Control Surface Runoff.** Require new development and redevelopment to reduce the discharge of stormwater pollutants to the maximum extent practicable in order to protect surface and groundwater quality and watersheds. Condition development project approvals to provide ongoing maintenance for the stormwater management facilities associated with their developments.
- **PPF-4.5.1, Materials Recovery.** Establish, in conformance with state law, materials recovery through recycling, reuse and composting, as the primary and fundamental strategy of solid waste management by the County, with landfill disposal as a secondary and essential component. Designate materials recovery and reuse Projects as a funding priority in allocating capital expenditures for solid waste management.
- **PPF-4.5i.** Continue the use of the Buena Vista Landfill for landfill disposal and the Ben Lomond Transfer Station for solid waste transfer to Buena Vista or other landfill site. Utilize disposal methods and diversion practices at the Buena Vista Landfill to extend the landfill lifespan as long as possible. Begin planning for closure of the landfill and explore possible uses including converting it to a transfer station to address the County's critical solid waste needs. (Responsibility: CDID, Board of Supervisors).

Santa Cruz County Code

Title 7, Health and Safety, of the County Code regulates solid waste, wastewater, water, and stormwater, among other things. Chapter 7.20 focuses on regulations and requirements for solid waste. Specifically, Section 7.20.030 requires garbage collection services to be properly licensed, Sections 7.20.270 prohibit the mixing of recoverable materials and garbage, and Sections 7.20.120 and 7.20.160 require timely removal of garbage from garbage containers. Chapter 7.38 addresses requirements for the installation and use of sewage treatment and disposal facilities in the County. Chapter 7.71 regulates water delivery for domestic use. Chapter 7.79 discusses storm drain system requirements related to runoff and pollution control.

3.19.3 Methodology and Significance Thresholds

Methodology

This analysis considers the potential environmental impacts of the Project on utilities and service systems. Assessment of impacts to utilities and service systems is based on a review of site information, existing conditions, and proposed uses. The analysis presented herein is also based on state and County information regarding the capacity and features of existing utility infrastructure, including potable water, wastewater, and solid waste infrastructure and facility capacity.

Significance Thresholds

The introduction in Chapter 3, Environmental Impact Analysis, states that the significance thresholds used in this analysis are based on Appendix G of the CEQA Guidelines, which provides a sample Initial Study checklist that includes a number of factual inquiries related to the subject of utilities and service systems, as well as other environmental topics. Thus, the letters and thresholds presented below correspond with the questions in the Appendix G Initial Study checklist.

For purposes of this Environmental Impact Report (EIR), a significant impact would occur if implementation of the Project would result in any of the following conditions:

A. Require or result in the relocation or construction of new or expanded water, wastewater treatment, stormwater drainage, electric power, or natural gas facilities, the construction or relocation of which could cause significant environmental effects.

B. Have insufficient water supplies available to serve the Project and reasonably foreseeable future development during normal, dry and multiple dry years.

C. Result in a determination by the wastewater treatment provider which serves or may serve the Project that it has inadequate capacity to serve the Project's Projected demand in addition to the provider's existing commitments.

D. Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals.

E. Not comply with federal, state, and local management and reduction statutes and regulations related to solid waste.

3.19.4 Project Impact Analysis

For each impact, the discussion is separated into Project construction, Project operation, and Project components as needed to describe the potential impact. The overall conclusion or

significance determination is presented at the end of the discussion, as well as in parentheses at the end of the numbered impact statement.

As described in Chapter 2, Project Description, the Project components include:

1. Transfer Stations (Transfer Station A and Transfer Station B)
2. Organics Diversion Facility (ODF Option 1 and ODF Option 2)
3. Landfill Closure and Revegetation
4. Optional Elements: a) Internal Access Road Improvements, b) Scale House Upgrades, c) Recycling Center, d) Equipment Parking and Storage Area
5. General Plan/Local Coastal Program Land Use Designation and Zoning Map Amendments

The General Plan/LCP Land Use Designation and Zoning Map Amendments associated with the Project components listed above would not impact utilities and service systems and, therefore, are not discussed further in this section.

Threshold A:	Require or result in the relocation or construction of new or expanded water, wastewater treatment, stormwater drainage, electric power, or natural gas facilities, the construction or relocation of which could cause significant environmental effects.

Impact UTIL-1 THE PROJECT WOULD REQUIRE THE RELOCATION OR REPLACEMENT OF WATER, WASTEWATER, STORMWATER, AND ELECTRICITY CONVEYANCE INFRASTRUCTURE. (LESS THAN SIGNIFICANT IMPACT)

Construction of the Project would necessitate the relocation, modification, and/or replacement of existing water, wastewater, stormwater drainage, electricity, natural gas, and telecommunications facilities infrastructure. Expected construction impacts to these utilities and service systems are discussed below.

Transfer Stations (Transfer Station A and Transfer Station B)

Construction of Transfer Stations A and B would involve extension or relocation of utilities to support operation of the transfer stations. The Project would connect to existing utility systems currently serving the landfill. Each transfer station would include an office, restrooms, and solid waste collection operations that require utilities.

Water

New water service lines for operational use and fire suppression would be extended onto the Transfer Station A site from the existing water tanks located at the neighboring Rountree Medium Facility (Jail), requiring new connection pipelines installed from the Rountree Medium Facility (Jail) connection running south to north between the landfill and Harkins Slough Road to Transfer Station A.

New water service lines for operational use and fire suppression would also be extended to Transfer Station B from the existing water lines on site, which convey water from the existing water tanks at the Rountree Medium Facility (Jail) and are currently serving the maintenance facility on this site.

Both Transfer Stations A and B would include a fire detection and suppression system.

Wastewater

Wastewater from Transfer Station A would be collected in a new underground holding tank adjacent to the office and pumped out and hauled to a wastewater treatment facility as needed.

This wastewater includes any contact water internal to the transfer station, including the tipping floor where there may be contact water from waste on the floor or from washing the building interior with a pressure washer. An oil/water separator may be installed to separate any unwanted liquids before water reaches the holding tank. For restrooms, wastewater would be collected in a separate holding tank.

Wastewater from Transfer Station B would be collected in a new underground holding tank, which would replace the existing septic tank used for restrooms at the existing maintenance facility, adjacent to the office and pumped out and hauled to a wastewater treatment plant as needed. Like Transfer Station A, this wastewater includes any contact water internal to the transfer station, including the tipping floor where there may be contact water from waste on the floor or from washing the building interior with a pressure washer. An oil/water separator may be installed to separate unwanted liquids before water reaches the holding tank. For restrooms, wastewater would be collected in a separate holding tank.

Currently, for wastewater generated from restroom use at the existing maintenance facility (where Transfer Station B would be located), a private vendor transports the wastewater from the existing holding tank to the Watsonville Wastewater Treatment Facility. The County plans to continue this practice once the transfer stations are operating. For contact water (wastewater generated from waste management and transportation operations), the water would be collected and held in a storage tank for pump and haul removal (refer to Stormwater below).

Stormwater

Stormwater surface runoff from new impervious surfaces built within Transfer Station A facility limits would be collected at the low point on the back (northern) side of the transfer station, directed toward the transfer station, and conveyed via storm pipe infrastructure into the landfill's existing stormwater channel. Filtration measures would be taken to prevent unwanted solid waste or contaminated stormwater from entering the stormwater system. Contact water would be collected and held in a storage tank for pump and haul removal. The realigned Harkins Slough Road would drain in the direction of the transfer station facility to prevent an increase of stormwater runoff to the existing perimeter ditch to the north of the property and to the open space east of the property. Stormwater would be conveyed from the new road to the facility via sheet flow, storm pipe, or a combination to the proposed stormwater recharge chambers located adjacent to Transfer Station A.

Stormwater surface runoff from Transfer Station B would be conveyed via curbing and v-ditches to a series of catch basins within the paved area, similar to current conditions. Stormwater would outfall at the existing outfall east of the facility into the perimeter ditch. Improvements would be made to this outfall to ensure it is adequate to handle an increase in flow if needed.

Electricity

Transfer Stations A and B would connect to electrical infrastructure already serving the site. A new buried electrical power line would be extended from the existing overhead line along Harkins Slough Road to serve Transfer Station A, and a new overhead electrical power line would be extended from an existing overhead line to provide electrical power to Transfer Station B.

The existing overhead lines south of the existing buildings may need to be relocated. Additionally, there would be a backup diesel generator and/or solar panels at both transfer station sites. A heating, ventilation, and air conditioning unit would be provided on the roof above the office or on the ground adjacent to the office.

Natural Gas

Transfer Stations A and B would not require natural gas usage and would not involve the relocation, modification, or replacement of natural gas infrastructure.

Summary

The construction and operation of Transfer Stations A and B would require the extension, relocation, replacement, and/or modification (hereinafter called modifications) of existing water, wastewater, stormwater, and electricity infrastructure, the construction of which could cause environmental impacts. These utility modifications are part of the Project (Transfer Stations A and B), and the potential construction-related impacts of the Project are analyzed by topic throughout this EIR. The potential impacts associated with operation of the utilities needed to serve the transfer stations, such as adequate water supply and wastewater capacity, are addressed under Impacts UTIL-2 and UTIL-3. Once the Project is implemented, these utilities would be similar to existing conditions and adequate for the Project's utility needs, such that additional new or expanded facilities would not be necessary. Therefore, modifying existing utilities infrastructure included as part of construction and operation of Transfer Stations A and B would not cause significant environmental effects that are not already considered in this EIR. Therefore, this impact would be **Less than Significant**. No mitigation is required.

Organics Diversion Facility (ODF Option 1 and ODF Option 2)

Water Facilities

Water would be needed for both ODF Option 1 and Option 2. Both facilities would require dust suppression water to manage fugitive dust and debris from compost preprocessing operations. Additional water would be needed if ODF Option 2 is selected to provide process water for composting materials on site. Water needs at both facilities can be provided by water truck deliveries from on-site water well or water storage tanks, and no water infrastructure would be required.

Wastewater

No sewer lines would be needed to serve ODF Options 1 or 2.

Stormwater

For both ODF Options 1 and 2, the Project would include stormwater management to meet state regulatory compliance requirements. For ODF Option 1, the existing operation area would be primarily paved with this area sloped to the north where the stormwater runoff would be directed by diversion berms into larger stormwater conveyance channels. The area may also include stormwater check dams to slow down the runoff to minimize erosion.

For ODF Option 2, the Old Landfill area would be primarily paved to accommodate operations. Runoff would be conveyed to the existing bioswale located on the south portion of this landfill top deck. Paved stormwater berms may be used to direct the stormwater runoff into this bioswale. Improvements to the swale may be necessary to improve stormwater conveyance to include the addition of erosion control matting and stone check dams.

Electricity

For ODF Option 1, which is status quo, no electrical power facilities would be required. Electric power would be needed for ODF Option 2 to run the fans for the mass-bed aeration system. Electrical power would be extended from the former Ameresco facility located south at the Old Landfill to provide power for ODF Option 2 if needed.

Natural Gas

ODF Options 1 and 2 would not require natural gas use and would not involve the relocation, modification, or replacement of natural gas infrastructure.

Summary

Although the construction and operation of ODF Option 1 and ODF Option 2 would require the relocation and modification of existing water, stormwater, and electricity infrastructure, these improvements are included as part of the Project, and impacts are analyzed throughout this EIR. Once implemented, the proposed utilities improvements would be similar to existing conditions and adequate for utility needs, such that new or expanded facilities would not be necessary. Therefore, the relocation and modification of existing utilities infrastructure included as part of construction and operation of ODF Option 1 and ODF Option 2 would not cause significant environmental effects that are not already considered in this EIR and would result in a **Less than Significant Impact**. No mitigation is required.

Landfill Closure and Revegetation

Water Facilities

The Landfill Closure and Revegetation Plan would not require the use of on-site irrigation and, therefore, would not result in a permanent demand for water and would not involve the relocation, modification, or replacement of water facilities.

Sewer

The Landfill Closure and Revegetation Plan would not generate wastewater and would not involve the relocation, modification, or replacement of wastewater facilities.

Stormwater

The proposed surface water management system would control flows on the landfill surface after the final cover has been placed; prevent infiltration, inundation, and ponding on the landfill final cover; minimize erosion, slope failure, washout, and over-topping of associated surface water conveyances; and minimize sediments carried off site. Water quality units would be designed and sized as part of the final closure of the site. Section 3.10 includes additional information regarding drainage and stormwater runoff, including the location of discharge points and regulatory compliance requirements.

Electrical Power

The Landfill Closure and Revegetation Plan would not require connection to existing electrical power and would not involve the relocation, modification, or replacement of electrical power infrastructure.

Natural Gas

The Landfill Closure and Revegetation Plan would not require natural gas use and would not involve the relocation or replacement of natural gas infrastructure.

Summary

Construction and operation of the Landfill Closure and Revegetation Plan would not require the relocation and modification of existing water, sewer, stormwater, electricity, and natural gas infrastructure, which could cause significant environmental effects. Impacts would be **Less than Significant**. No mitigation is required.

Optional Elements: a) Internal Access Road Improvements, b) Scale House Upgrades, c) Recycling Center Upgrades, d) Equipment Parking and Storage Area

The Project could also include the option elements to serve the primary Project purpose and components which could require the relocation and modification of existing water, sewer, stormwater, and electricity.

Anticipated improvements to internal access roads would pave the most frequently used internal roads to improve facility access and reduce the need for dust suppression once paving is complete. Currently, internal road dust suppression uses more water than any other landfill operation. Paving internal roads would free up the majority of dust suppression water for other uses.

The existing recycling center is located south of the existing scale house, and no excavation or trenching is anticipated if it stays at this location. If all or a portion of the recycling activities are relocated, it would be to the currently active landfill area to the northeast, where the planned ODF Option 1 could be located. If the recycling center involves relocation, electricity lines would be extended to that location similar to how it is described above for ODF 1.

In addition, a new parking and storage area for facility trucks and equipment could be located on the southern side of the property on vacant, undeveloped land owned by the County. The parking and storage area would provide both diesel fuel and alternative vehicle fueling because the County's diesel trucks will be replaced by alternative fuel vehicles over time. The site could require electricity if electric vehicle charging infrastructure is added and for exterior lighting standards, which would be extended from adjacent facilities.

Once implemented, the proposed utilities improvements would be similar to existing conditions and adequate for utilities needs such that new or expanded facilities would not be necessary. Therefore, the relocation and modification of existing utilities infrastructure included as part of construction and operation of ODF Option 1 and ODF Option 2 would not cause significant environmental effects that are not already considered in this EIR. Impacts would be **Less than Significant**. No mitigation is required.

Threshold B:	Have sufficient water supplies available to serve the Project and reasonably foreseeable future development during normal, dry and multiple dry years.

Impact UTIL-2 SUFFICIENT WATER SUPPLIES ARE AVAILABLE TO SERVE CONSTRUCTION AND OPERATION OF THE PROJECT. (LESS THAN SIGNIFICANT IMPACT)

Construction

The Project would require water usage during construction for dust suppression of disturbed areas. All Project components would result in ground-disturbing activities that could require water for dust suppression, except the General Plan/LCP Land Use Designation and Zoning Map Amendments. Additionally, water could be used for landfill closure and revegetation, after the final site surface is hydroseeded with grassland, if necessary during drought or low rain years while the grasses are establishing, but there would be no irrigation system.

Water would be provided by water truck deliveries from the on-site water well or water storage tanks. The amount needed for construction and revegetation would be minimal, and the need would be temporary; therefore, existing resources would be adequate to support potential needs. This impact would be **Less than Significant**. No mitigation is required.

Operation

Operation of the Project would require permanent demand for water from Transfer Stations A and B, which would include conference/break rooms, restrooms, hose bibs for periodic washing of interior transfer station walls, and fire suppression. Water for operating the transfer stations would be provided from the existing water tanks at the neighboring Rountree Medium Facility (Jail). The amount of water required would not be substantial, and a portion that would be required is already being used for operation of the existing maintenance facility, which has a conference/breakroom and restrooms.

In addition, water would be needed at both ODF Option 1 and Option 2. Option 1 is status quo; therefore, it would continue to use water for dust suppression to manage fugitive dust and debris from compost preprocessing operations. If ODF Option 2 is selected, additional water would be needed to provide process water for composting materials on site. Water needs for both ODF Options 1 and 2 would be provided by water truck deliveries from an on-site water well or water storage tanks.

As noted under Construction, final landfill closure and revegetation may require water for a few years until grasses on the final face slope are established. Water trucks could be used during the germination period if necessary during drought or low rain years while the grasses are establishing. There would be no irrigation system and minimal ongoing maintenance (e.g., mowing) to improve roadway visibility and reduce fire hazards near buildings.

The on-site well provides adequate water to support the Project fire suppression and water supply needs (Schaaf & Wheeler 2025).

Therefore, existing water supplies would be sufficient to serve the Project during normal, dry, and multiple dry years, and there would be no reasonably foreseeable future development at the landfill. This impact would be **Less than Significant**. No mitigation is required.

Threshold C:	Result in a determination by the wastewater treatment provider which serves or may serve the Project that it has adequate capacity to serve the Project's Projected demand in addition to the provider's existing commitments.

Impact UTIL-3 THE PROJECT WOULD NOT GENERATE WASTEWATER IN EXCESS OF EXISTING TREATMENT CAPACITY. (LESS THAN SIGNIFICANT IMPACT)

Construction

Any wastewater generated during Project construction would be minimal and temporary in nature. Portable toilets provided by a private vendor would be used during the construction of the various Project components. Additionally, the restrooms at the existing maintenance facility (before it is demolished), and new Transfer Stations A and B (once constructed) may be available during construction of the other Project components. These impacts would be **Less than Significant**. No mitigation is required.

Wastewater would be generated at Transfer Stations A and B from the proposed restrooms and from periodic cleaning of the interior transfer station walls where solid waste is collected (called contact water). Wastewater from restrooms and contact water would be held in separate holding tanks. Similar to existing conditions, holding tanks would be pumped out regularly and taken to the Watsonville Wastewater Treatment Facility. There are currently 40–45 staff at the Buena Vista Landfill, and it is anticipated that there would be similar staffing levels with Project implementation. Therefore, wastewater volume associated with restroom use is expected to be similar although redistributed to include the Transfer Station A site. There would be a nominal amount of additional wastewater from periodic cleaning interior transfer station walls (called contact water).

Therefore, wastewater generation under operation of the Project would be similar to wastewater generation under existing landfill conditions, with a minor increase from contact water when washing the tipping floors at Transfer Stations A and B. Therefore, operation of the Project would not generate wastewater in excess of existing treatment capacity, and impacts would be **Less than Significant**. No mitigation is required.

Threshold D:	Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals.
Threshold E:	Not comply with federal, state, and local management and reduction statutes and regulations related to solid waste.

Impact UTIL-4 THE PROJECT WOULD NOT GENERATE SOLID WASTE IN EXCESS OF LOCAL LANDFILL CAPACITY AND WOULD COMPLY WITH APPLICABLE REGULATIONS RELATED TO SOLID WASTE. (LESS THAN SIGNIFICANT IMPACT)

Construction

As described in **Table 2-2**, Construction Estimates, in Chapter 2, the Project would generate an estimated 23,200 cubic yards of construction-related waste. Most of the construction waste would be associated with constructing the transfer stations. This would include lumber, plywood, sheetrock, metal, and other debris from demolishing the existing maintenance facility for Transfer Station B, and primarily vegetation debris from clearing the site for Transfer Station A. Of this construction and demolition debris, approximately 65 to 80 percent is likely to be diverted for recycling and composting under the CALGreen program. Even before diversion, the total construction waste generated by the

Project would equal less than 1 percent of the Buena Vista Landfill's remaining daily capacity. Any excess construction waste could be disposed of at the Monterey Peninsula Landfill, which has an even greater remaining capacity than the Buena Vista Landfill. Therefore, the Project would not generate solid waste in excess of the capacity of local infrastructure or otherwise impair the attainment of solid waste reduction goals. Furthermore, any solid waste receiving facilities that would serve the Project currently operate under California Solid Waste Facilities Permits issued by CalRecycle and, therefore, comply with applicable solid waste statutes and regulations described in Section 3.19.2, Regulatory Setting. Therefore, construction impacts associated with the generation of solid waste would be **Less than Significant**. No mitigation is required.

Operation

The Project purpose is to ensure an orderly landfill closure program that meets state requirements and provides ongoing solid waste handling capabilities to allow the County to meet state-required waste management goals for waste reduction, source separation, materials recycling, household hazardous waste management, and composting.

Because the Buena Vista Landfill is nearing capacity for solid waste disposal, Transfer Stations A and B would be developed at the landfill site to collect the solid waste that cannot be diverted for recycling and composting and transfer it in trucks to a regional landfill. As described in Section 2.4, Project Components, the ReGen Monterey Landfill is located 19 miles south in the City of Marina and is used for planning and analysis purposes based on relative proximity and capacity. ReGen Monterey Landfill has capacity to accept solid waste for approximately 90 more years, and future developments in recycling and diversion are anticipated to extend the life expectancy beyond 90 years (Santa Cruz County 2022).

The County would continue to divert organic materials (e.g., vegetation, yard waste, food waste, clean lumber, sheetrock, pallets) at the Buena Vista facility in compliance with state law organics diversion requirements. The County is considering and would implement one of the following two ODF options for continued organics diversion at the Buena Vista facility, to handle the increase in diverted organic waste requiring processing.

ODF Option 1 would be a continuation of the existing operation located in the northern portion of the landfill, southwest of and near proposed Transfer Station A. The organics diversion operation would continue preprocessing organic materials for off-site composting at the Monterey Bay Regional Waste Management District and other sites in the Monterey Bay region. Preprocessing may include de-packaging food waste, trash and contaminant removal, chipping/grinding wood waste, stockpiling green waste, and other organic feedstock preprocessing tasks.

ODF Option 2 would be the relocation of the existing operation (from the northern portion of the landfill to the southern portion on the Old Landfill site) and expanding the operation to include composting. In addition to preprocessing, ODF Option 2 would also include composting and post-processing steps to produce finished compost on site (within the County-owned Buena Vista Landfill property). Preprocessing would include depackaging of food waste, grinding of yard waste, and mixing of food waste with yard waste. Food and green waste would be mixed in an estimated volumetric ratio to achieve an appropriate moisture content and carbon-to-nitrogen ratio. The mixed feedstocks would then be composted in a mass-bed aeration system (mass-bed aerated static pile). After the mass-bed aerated static pile process is complete, material is removed and stockpiled at a curing pile location for 4 weeks before being screened and then hauled off site to the end user market. Finished compost is typically produced between 2 to 3 months, depending on temperature, moisture, and aeration of the pile, which are carefully monitored during the process.

In addition, the County would continue to accept household hazardous materials and recycling. The Project includes an option to upgrade the existing recycling center, which could include relocating and expanding it on site to accommodate recovery of more mandated materials.

Therefore, the Project would not generate solid waste in excess of the capacity of local infrastructure or otherwise impair the attainment of solid waste reduction goals. Furthermore, the Project would comply with applicable solid waste statutes and regulations described in Section 3.19.2. The impact would be **Less than Significant**.

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3.20 Wildfire

This section describes existing wildfire risk, outlines the regulatory framework applicable to wildfire, and evaluates impacts related to wildfire as a result of the Buena Vista Landfill Redevelopment Project (Project) construction and operation. **Table 3.20-1** presents a summary of potential impacts related to wildfire.

Table 3.20-1. Summary of Project Impacts Related to Wildfire

Impact	Significance before Mitigation	Mitigation	Significance after Mitigation
WILD-1. The Project would not substantially impair an adopted emergency response plan or emergency evacuation plan.	Less than Significant	None	Less than Significant
WILD-2. The Project would not, due to slope, prevailing winds, and other factors, exacerbate wildfire risks and thereby expose Project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire.	Less than Significant	None	Less than Significant
WILD-3. The Project would not require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment.	Less than Significant	None	Less than Significant
WILD-4. The Project would not expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes.	Less than Significant	None	Less than Significant

Notes: The impact, significance determination, and mitigation apply to the Project as a whole, considering all Project components, unless otherwise noted.

3.20.1 Existing Conditions

The Project area is located amid low-lying hills that gradually slope westward toward the coastline between Highway 1 and the Pacific Ocean and is adjacent to lands zoned for public facilities and agricultural uses. The Project area includes slopes created from solid waste disposal.

As described in Section 3.3, Air Quality, the Project area is located in the northwestern sector of the North Central Coast Air Basin (NCCAB), which is dominated by the Santa Cruz Mountains. The semi-permanent high-pressure cell in the eastern Pacific Ocean is the controlling factor in the NCCAB's climate and wind. In the summer, there are persistent west and northwest winds over the entire California coast. In the fall, the surface winds become weak, and the marine layer grows shallow, dissipating altogether on some days. During the winter, this high-pressure cell migrates southward and has less influence on the NCCAB.

California Department of Forestry and Fire Protection (CAL FIRE) has mapped areas of significant fire hazards in the state through its Fire and Resources Assessment Program. These areas are referred to as Fire Hazard Severity Zones (FHSZs) and are identified for Federal Responsibility Areas, where federal agencies have responsibility for wildfire protection; State Responsibility Areas (SRAs), where CAL FIRE

has responsibility for wildfire protection; and Local Responsibility Areas (LRAs), where local fire protection agencies have responsibility for wildfire protection. Different FHSZs (moderate, high, and very high) are based on a hazard scoring system using subjective criteria for fuels, fire history, terrain influences, housing density, and occurrence of severe fire weather where urban conflagration could result in catastrophic losses. The speed and intensity of potential fires within the area, ability of embers to spread and multiply, loading of fuel, topographic conditions, and local climate all culminate to form the fire hazard severity for an area. Very high FHSZs are areas lacking adequate wildland and structural fire protection. In addition to CAL FIRE's FHSZ mapping, the County has also mapped critical and mitigable wildfire hazard areas due to accumulations of wildfire-prone vegetation, steep and dry slopes, and the presence of structures vulnerable to wildland fires.

The risk of significant wildfire exists in Santa Cruz County. The combined influences of local topography, fuels (forest, chaparral, grasslands), and certain weather conditions make Santa Cruz County prone to periodic large wildfire events. The County experiences annual cycles of elevated fire danger, with the wildfire season typically extending from roughly May into late October or early November (Santa Cruz County 2024). For example, in 2008, the Trabing Fire in south County burned 630 acres between Mar Monte Avenue, White Road, Calabasas Road, and Buena Vista Drive in Larkin Valley. In 2020, the CZU Lightning Complex Fire in north County was one of the most destructive fires in the County's history, burning 86,509 acres.

Most of the County's unincorporated area is within the SRA with predominantly moderate to high FHSZs, while very high FHSZs are present within a small area of Bonny Doon and areas along the eastern boundary of the County.

The Project area is not located in the SRA. However, portions of the Project area are located in the LRA, with the eastern portion in a Very High Fire Severity Zone and the western portion in a High Fire Severity Zone.

3.20.2 Regulatory Setting

This section describes the federal, state, regional, and local plans, policies, and laws relevant to wildfire for the Project.

Federal

Federal Wildland Fire Management Policy

The Federal Wildland Fire Management Policy was developed in 1995 and updated in 2001 by the National Wildfire Coordinating Group, a federal multi-agency group that establishes consistent and coordinated fire management policy across multiple federal jurisdictions. An important component of the Federal Wildland Fire Management Policy is the acknowledgment of the essential role of fire in maintaining natural ecosystems. The Federal Wildland Fire Management Policy and its implementation are founded on the following guiding principles (NIFC 2009):

- Firefighter and public safety is the first priority in every fire management activity.
- The role of wildfire as an essential ecological process and natural change agent will be incorporated into the planning process.
- Fire management plans, programs, and activities support land and resource management plans and their implementation.
- Sound risk management is a foundation for all fire management activities.

- Fire management programs and activities are economically viable, based upon values to be protected, costs, and land and resource management objectives.
- Fire management plans and activities are based upon the best available science.
- Fire management plans and activities incorporate public health and environmental quality considerations.
- Federal, state, tribal, local, interagency, and international coordination and cooperation are essential.
- Standardization of policies and procedures among federal agencies is an ongoing objective.

National Fire Plan

The National Fire Plan was a Presidential directive in 2000 as a response to severe wildfires that had burned throughout the United States. The National Fire Plan focuses on reducing fire impacts on rural communities and assurance for sufficient firefighting capacity in the future. It is a long-term investment that will help protect natural resources in addition to communities, as well as a long-term commitment based on cooperation and communication among federal agencies, states, local governments, Tribes, and interested members of the public. There are five key areas addressed under the National Fire Plan:

- Firefighting and Preparedness
- Rehabilitation and Restoration
- Hazardous Fuels Reduction
- Community Assistance
- Accountability

State

California Department of Forestry and Fire Protection

CAL FIRE protects the people of California from fires, responds to emergencies, and protects and enhances forest, range, and watershed values providing social, economic, and environmental benefits to rural and urban citizens. CAL FIRE's firefighters, fire engines, and aircraft respond to an average of nearly 6,000 wildland fires that burn over 260,000 acres each year (CAL FIRE 2025a). CAL FIRE is responsible for the protection of approximately 31 million acres of private land within the state and, at the local level, is responsible for inspecting defensible space around private residences. CAL FIRE is also responsible for enforcing State of California fire safety codes included in the California Code of Regulations and California Public Resources Codes (discussed below).

The Office of the State Fire Marshal supports CAL FIRE's mission by focusing on fire prevention. It provides support through a wide variety of fire safety responsibilities including by regulating buildings in which people live, congregate, or are confined; by controlling substances and products which may, in and of themselves, or by their misuse, cause injuries, death, and destruction by fire; by providing statewide direction for fire prevention in wildland areas; by regulating hazardous liquid pipelines; by reviewing regulations and building standards; and by providing training and education in fire protection methods and responsibilities.

The Board of Forestry and Fire Protection (Board) is a government-appointed body within CAL FIRE. It is responsible for developing the general forest policy of the state, determining the guidance policies of CAL FIRE, and representing the state's interest in federal forest land in California.

Together, the Board and CAL FIRE work to carry out the California Legislature's mandate to protect and enhance the state's unique forest and wildland resources.

The Board is charged with protecting all wildland forest resources in California that are not under federal jurisdiction. These resources include major commercial and non-commercial stands of timber, areas reserved for parks and recreation, woodlands, brush-range watersheds, and all private and state lands that contribute to California's forest resource wealth.

The San Mateo – Santa Cruz Unit of CAL FIRE includes the Counties of Santa Cruz, San Mateo, and San Francisco. The unit primarily operates in the SRAs of San Mateo County and Santa Cruz County, an area of approximately 894 square miles. CAL FIRE is the County Fire Department for both San Mateo County and Santa Cruz County (CAL FIRE 2025a).

California Department of Forestry and Fire Protection 2018 Strategic Fire Plan

California Public Resources Code, Sections 4114 and 4130, authorizes the State Board of Forestry to establish a Strategic Fire Plan for California that identifies the levels of statewide fire protection services. These levels of service recognize other fire protection resources at the federal and local level that collectively provide a regional and statewide emergency response capability. In addition, California's integrated mutual aid fire protection system provides fire protection services through automatic and mutual aid agreements for fire incidents across all ownerships. The Board has adopted these Strategic Fire Plans since the 1930s and periodically updates them to reflect current and anticipated needs of California's wildland.

The Strategic Fire Plan is the state's road map for reducing the risk of wildfire through planning and prevention to reduce firefighting costs and property losses, increase firefighter safety, and contribute to ecosystem health. The Strategic Fire Plan is adopted to better respond to the changes of the environmental, social, and economic landscape of California's wildlands and to provide CAL FIRE, who implements and enforces the Board of Forestry's policies and regulations, with appropriate guidance for adequate statewide fire protection of SRAs.

The latest Strategic Fire Plan is dated August 22, 2018 (2018 Strategic Fire Plan). The 2018 Strategic Fire Plan reflects CAL FIRE's focus on (1) fire prevention and suppression activities to protect lives, property, and ecosystem services, and (2) natural resource management to maintain the state's forests as a resilient carbon sink to meet California's climate change goals and to serve as important habitat for adaptation and mitigation.

California Fire Code

The California Fire Code (CFC), contained in Title 24, Part 9 of the California Code of Regulations, was created by the California Building Standards Commission and incorporates by adoption the International Fire Code of the International Code Council, with California amendments. The CFC establishes regulations to safeguard against the hazards of fire, explosion, or dangerous conditions in new and existing buildings, structures, and premises. The Fire Code also establishes requirements intended to provide safety for and assistance to firefighters and emergency responders during emergency operations. The provisions of the Fire Code apply to the construction, alteration, movement, enlargement, replacement, repair, equipment, use and occupancy, location, maintenance, removal, and demolition of every building or structure throughout California. The Fire Code includes regulations regarding fire-resistance-rated construction, fire protection systems such as alarm and sprinkler systems, fire services features such as fire apparatus access roads, means of egress, fire safety during construction and demolition, and wildland-urban interface areas. The CFC is updated every 3 years. The 2019 CFC was published July 1, 2019, and became effective January 1, 2020.

California Health and Safety Code – State Fire Regulations

Fire regulations for California are established in Section 13000 et seq. of the California Health and Safety Code and include regulations for structural standards (similar to those identified in the California Building Code), fire protection and public notification systems, fire protection devices such as extinguishers and smoke alarms, standards for high-rise structures and childcare facilities, and fire suppression training. The Office of the State Fire Marshal is responsible for enforcement of these established regulations and building standards for all state-owned buildings, state-occupied buildings, and state institutions within California.

California Public Resources Code – Fire Hazard Mapping and Development Standards

California Public Resources Code (PRC), Sections 4201 through 4204, and California Government Code, Sections 51175 through 51189, direct CAL FIRE to map areas of significant fire hazards based on fuels, terrain, weather, and other relevant factors. These FHSZs define the application of various mitigation strategies to reduce risk associated with wildland fires. There are three levels of FHSZ mapped for SRAs (moderate, high, and very high), while only very high FHSZs are identified in LRAs (CAL FIRE 2025b).

PRC Section 4290, Hazardous Fire Areas, includes fire safety regulations, which establish minimum standards for roads for fire equipment access; standards for signs identifying streets, roads, and buildings; private water supply resources for emergency fire use; fuel breaks and greenbelts; basic emergency access; and wildland fuel modification. Section 4290 works in conjunction with current and new building construction development standards in SRAs, defined by the State Board of Forestry and Fire Protection as an area in which the State has primary financial responsibility for preventing and suppressing fires. SRA Fire Safe Regulations do not supersede local regulations that equal or exceed minimum State regulations.

PRC Section 4291, Mountainous, Forest-, Brush- and Grass-Covered Lands, requires the creation of a 100-foot fire break or fire protection area around and adjacent to habitable buildings or structures. These requirements indicate that a person who owns, leases, controls, operates, or maintains a building or structure in, upon, or adjoining a mountainous area, forest-covered lands, brush-covered lands, grass-covered lands, or land that is covered with flammable material, shall maintain defensible space of 100 feet from each side and from the front and rear of the structure. The amount of fuel modification necessary shall take into account the flammability of the structure as affected by building material, building standards, location, and type of vegetation. Fuels shall be maintained in a condition so that a wildfire burning under average weather conditions would be unlikely to ignite the structure. This paragraph does not apply to single specimens of trees or other vegetation that are well-pruned and maintained so as to effectively manage fuels and not form a means of rapidly transmitting fire from other nearby vegetation to a structure or from a structure to other nearby vegetation. The intensity of fuels management may vary within the 100-foot perimeter of the structure, the most intense being within the first 30 feet around the structure. “Fuel” means any combustible material, including petroleum-based products and wildland fuels.

As stated above, most of the County’s unincorporated area is within the SRA with predominantly moderate to high FHSZs, while very high FHSZs are present within a small area of Bonny Doon and areas along the eastern boundary of the County. The Project area is not located in a SRA.

Wildland Urban Interface Building Codes and Standards

The California Building Code (CBC), Part 2 of 24 California Code of Regulations, identifies building design standards, including those for fire safety. The CBC is updated on a 3-year cycle. It is effective statewide, but a local jurisdiction may adopt more restrictive standards based on local conditions under specific amendment rules prescribed by the State Building Standards Commission. Commercial and residential buildings are plan checked by local city and county building officials for compliance with the CBC and any applicable local edits. Typical fire safety requirements of the CBC include the installation of sprinklers in all high-rise buildings and other facilities; the establishment of fire-resistance standards for fire doors, building materials, and particular types of construction in high FHSZs; requirements for smoke detection systems; exiting requirements; and the clearance of debris.

Chapter 7A of the CBC and Chapter R337 of the California Residential Code contain standards associated with the construction of buildings in wildfire-prone areas, including requirements that the exterior of the structure be ignition-resistant and be able to resist the entry of flying embers and fire radiation during a wildfire.

Emergency Response California Emergency Services Act

The California Emergency Services Act was adopted to establish the state's roles and responsibilities during human-caused or natural emergencies that result in conditions of disaster and/or extreme peril to life, property, or resources of the state. This act is intended to protect health and safety by preserving the lives and property of the people of the state.

California Natural Disaster Assistance Act

The California Natural Disaster Assistance Act provides financial aid to local agencies to assist in the permanent restoration of public real property, other than facilities used solely for recreational purposes, when such real property has been damaged or destroyed by a natural disaster. The California Natural Disaster Assistance Act is activated after a local declaration of emergency and the California Emergency Management Agency gives concurrence with the local declaration, or the governor issues a proclamation of a state emergency. Once activated, local government is eligible for certain types of assistance, depending on the specific declaration or proclamation issued.

Local

Santa Cruz County General Plan and Local Coastal Program

The Santa Cruz County General Plan Public Safety Element contains objectives and policies related to fire hazards. Objective 6.5 and Policies 6.5.7 and 6.5.8 require that adequate fire detection and suppression are available for all facilities. These policies are listed below (Santa Cruz County 2024):

- **Policy 6.5.7, Certification of Adequate Fire Protection Prior to Permit Approval**. Require all land divisions, multi-unit residential complexes, commercial and industrial complexes, public facilities, and critical utilities to obtain certification from the appropriate fire protection agency that adequate fire protection is available, prior to permit approval.
- **Policy 6.5.8, Public Facilities within Critical Fire Hazard Areas.** Discourage location of public facilities and critical utilities in Critical Fire Hazard Areas. When unavoidable, special precautions shall be taken to ensure the safety and uninterrupted operation of these facilities.

Based on the County's Geographic Information Systems Online (GIS), the Project area is not located in a Critical Fire Hazard Area (Santa Cruz County 2025).

San Mateo – Santa Cruz County Community Wildfire Protection Plan

Community Wildfire Protection Plans (CWPPs) are authorized and defined in Title 1 of the Healthy Forests Restoration Act of 2003. The San Mateo – Santa Cruz County CWPP identifies the risks and hazards associated with wildland fires in the wildland-urban interface areas of San Mateo and Santa Cruz Counties. The CWPP also identifies recommendations aimed at preventing and reducing both infrastructure and ecosystem damage associated with wildland fires. The CWPP documents suggested actions intended to reduce the risk to people, property, and the environment. Fuel reduction projects identified in an approved CWPP receive priority for federal funds.

The San Mateo – Santa Cruz Unit Strategic Fire Plan and the CWPP address areas with inadequate access and evacuation routes and identify risk to life and property from wildland fire and provide information on firefighter safety, community evacuation, and recommended actions by first responders. The plans also address post-fire responsibilities for natural resource recovery, including watershed protection reforestation, and ecosystem restoration.

Operational Area Emergency Management Plan

The Office of Response, Recovery and Resilience updated the Operational Area Emergency Operations Plan in September of 2024. The Santa Cruz County Operational Area Emergency Operations Plan seeks to ensure a coordinated and effective response to any emergency, disaster, or event that impacts, or may impact, the County and/or Operational Area operations.

County staff, community partners, and stakeholders from diverse and vulnerable groups were actively included in the plan's development to foster a collaborative, community-centered approach. By focusing on those at the margins, the plan strives for a holistic understanding and consideration of all community members' needs throughout all phases of emergency management. The County Emergency Management Team and the Readiness Working Group are codified within this plan. Membership composition, organizational structures, and procedures require work for these groups to achieve their full intended purpose. The effort to embed the County Emergency Management Team and Readiness Working Group into County and community culture will be led by the Office of Response, Recovery and Resilience. Collaborative work is also required by the entirety of the Santa Cruz County Emergency Management Community to maximize effectiveness (Santa Cruz County 2015).

County of Santa Cruz Local Hazard Mitigation Plan

The County of Santa Cruz Local Hazard Mitigation Plan (LHMP) 2021–2026 was prepared in accordance with the requirements of the Federal Emergency Management Agency (FEMA). FEMA reviews and approves LHMPs and requires an update on a 5-year cycle. The County is currently updating the LHMP with the first multi-jurisdictional planning process including partner cities and special districts. The County LHMP identifies potential hazards in the County, including wildfire hazards. The plan provides hazard mitigation to implement actions that reduce vulnerability and risk from hazards or reduce the severity of the effects of hazards on people and property. Mitigation actions include both short-term and long-term activities that reduce the impacts of hazards, reduce exposure to hazards, or reduce effects of hazards through various means, including preparedness, response and recovery measures. Effective mitigation actions also reduce the adverse impacts and cost of future disasters.

The County LHMP also designates critical hazard areas of the County as areas subject to greater threat from wildfire, and identifies these areas based on slope, vegetation, ability to respond to fire

threats, and localized weather conditions to assist with preparation of County hazard mitigation and response planning (Santa Cruz County 2021).

Santa Cruz County Code, Chapter 7.92, Santa Cruz County Fire Code

The Santa Cruz County Fire Code (Santa Cruz County Code [SCCC], Chapter 7.92), which adopts the CFC, regulates the safeguarding of life, property, and public welfare from the hazards of fire, including development in the Wildland-Urban Interface. County of Santa Cruz Building Code Chapter 12 incorporates the CBC (Chapter 12.10), as amended, to reflect conditions in Santa Cruz County. The Building Code contains standards and regulations relating to construction materials, fire protection measures, exterior design standards, and access requirements for firefighting purposes. The Code addresses installation of fire protection equipment, building setbacks, fire retardant building materials, and the minimum standards to safeguard and protect life, buildings, and structures from fire hazards within the County.

3.20.3 Methodology and Significance Thresholds

Methodology

The analysis of wildfire impacts follows the guidance and methodologies recommended in Appendix G of the California Environmental Quality Act (CEQA) Guidelines.

Significance Thresholds

The introduction in Chapter 3, Environmental Impact Analysis, states that the significance thresholds used in this analysis are based on Appendix G of the CEQA Guidelines, which provides a sample Initial Study checklist that includes a number of factual inquiries related to the subject of wildfire and the other environmental topics.

For the purposes of this Environmental Impact Report (EIR), a significant impact would occur if implementation of the Project would result in any of the following conditions, if the Project is located in or near SRAs or lands classified as very high FHSZs:

A. Substantially impair an adopted emergency response plan or emergency evacuation plan.

B. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose Project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire.

C. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment.

D. Expose people or structures to significant risks, including downslope or downstream flooding or landslides as a result of runoff, post-fire slope instability, or drainage changes.

3.20.4 Project Impact Analysis

For each impact, the discussion is separated into Project construction, Project operation, and Project components as needed to describe the potential impact. The overall conclusion or significance determination is presented at the end of the discussion, as well as in parentheses at the end of the numbered impact statement.

As described in Chapter 2, Project Description, the Project components include:

1. Transfer Stations (Transfer Station A and Transfer Station B)
2. Organics Diversion Facility (ODF Option 1 and ODF Option 2)
3. Landfill Closure and Revegetation
4. Optional Improvements: a) Internal Access Road Improvements, b) Scale House Upgrades, c) Recycling Center Upgrades, d) Equipment Parking and Storage Area
5. General Plan/Local Coastal Program Land Use Designation and Zoning Map Amendments

Threshold A:	Substantially impair an adopted emergency response plan or emergency evacuation plan.

Impact WILD-1 THE PROJECT WOULD NOT SUBSTANTIALLY IMPAIR AN ADOPTED EMERGENCY RESPONSE PLAN OR EMERGENCY EVACUATION PLAN. (LESS THAN SIGNIFICANT IMPACT)

The County Operational Area Emergency Management Plan addresses the planned response to large-scale emergencies affecting the unincorporated area of the County (County of Santa Cruz 2024). Santa Cruz County is the lead agency for the County operational area and would prepare for, respond to, and recover from emergencies in coordination with other local jurisdictions within the operational area.

Construction and operation of Transfer Station A and Transfer Station B requires the realignment of Harkins Slough Road near Transfer Station A to accommodate existing traffic and to contain all solid waste operational traffic on internal roadways. Harkins Slough Road is currently located between the proposed Transfer Station A site and the active landfill area. To separate local traffic using Harkins Slough Road to access land uses to the south (Buena Vista Migrant Center [farmworker housing and childcare facility], Tierra Alta Affordable Housing, Rountree Medium [Jail] Facility) from Buena Vista facility traffic accessing the transfer stations, Harkins Slough Road would be realigned to the northeast perimeter of the Project area, adjacent to the north and east property lines (**Figure 2-1**). This realignment would keep the general public on Harkins Slough Road, outside the facility fence. The only transfer station related traffic on Harkins Slough Road would mirror existing conditions of staff arriving/departing from work. These improvements are intended to improve traffic flow and minimize interference between hauling trucks and passenger vehicles not accessing the area and would not interfere with emergency access in and out of this area, nor impair an adopted emergency response plan or emergency evacuation plan.

During construction, the existing Harkins Slough Road would remain in use while the realigned Harkins Slough Road is being constructed around the north side of Transfer Station A. Although there could be temporary lane closures during construction, there would be no planned road closures. Emergency access and general access to the landfill and land uses to the south would be retained throughout construction with traffic controls. All other construction related activities would occur within the landfill boundary.

Construction and operation of the other Project components would be within the existing landfill operational boundaries and would not impair an emergency response plan or emergency evacuation plan adopted by the County.

In summary, the Project, including the primary components and optional improvements described above, as well as the associated General Plan/Local Coastal Program (LCP) Land Use Designation and

Zoning Map Amendments, would not impair an emergency response plan or emergency evacuation plan adopted by the County. The impact would be **Less than Significant**. No mitigation is required.

Threshold B:	Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose Project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire.

Impact WILD-2 THE PROJECT WOULD NOT, DUE TO SLOPE, PREVAILING WINDS, AND OTHER FACTORS, EXACERBATE WILDFIRE RISKS AND THEREBY EXPOSE PROJECT OCCUPANTS TO POLLUTANT CONCENTRATIONS FROM A WILDFIRE OR THE UNCONTROLLED SPREAD OF A WILDFIRE. (LESS THAN SIGNIFICANT IMPACT)

CAL FIRE's Fire and Resource Assessment Program assesses the amount and extent of California's forests and rangelands, analyzes their conditions, and identifies alternative management and policy guidelines. The Project area is not located in a CAL FIRE SRA. However, portions of the Project area are located in the County's LRA, with the eastern portion in a Very High Fire Severity Zone and the western portion in a High Fire Severity Zone.

The Project is the redevelopment of the Buena Vista Landfill and does not include housing or other structures that would result in permanent occupants at the Project area. Project implementation would result in similar land uses within and adjacent to the Project area as existing conditions. However, the Project would introduce a new structure with the construction of Transfer Station A that could require protection during a fire. Transfer Station A, as well as Transfer Station B, which would replace the existing office and maintenance buildings, would include fire detection and fire suppression systems in accordance with the CFC.

For landfill closure and revegetation, the final cover slopes would be constructed at a slope of approximately 3:1 (3-foot horizontal to 1-foot vertical) and at approximately 3 percent on the landfill top deck. The final site face would be hydroseeded with a mixture of native and sterile grassland species annual in the fall for a few years until established to promote long-term erosion control and to protect the final cover system. There would be no irrigation system and minimal ongoing maintenance (e.g., mowing) as needed to reduce fire hazards and preserve traffic sight lines along interior roads.

Weed control measures, including annual or twice yearly weed whacking to maintain low dry grass height, would also limit combustible underbrush near facilities and structures. The existing perimeter road would continue to be maintained as both an access and as a fire break between the Project area and adjacent properties. The potential for on-site fire to spread to adjacent grasslands is reduced by stored water, stockpiled soil, and equipment in the area that can be used to extinguish or contain small fires, as well as the maintenance of fire breaks.

Landfills primarily generate two main gases, methane and carbon dioxide, a natural byproduct of anaerobic decomposition of materials buried in landfills. Methane is highly combustible and is prone to migrate. Fires and explosions could result from excessive methane production. As described in Section 2.4, Project Components, under Gas Monitoring, landfill gas migration is controlled by the landfill gas well controls and the landfill gas collection and conveyance system. These landfill gas controls work to a) collect and beneficially reuse gas to produce energy (at the on-site Ameresco facility) and b) collect and flare the gas on site to ensure landfill gas does not migrate away from the landfill boundary to cause a hazard in the surrounding area or structures. In addition, both Transfer Stations A and B would include gas monitoring sensors to ensure gas levels do not exceed California Department of Resources Recycling and Recovery's standard of 5 percent. Therefore, recovery and use of methane reduces the ignition risk associated with methane migration.

In summary, with onsite controls in place (weed control, stored water, stockpiled soil, extinguishing equipment, gas monitoring), the Project, including the primary components and optional improvements described above, as well as the associated General Plan/LCP Land Use Designation and Zoning Map Amendments, would not exacerbate wildfire risks and thereby expose Project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. The impact would be **Less than Significant**. No mitigation is required.

Threshold C:	Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment.

Impact WILD-3 THE PROJECT WOULD NOT REQUIRE THE INSTALLATION OR MAINTENANCE OF ASSOCIATED INFRASTRUCTURE (SUCH AS ROADS, FUEL BREAKS, EMERGENCY WATER SOURCES, POWER LINES OR OTHER UTILITIES) THAT MAY EXACERBATE FIRE RISK OR THAT MAY RESULT IN TEMPORARY OR ONGOING IMPACTS TO THE ENVIRONMENT. (LESS THAN SIGNIFICANT IMPACT)

The Buena Vista Landfill redevelopment includes the installation or maintenance of associated infrastructure, including power lines, emergency water sources, and utilities. Specifically, new water services lines for domestic and fire suppression would be extended onto the Transfer Station A site and Transfer Station B site from the existing water tanks. Transfer Station A and B would connect to existing electrical infrastructure that already serves the site. New buried electrical lines would be extended to Transfer Station A, and new overhead electrical lines would be extended to Transfer Station B. In addition, electrical power for the ODF Option 2 at the Old Landfill site would be extended from existing electrical infrastructure located near the Ameresco facility. Harkins Slough Road would be realigned around Transfer Station A to accommodate existing traffic and to contain all solid waste operational traffic on internal roadways. Internal access roadway improvements could include asphalt paving of existing unpaved roads and repaving of existing worn and deteriorated roads.

The installation or maintenance of new infrastructure would be required to comply with all necessary regulations to minimize any fire risks. Transfer Station A and B would include fire detection and fire suppression systems in accordance with the CFC.

In summary, the Project's associated infrastructure, including the primary components and optional improvements described above, as well as the associated General Plan/LCP Land Use Designation and Zoning Map Amendments, would not exacerbate fire risk. The impact would be **Less than Significant**. No mitigation is required.

Threshold D:	Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes.

Impact WILD-4 THE PROJECT WOULD NOT EXPOSE PEOPLE OR STRUCTURES TO SIGNIFICANT RISKS, INCLUDING DOWNSLOPE OR DOWNSTREAM FLOODING OR LANDSLIDES, AS A RESULT OF RUNOFF, POST-FIRE SLOPE INSTABILITY, OR DRAINAGE CHANGES. (LESS THAN SIGNIFICANT IMPACT)

As described in Section 3.7, Geology and Soils (Impact GEO-2), there are no mapped landslides within the Project area, and the potential impact associated with landslides would be **Less than Significant**.

Transfer Stations (Transfer Station A and Transfer Station B)

Two new waste transfer stations would be developed at the landfill site to implement transfer station operations for waste handling and transport. For Transfer Station A, stormwater surface runoff from new impervious surfaces would be collected at the low point on the back (north) side of the transfer station, directed toward the transfer station, and conveyed via storm pipe infrastructure into the landfill's existing stormwater collection system. For Transfer Station B, stormwater surface runoff would be conveyed via curbing and v ditches to a series of catch basins located within the paved area, similar to current conditions. Therefore, the impact of the transfer stations would be **Less than Significant,** and no mitigation is required.

Also refer to Section 3.10, Hydrology and Water Quality, which provides a comprehensive analysis of the existing and proposed hydrology and drainage features of the Project.

Organics Diversion Facility (ODF Option 1 and ODF Option 2)

The County would continue to divert organic materials (e.g., vegetation/yard waste, food waste) at the Buena Vista facility in compliance with state law organics diversion requirements. The County is considering the following two options for the ODF at the Buena Vista facility. ODF Option 1 would be a continuation of the existing operation located near the northern facility boundary, southwest of and near proposed Transfer Station A. ODF Option 2 would relocate the organics diversion operation to the Old Landfill site and would include additional compost processing steps to produce finished compost on site (within the County-owned landfill property).

Post construction, the Project would include stormwater management to meet state regulatory compliance requirements. For ODF Option 1, the existing operation area would be primarily paved with this area sloped to the north where the stormwater runoff would be directed by diversion berms into the larger existing stormwater conveyance channels. The area may also include stormwater check dams to slow down the runoff to minimize erosion.

For ODF Option 2, the Old Landfill area would be primarily paved to accommodate operations. Existing slopes lead to stormwater runoff conveying in a southeast direction into an existing bioswale extending along the southeast side, between the Old Landfill and the railroad tracks. The design for ODF Option 2 would maintain the existing grades wherever possible. This would mean using the existing bioswale located on the south portion of this landfill top deck. Paved stormwater berms may be used to direct the stormwater runoff into this bioswale. The swale would be improved and restored so it can convey stormwater as originally designed. The swale may also have erosion control matting and stone check dams to help minimize erosion. Therefore, the impact of ODF Option 1 and Option 2 would be **Less than Significant,** and no mitigation is required.

Also refer to Section 3.10 provides a comprehensive analysis of the existing and proposed hydrology and drainage features of the Project.

Landfill Closure and Revegetation

Once the capacity of the current active landfill area is reached, the landfill closure and revegetation plan would be implemented. California and federal landfill closure regulations require a landfill cover system, commonly called a cap, to separate waste from the environment, to control erosion by conveying stormwater runoff at non-scouring flow rates, minimize rain infiltration into the waste to prevent the production of leachate, and control and contain landfill gas. As described in Section 2.4, the cap includes four layers: foundation, barrier, drainage, and vegetative. The vegetative layer would be 2 inches thick to protect the landfill cap from erosion and support a mixture of grassland species.

The proposed surface water management system would control flows on the landfill surface after the final cover has been placed; prevent infiltration, inundation, and ponding on the landfill final cover; minimize erosion of final cover; minimize erosion, slope failure, washout, and over-topping of associated surface water conveyances; and minimize sediments carried off site.

Refer to Section 3.10 for additional information regarding drainage and stormwater runoff, including the location of discharge points.

Optional Improvements: a) Internal Access Road Improvements, b) Scale House Upgrades, c) Recycling Center Upgrades, d) Equipment Parking and Storage Area

The Project could also include the following improvements and features to support the primary Project purpose and components: a) Internal Access Road Improvements, b) Scale House Upgrades, c) Recycling Center, d) Equipment Parking and Storage Area.

Upgrades to the scale house would improve traffic flow and scale house operations. If additional scales are installed, they would be located on the existing pavement. A new parking and storage area for facility trucks and equipment could be located on the south side of the property on vacant, undeveloped land owned by the County. The area would be paved, sloping from north to south with surface runoff entering the existing drainage swale. Runoff from this location would be handled with a bioswale, underground recharge chambers, or with the use of a Stormceptor system to capture debris and oils while allowing stormwater to flow efficiently. As discussed in Section 3.10, with implementation of the proposed drainage facilities, impacts related to runoff would be reduced to a less than significant level.

Therefore, it is unlikely that any downslope or downstream impacts associated with runoff, post-fire slope instability, or drainage changes would occur. The impact would be **Less than Significant**. No mitigation is required.

In summary, the Project, including the primary components and optional improvements described above, as well as the associated General Plan/LCP Land Use Designation and Zoning Map Amendments, would not expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes. The impact would be **Less than Significant**. No mitigation is required.

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4 Other CEQA-Required Discussions

This chapter provides other discussions required by the California Environmental Quality Act (CEQA) for addressing potential impacts caused by the proposed Buena Vista Landfill Redevelopment Project (Project), including the following:

- Section 4.1, Cumulative Impact Analysis
- Section 4.2, Growth Inducement
- Section 4.3, Irreversible Environmental Impacts
- Section 4.4, Significant and Unavoidable Impacts

4.1 Cumulative Impact Analysis

Section 4.1.1, Methodology, describes the methodology used in the analysis, and Section 4.1.2, Analysis, includes a discussion for each environmental resource topic analyzed in Chapter 3, Environmental Impact Analysis. The discussion of potential cumulative impacts for Alternative 3 (Combined Facilities on Adjacent Property), which is analyzed at the same level of detail as the Proposed Project, is included at the end of the analysis in each resource topic section in Chapter 6.

4.1.1 Methodology

CEQA Guidelines

The term "cumulative impacts" refers to "two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts" (CEQA Guidelines, Section 15355).

A cumulative impact can result from the combination of two or more individually significant impacts or the combination of two or more impacts that are individually less than significant but constitute a significant change in the environment when considered together. To analyze a proposed project's contribution to cumulative impacts, CEQA requires the lead agency to identify past, present, and probable future projects within the vicinity, summarize their effects, identify the incremental contribution of the proposed Project to any significant cumulative impacts occurring in the Project region, and recommend mitigation measures as appropriate (CEQA Guidelines, Section 15130[b]). Mitigation measures should focus on any cumulatively considerable incremental contribution from the proposed project to any significant cumulative effect created by the past, present, and probable future projects, together with the proposed project or alternative (CEQA Guidelines, Section 15130[a][3]; also refer to CEQA Guidelines, Section 15126.2[a][4]).

Section 15130 of the CEQA Guidelines permits two approaches for identifying cumulative projects to analyze. The first is the "list" approach, based on a list of past, present, and probable future projects that produce related or cumulative impacts. This approach is generally more appropriate for project-specific Environmental Impact Reports (EIRs). The second is the "projections" approach, based on a summary of projections contained in an adopted plan or related planning document, such as a General

Plan, or in an EIR prepared for such a plan. This approach is generally more appropriate for programmatic EIRs. A reasonable combination or hybrid of the two approaches may also be used.

Approach Used in This EIR

This EIR uses a combination of the "list" and "projections" approaches, as relevant for each environmental topic discussion, and considers the significant impacts identified in the County's Sustainability Update EIR. These are described further below.

For each environmental resource topic, the cumulative impact analysis considers the combined effect of cumulative projects located in the appropriate geographic area, which varies by resource topic. For example, the appropriate geographic area for aesthetic impacts is the viewshed from within and around the Project area, which is the scope of human eyesight within the vicinity of the Project area. The appropriate geographic area for air quality impacts is the North Central Coast Air Basin, which covers an area of more than 5,100 square miles.

Accordingly, for each resource topic, cumulative impacts were determined in the following manner.

If the Project has no impact on the resource, there is no potential contribution, and no further analysis is required (CEQA Guidelines, Section 15130[a][1]).

If there is a potential impact on the resource:

1. Identify the appropriate geographic scope of the affected area.
2. State the cumulative projects being considered: List of Projects, Projections, or both.
3. Determine if there is a "significant" cumulative impact from the cumulative projects:
    a. If the cumulative impact is not significant, then no further analysis is required.
    b. If the cumulative impact is significant, then discuss the Project's contribution (step 4).
4. Determine the Project's contribution to the identified significant cumulative impact.

List of Projects

Table 4-1 presents the list of cumulative projects that are considered in the discussions. The projects are generally within a 5-mile radius of the Project area, although some of the transportation projects along Highway 1 and the Santa Cruz Branch Rail Line (SCBRL) extend farther.

Projections

Some discussions consider the population and employment growth projections identified in the Santa Cruz County General Plan/Local Coastal Program (LCP), which are based on the Association of Monterey Bay Area Governments (AMBAG) projections, and evaluated in the Sustainability Policy and Regulatory Update of the County of Santa Cruz General Plan and Local Coastal Program and County Code (Sustainability Update EIR).

For population, the average annual growth rate (2020–2040) is 0.08 percent for the unincorporated area (from 133,493 to 135,953 people) and 0.40 percent for the County as a whole (from 271,233 to 294,967 people), which also includes the Cities of Santa Cruz, Capitola, Scotts Valley, and Watsonville.

For employment, the adopted employment forecast (2020–2040) projects employment to grow by 6.5 percent (from 45,264 to 48,202 jobs) for the unincorporated area and 7.2 percent for the County as a whole, with the economic base industries of agriculture and tourism experiencing moderate growth. Job growth in Santa Cruz County is projected to be slower than the state average.

Significant Impacts in Sustainability Update EIR

The discussion of cumulative Project impacts considers the following potentially significant and unavoidable impacts identified in the Sustainability Update EIR (County of Santa Cruz 2022), which was certified and in effect on March 15, 2024.

- **Agricultural Resources**. Impact AGR-1: Farmland Conversion (development, including public/quasi-public facilities, could convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance)
- **Biological Resources**. Impact BIO-2B: Sensitive Habitats (development at the Thurber Lane/Soquel Drive property could impact riparian and wetland habitats and associated potential special status species)
- **Cultural Resources**. Impact CUL-1: Historical Resources (development could result in a substantial adverse change in the significance of historical built resources)
- **Transportation**. Impact TRA-1: Conflict with County VMT Threshold (new development could exceed County's adopted VMT threshold)
- **Utilities and Service Systems**. Impact UTL-2: Water Supplies (development could increase demand for domestic water supplies, and two existing providers (City of Santa Cruz and Soquel Creek Water District) may not have sufficient water supplies available)

Of these, the County concluded that the only significant and unavoidable cumulative impacts are associated with Transportation and Utilities/Service Systems (water supplies). However, since the Sustainability Update EIR was prepared in 2022, additional significant and unavoidable cumulative impacts to biological resources (sensitive habitat) were identified in the Coastal Rail Trail Segments 8 and 9 EIR (City of Santa Cruz 2023) and Coastal Rail Trail Segments 10 and 11 EIR (Santa Cruz County 2024a).

Therefore, the cumulative impact analysis in this section considers there to be significant cumulative impacts for the following topics, and determines if the Project contribution would be considerable or not considerable:

- Biological Resources – Sensitive Habitat
- Transportation – VMT
- Utilities and Service Systems – Water Supplies

Table 4-1. List of Cumulative Projects

Project Name/Type	Location	Description	Status
County of Santa Cruz Projects[1]			
Buena Vista Drive Rehabilitation	Buena Vista Drive between State Route 1 (Highway 1) and the landfill entrance near Harkins Slough Road.	Rehabilitating Buena Vista Drive by resurfacing the roadway, improving drainage, and enhancing safety features such as signage and guardrails. The goal is to ensure a smoother and safer driving experience, particularly given the road's proximity to the Buena Vista Landfill and its role as a vital access route.	Construction summer 2026.
MidPen Green Valley: Residential	578 Green Valley Road	Minor Land Division approved in February 2024 with the intent of submitting Preliminary Application – Consultation to the County. Consultation will be to determine the feasibility of constructing a residential project consisting of 60–80 affordable multi-family units.	Potential start of construction between 2024 and 2028.
Pippin Phase II: Residential	78 Atkinson Lane	80 units of affordable housing, for rental units.	Construction 2022–2025.
Freedom Boulevard Homekey Project	2716 Freedom Boulevard	Homekey project involving conversion of an existing vacant care facility into 11 studios to provide transitional housing for transition age youth. Project will move forward if it receives a Homekey Round 3 award.	Predevelopment Phase.
Coastal Rail Trail Segments 10–11	Santa Cruz County (mid County)	Construct multi-use bicycle and pedestrian trail along the SCBRL as part of the MBSST Network Master Plan.	Construction 2027–2035.
City of Santa Cruz			
Coastal Rail Trail Segments 8–9	Santa Cruz County (mid County)	Construct multi-use bicycle and pedestrian trail along the SCBRL as part of the MBSST Network Master Plan.	Construction 2027–2035.
City of Watsonville[2]			
Watsonville Landfill Expansion (1993)	730 San Andreas Road	The City's landfill site was initially developed with Cells 1–2, expanded in the 1990s to allow for Cells 3–5. Cell 3 permanent closure cap and the groundwater protection lining on Cell 4 will be completed in late 2024. The total existing active landfill site has an anticipated lifespan of 30–50 years.	Construction 2024 for capping Cell 3 and lining Cell 4. Cell 4 construction completed April 2025.
Wastewater Treatment Facility	500 Clearwater Lane	The existing wastewater and recycled water infrastructure will require various replacement or improvement projects that are not anticipated to expand existing capacity. There are two large replacement projects planned to be constructed 2024–2028, with others ongoing.	Construction 2024–2028 for various projects.
Highway 1 Pedestrian Bridge	Harkins Slough Road/Hwy 1 Overcrossing	Construction of a pedestrian bridge over Hwy 1 and install pedestrian and bicycle safety improvements on Harkins Slough Road.	Construction planned for 2025–2027.
Lee Rd Trail Phase I	PV High School to Lee Road	Construct trail sidewalk and bicycle lanes on Lee Road to PV High School.	Construction anticipated 2025.

Table 4-1. List of Cumulative Projects

Project Name/Type	Location	Description	Status
Downtown Watsonville Specific Plan	Area including and surrounding Main Street, generally from Freedom Blvd to E Riverside Dr	The specific plan provides a guide for future development, including multi-story mixed-use buildings through both new construction and adaptive reuse of historic buildings, including new residential housing and commercial uses.	Adopted 2023. Construction timing of individual projects unknown.
Watsonville City Plaza Expansion and Revitalization Project	Bound by Main Street, East Beach Street, and Union Street	Park rehabilitation and installation of permanent restroom.	Construction 2024.
Ramsay Park Master Plan	1301 Main Street	Redesigned sports field, new soccer field, inclusive playground, dog park, nature center, trails, parking improvements.	Construction 2024–2025.
Hillcrest Estates Subdivision	511 Ohlone Parkway	The project involves a major subdivision and construction of 144 new residential units in 5 phases, as shown to the right, but there could be overlap to expedite the schedule.	Phase 1 2024–2025, Phase 2 2026, Phase 3 2027, Phase 4 2028, and Phase 5 2029.
Sunshine Gardens	1777 Santa Victoria Avenue	The project involves a major subdivision and construction of 87 new residential units. No Development Agreement in place.	Construction timing unknown.
Reyes Beverage Warehousing & Distribution Center	200 Manabe Ow Road	The project involves construction of a new 160,000 sf warehousing and distribution center for Reyes. The building has 20 truck bays for loading and unloading.	Construction 2023–2024.
Speculative Warehousing & Distribution Center	100 Manabe Ow Road	The entitled project involves construction of a new 176,000 sf warehousing and distribution building (speculative). The building has 41 truck bays for loading and unloading. Building permit expired, and entitlements expire 8/1/25.	Construction timing unknown.
Sumano's Bakery	404 West Beach Street	The project involves construction of a new 32,467 sf industrial bakery building with 3 truck bays and a loading dock for 16 delivery trucks.	Construction 2024–2025.
Watsonville Municipal Airport Master Plan	Watsonville Municipal Airport, Airport Boulevard	The master plan provides a guide for future airport development, such as modifying runways, taxiways, apron and hangar areas; and installing storage building aircraft wash rack, and aboveground fuel facilities and water reservoir.	Adopted 2023 Construction of aboveground water reservoir 2023–2025, Pollution control facility 2024, and Taxi Lane Connector 2026.

Table 4-1. List of Cumulative Projects

Project Name/Type	Location	Description	Status
Pajaro Valley Water Management Agency[3]			
College Lake Integrated Resources Management Project	College Lake, near Watsonville, California	The project aims to construct a water pipeline to divert and store water from College Lake to supplement agricultural irrigation supplies. It involves building intake facilities, a pump station, and a 5.5-mile pipeline to deliver water to farms in the Pajaro Valley, reducing groundwater dependency and improving water sustainability.	Final phase of construction begins 2024.
Pajaro River Flood Risk Management Project	Lower Pajaro River, Corralitos, and Salsipuedes Creeks, near Watsonville and Pajaro, California.	The Project focuses on improving flood protection for Watsonville, Pajaro, and surrounding agricultural lands by modifying levees along the lower Pajaro River, Salsipuedes, and Corralitos Creeks. The project will upgrade about 12 miles of existing levees and construct new levee segments, enhancing protection from a 100-year flood event. The plan includes increasing levee height, constructing setback levees, and improving drainage to reduce flood risk for homes, businesses, and critical infrastructure.	Currently in the pre-construction, engineering, and design phase. Construction is expected to begin in 2025.
Santa Cruz County Regional Transportation Commission[4]			
Highway 1, 41st Avenue to Soquel Drive Auxiliary Lanes, Bus-on-Shoulder, and Chanticleer Avenue Bike/Pedestrian Overcrossing	Highway 1, between 41st Avenue and Soquel Drive	Construction of northbound and southbound auxiliary lanes and bus-on-shoulder improvements between the 41st Avenue and Soquel Avenue/Drive interchanges and construction of a new bicycle and pedestrian overcrossing at Chanticleer Avenue.	Construction 2022–2025.
Highway 1, Bay Avenue/Porter Street to State Park Drive Auxiliary Lanes, Bus-on-Shoulder, and Mar Vista Drive Bike/Pedestrian Overcrossing	Highway 1, between Bay/Porter and State Park Drive	Construction of northbound and southbound auxiliary lanes and bus-on-shoulder improvements between the Bay Avenue/Porter Street to State Park Drive and construction of a new bicycle and pedestrian overcrossing at Mar Vista Drive.	Construction 2023–2026.
Highway 1, State Park Drive to Freedom Boulevard Auxiliary Lanes, Bus-on-Shoulder, and Coastal Rail Trail Segment 12	Highway 1, between State Park Drive and Freedom Boulevard	Construction of northbound and southbound auxiliary lanes and bus-on-shoulder improvements between the State Park Drive and Freedom Boulevard interchanges, replacement of two existing railroad bridges between the State Park Drive and Rio Del Mar Boulevard interchanges, widening the Aptos Creek bridge, and constructing Coastal Rail Trail Segment 12 from State Park Drive to Rio Del Mar Boulevard.	Construction anticipated 2026–2027.
Zero Emission Passenger Rail & Trail Segments 13–20	SCBRL (south County)	The RTC is studying/planning for development of electric passenger rail transit service on the SCBRL and construction of a multi-use bicycle and pedestrian trail (Segments 13–20) along the SCBRL as part of the MBSST Network Master Plan.	Project development 2023–2035. Construction/ Implementation unknown.

Table 4-1. List of Cumulative Projects

Project Name/Type	Location	Description	Status
Rail Corridor Maintenance Vegetation Trimming and Removal	SCBRL	Vegetation/tree trimming and/or removal, as needed to clear culverts, regrade ditches, remove damaged or fallen trees, and otherwise maintain the rail corridor. As part of the RTC's routine maintenance, there would be continued vegetation/tree trimming and removal, including potential removal of an unspecified number of trees that present hazards or are in poor condition such that they threaten the integrity of the rail line, trail, and/or public safety.	Ongoing.
Caltrans' SR-1 Roadside Safety and Drainage System Improvements	SR-1, between Larkin Valley Road and Laguna Road (post miles 8.2 to 26)	Drainage system restoration, barrier replacement, paving at multiple ramps, and lighting installation at interchanges.	Construction 2026–2027.
County of Monterey/Transportation Agency of Monterey County[5]			
Anthony Nicola Inc. – (PLN200203) Combined Development Permit	124 Gonda Street Royal Oaks	Administrative Permit to demolish an existing single-family dwelling and septic system, Use Permit to construct two three-story buildings for 34 two-bedroom units and one one-bedroom unit, totaling 36,200 square feet for use as agricultural employee housing of up to 272 workers.	Approved 2024.
Pajaro-Watsonville Multimodal Transit Hub	Unincorporated community of Pajaro. The station site is approximately 1.5 miles from downtown Watsonville	Planned train station will be the connection point for Santa Cruz County to new passenger rail service on the Coast mainline tracks between Salinas and the San Francisco Bay Area.	Predevelopment Phase.

Notes:

[1] The list of projects was provided by County of Santa Cruz Planning staff on September 5, 2024.

[2] The list of projects was provided by City staff Matt Orbach (Planning), Danielle Green (Public Works), and Rayvon Williams (Watsonville Municipal Airport) on August 21 and 22, 2024.

[3] The list of projects was provided by Pajaro Valley Water Management Agency staff on September 3, 2024.

[4] The list of projects was obtained from the Santa Cruz County Regional Transportation Commission staff on June 30, 2025.

[5] The list of projects was obtained from the County of Monterey and Transportation Agency of Monterey County websites on February 12, 2025.

Caltrans = California Department of Transportation; MBSST = Monterey Bay Sanctuary Scenic Trail; RTC = Santa Cruz County Regional Transportation Commission; SCBRL = Santa Cruz Branch Rail Line; SR- = State Route

4.1.2 Analysis

This section includes a discussion of potential cumulative impacts of the Proposed Project for each environmental resource topic analyzed in Chapter 3, with a summary provided in **Table 4-2**. All figures are presented at the end of Chapter 4.

As described above, there are significant and unavoidable cumulative impacts associated with biological resources (sensitive habitat), transportation (VMT), and utilities/service Systems (water supplies), based on the County's Sustainability Update EIR and the subsequent Coastal Rail Trail EIR. Therefore, for purposes of this analysis, there is a significant cumulative impact for these topics, as shown in Table 4-2 (middle column). The discussion of potential cumulative impacts for each topic concludes with a determination on whether or not the Proposed Project would result in a considerable (substantial) contribution to a significant cumulative impact.

In summary, the Proposed Project's contribution to significant cumulative impacts would not be considerable for all the environmental topics discussed, except biological resources, as shown in Table 4-2 (third column), due to impacts on sensitive habitat from oak woodland tree removal. Note, Alternative 3 (Combined Facilities on Adjacent Property), which is analyzed at the same level of detail as the Proposed Project in Chapter 6, would not result in a considerable contribution to this cumulative impact because it reduces the impact to oak woodland.

Table 4-2. Summary of Project Contribution to Significant Cumulative Impacts

Resource Topic	Significant Cumulative Impact?	Project Contribution
Aesthetics	No significant cumulative impact	Not considerable
Agricultural Resources	No significant cumulative impact	Not considerable
Air Quality	No significant cumulative impact[1]	Not considerable
Biological Resources	Significant cumulative impact[2]	Considerable
Cultural Resources	No significant cumulative impact	Not considerable
Energy	No significant cumulative impact	Not considerable
Geology and Soils	No significant cumulative impact	Not considerable
Greenhouse Gas Emissions	No significant cumulative impact[3]	Not considerable
Hazards and Hazardous Materials	No significant cumulative impact	Not considerable
Hydrology and Water Quality	No significant cumulative impact	Not considerable
Land Use and Planning	No significant cumulative impact	Not considerable
Noise	No significant cumulative impact	Not considerable
Public Safety and Services	No significant cumulative impact	Not considerable
Recreation	No significant cumulative impact	Not considerable
Transportation	Significant cumulative impact[4]	Not considerable
Tribal Cultural Resources	No significant cumulative impact	Not considerable
Utilities and Service Systems	Significant cumulative impact[5]	Not considerable
Wildfire	No significant cumulative impact	Not considerable

Notes:

[1] There is no significant cumulative impact per the County's Sustainability Update EIR. However, the North Central Coast Air Basin is in non-attainment for the California Ambient Air Quality Standards for respirable particulate matter (PM_{10}).

[2] There is no significant cumulative impact per the County's Sustainability Update EIR. However, two subsequent EIRs for the Coastal Rail Trail projects determined significant and unavoidable cumulative impacts to biological resources from tree removal in sensitive habitat.

[3] There is no significant cumulative impact per the County's Sustainability Update EIR. However, there is an existing statewide cumulative impact relative to greenhouse gas (GHG) emissions.

[4] There is a significant cumulative impact per the County's Sustainability Update EIR because new development could exceed County's adopted VMT threshold.

[5] There is a significant cumulative impact per the County's Sustainability Update EIR because development could increase demand for domestic water supplies, and two existing providers (City of Santa Cruz and Soquel Water District) may not have sufficient water supplies available.

EIR = Environmental Impact Report; VMT = vehicle miles traveled

Aesthetics

The geographic scope for considering cumulative impacts to aesthetics is the viewshed within and around the Project area, including existing views of the site from surrounding public roadways. As described in Section 3.1, Aesthetics, the Project area is a highly disturbed environment (from historical mining and current and historical landfill operations) located amid low lying hills and is adjacent to agricultural uses and public facilities, including a jail facility and publicly owned farmworker and affordable housing to the south, as well as undeveloped open space to the east. The cumulative viewshed is primarily defined by existing views from public roadways in the Project vicinity, and the views are fleeting due to existing vegetation, topography, and many curves requiring drivers to focus on the roadway. There are no sidewalks or other public viewpoints along the surrounding roadways.

The cumulative projects being considered are those listed in **Table 4-1** and potential planned development based on surrounding zoning designations. The cumulative projects in **Table 4-1** that would occur in the cumulative viewshed include the following:

- **Buena Vista Drive Rehabilitation.** This includes resurfacing the roadway, improving drainage, and enhancing safety features such as signage and guard rails. Buena Vista Drive is a public roadway and a County-designated scenic roadway. Aesthetic impacts from rehabilitating the roadway would be temporary, and there would be no permanent adverse impacts.
- **Watsonville Landfill Expansion.** This includes capping and closing Cell 3 and lining Cell 4 for use in the near term. The fifth and final cell would be used when needed during the next 30–50-year anticipated landfill lifespan. The Watsonville Landfill, located southwest of the Buena Vista Landfill, is not visible from public views in the cumulative viewshed due to intervening topography, vegetation, and distance from the roadways (as shown on **Figure 1-3**, Buena Vista Landfill Boundaries; **Figure 2-1**, Project Overview; and **Figure 3.17-1**, Project Location and Study Intersections).
- **Zero Emission Passenger Rail & Trail Segments 13–20.** The passenger rail would extend along the SCBRL that extends between the Buena Vista Landfill and the Watsonville Landfill. Public views of the rail corridor in the cumulative viewshed are limited due to intervening vegetation, topography, and distance from public roadways. The nearest public view of the SCBRL rail corridor is the intersection of Buena Vista Drive and San Andreas Road (refer to **Figure 1-3** and **Figure 3.17-1**). Views of a train along the rail corridor would not be considered an adverse aesthetic impact, as it is a historical and planned use of the rail corridor. Although the Monterey Bay Sanctuary Scenic Trail (MBSST) Master Plan identifies the multi-use path within the SCBRL corridor in this area, the Santa Cruz County Regional Transportation Commission (RTC) is considering realigning this portion of the multi-use path to extend along San Andreas Road, which would not be considered an adverse aesthetic impact to public views from the roadway.
- **Rail Corridor Maintenance Vegetation Trimming and Removal.** As stated above, public views of the rail corridor in the cumulative viewshed are limited, and routine vegetation trimming and removal would not be considered an adverse aesthetic impact to public views.

There are no major development projects proposed in the cumulative viewshed, and the potential for future development is limited by the existing zoning for agricultural uses, protected open space, and public facilities which are already built out with the Rountree Medium (Jail) Facility, Buena Vista Migrant Center (farmworker housing and childcare facility), and Tierra Alta Affordable Housing on Tierra Alta Drive to the southeast. Further, cumulative development in the Santa Cruz County region would be required to comply with policies that govern scenic quality, such as the County General Plan/LCP.

As described in Section 3.1, the Project would not have an adverse effect on scenic resources, degrade public views, or create a significant source of substantial light or glare, nor would any of the cumulative projects for the reasons described above. Even when considering the combined effect of the Project and the projects listed above, the cumulative aesthetic impact would be less than significant due to limited public views in the cumulative viewshed, no adverse effects on scenic resources, no substantial degradation of existing visual character or quality of public views, and no significant sources of new light and glare that would affect daytime or nighttime views.

Impact AES-C: Cumulative development would not result in a significant cumulative impact. Therefore, **the Project's contribution would not be cumulatively considerable**.

Agricultural Resources

The geographic scope for considering cumulative impacts to agricultural resources is countywide. As shown on **Figure 4-1**, County of Santa Cruz Important Farmland, most of the "Important Farmland" is located in the south County area.

The cumulative projects being considered are those in **Table 4-1** list of projects, as well as the projects considered in the cumulative analysis in the County's Sustainability Update EIR.

The Sustainability Update EIR concluded that, because cumulative development and growth would tend to be located in developed urban areas and along transportation corridors (rather than on agricultural lands), cumulative impacts related to potential conversion of Important Farmlands, conflicts with agricultural zoning or William Act or other changes that could potentially lead to conversion of agricultural lands would be less than significant.

As discussed in Section 3.2, Agricultural Resources, the Project would not convert Important Farmland to non-agricultural use, and no portion of the Project area is enrolled in a Williamson Act contract; therefore, there is no potential contribution to a cumulative impact to Important Farmland or land under Williamson Act contract. A portion of the Project area (35 acres) is currently zoned Commercial Agriculture and Airport Combining Zone (CA-AIA), as shown on **Figure 2-2**, Landfill Parcels and Current Zoning. However, this portion has been used as a landfill for over 35 years, and the Project includes amending the General Plan/LCP Land Use Designation and zoning map to support the historical use of the property as a landfill and the proposed landfill redevelopment. Therefore, there would be no conflict with existing zoning for agricultural use.

Impact AG-C: Cumulative development would not result in a significant cumulative impact to agricultural resources. Therefore, **the Project's contribution would not be cumulatively considerable**.

Air Quality

The geographic scope for considering cumulative impacts to air quality is the North Central Coast Air Basin, which is composed of Monterey, Santa Cruz, and San Benito Counties and covers an area of more than 5,100 square miles. Air pollutants have impacts that are often, although not always,

cumulative by nature. Any new source of pollution from foreseeable projects may contribute to violations of criteria air pollutant standards if the existing background sources cause non-attainment conditions, as they do according to the state standards for ozone and particulate matter in the Monterey Bay Air Resources District. Air districts manage attainment of the criteria air pollutant standards by adopting rules, regulations, and attainment plans, which make up a multifaceted programmatic approach to such attainment.

The cumulative projects being considered are those in the **Table 4-1** list of projects, as well as the projects considered in the cumulative analysis in the County's Sustainability Update EIR, as these projects would have the potential to contribute to regional emissions.

The Sustainability Update EIR concluded that air pollution by nature is largely a cumulative impact. As such, the analysis of whether an individual project would result in a cumulatively considerable new increase of any criteria air pollutant for which the Project region is in non-attainment is the appropriate analysis for cumulative impacts related to air quality.

A project's cumulative impact is determined through the thresholds prescribed by the Monterey Bay Air Resources District. The Monterey Bay Air Resources District CEQA Air Quality Guidelines also include recommendations for the analysis of cumulative impacts pertaining to ozone and localized pollutants. Inconsistency with the Air Quality Management Plan is considered a cumulatively adverse air quality impact.

The North Central Coast Air Basin is in non-attainment for the California Ambient Air Quality Standards for respirable particulate matter (PM_{10}). As such, there is an existing cumulative air quality impact.

In the Sustainability Update EIR Section 4.3, Air Quality, the County determined the impact of future development on air quality would be less than significant for several reasons, including but not limited to: Vehicular emissions rates are anticipated to lessen substantially in future years. Development would be constructed to the anticipated increasingly stringent building code standards and would be required to comply with County policies to reduce vehicle trips and emissions. The development would be consistent with the Air Quality Management Plan and therefore would not result in a cumulatively considerable net increase of any criteria air pollutant for which the region is in non-attainment under applicable national or state standards. Therefore, the impact from cumulative projects would not be significant. Similarly, as discussed in Section 3.3, Air Quality, the proposed Project would not conflict with the Air Quality Management Plan and would not result in a cumulatively considerable net increase of any criteria air pollutant.

Impact AIR-C: The North Central Coast Air Basin is experiencing an existing cumulative impact related to PM_{10} emissions. However, **the Project's contribution would not be cumulatively considerable**.

Biological Resources

The geographic scope for considering cumulative impacts to biological resources includes the Project area, the surrounding areas of the lower Pajaro Valley, the interconnected Watsonville Slough system, the SCBRL, and adjacent undeveloped and agricultural lands that contribute to habitat connectivity throughout the region. This area extends to the Pajaro River watershed, which drains into Monterey Bay, and represents a landscape characterized by a mosaic of land uses and habitat types. This broader area supports the analysis of cumulative impacts related to habitat fragmentation, tree removal, wildlife movement, and overall ecosystem function.

This cumulative extent is appropriate because it encompasses the planning area for the County and provides the County and the public with the opportunity to think broadly about regional land use

planning and impacts on biological resources, including infill development; tree removal in the context of wildlife habitat, climate change, and the urban heat island effect; maintenance and establishment of parks, open spaces, and urban forest, retaining and enhancement of opportunities for wildlife movement locally and across the region; mitigation opportunities on a regional scale, with consideration of the equitable distribution of parks, open space, and urban forest resources for all County residents.

This extent includes the planned developments that would impact biological resources, both within the City of Watsonville and Santa Cruz County (in the larger regional setting of open spaces and parks, creeks and drainages, natural communities, rangeland, coastal resources, and connectivity [links] between open spaces).

The cumulative projects being considered are those listed in **Table 4-1**, as well as the projects considered in the cumulative analysis in the County's Sustainability Update EIR.

The cumulative projects listed in **Table 4-1** that are most relevant to cumulative impacts to biological resources include the following:

- **Buena Vista Drive Rehabilitation.** Includes the removal of two solitary oak trees, several mature eucalyptus trees, and impacts to drainage and riparian which will subsequently be restored on-site. This project contributes to overall improvements that enhance drainage function and provide small wildlife crossing opportunities.
- **Watsonville Landfill Expansion (1993).** This includes capping and closing Cell 3 and lining Cell 4 for use in the near term. The fifth and final cell would be used when needed during the next 30–50-year anticipated landfill lifespan. The expansion encroaches into the vegetive buffer along the SCBRL, reducing the width of this movement corridor and diminishing the ecological value of the area.
- **RTC Highway 1 Construction**. Includes tree removal and vegetation disturbance, reducing the overall urban forest cover and resulting in the loss of refuge areas, wildlife movement corridors, and potential nesting and roosting habitat along the following sections:
    - Highway 1, between 41st Avenue and Soquel Drive
    - Highway 1, between Bay/Porter and State Park Drive
    - Highway 1, between State Park Drive and Freedom Boulevard
- **RTC Coastal Rail Trail Segments 8–11.** Includes tree removal and vegetation disturbance along approximately 6 miles of the SCBRL in mid Santa Cruz County, reducing the overall urban forest cover and resulting in the loss of refuge areas, wildlife movement corridors, and nesting and roosting habitat.
- **RTC Zero Emission Passenger Rail and Trail Segments 13–20.** Includes tree removal and vegetation disturbance from Rio Del Mar Boulevard to Watsonville, reducing the overall urban forest cover and resulting in the loss of refuge areas, wildlife movement corridors, and nesting and roosting habitat. This project has potential to impact federally protected wildlife species.
- **RTC Rail Corridor Maintenance Vegetation Trimming and Removal.** Involves periodic tree removal and clearing of vegetation along the rail corridor throughout Santa Cruz County, reducing the overall urban forest cover and resulting in the loss of refuge areas, wildlife movement corridors, and nesting and roosting habitat.

These projects share similar vegetation management objectives and collectively contribute to regional trends in habitat availability and connectivity.

HABITAT MODIFICATION

Projects that improve and maintain public access, transportation infrastructure, and utilities would modify the habitats along and near the SCBRL corridor as a result of disturbance from construction activities and the subsequent introduction of and/or substantial increase in public use. Expansion of the Watsonville Landfill has/will modify habitat, diminishing the vegetative buffer along the SCBRL. Buena Vista Drive Rehabilitation would result in limited habitat modification along the margins of the road. Habitat modification may consist of the following:

- Trampling and degradation of sensitive habitats.
- Disruption of habitat values associated with edge habitat.
- Degradation of wetlands, creeks, drainages, riparian habitat, water quality, associated habitat values and functions, and ecosystems services, including channelization of storm runoff that may increase stream flow, erosion, and sedimentation.
- Disruption of wildlife utilization of biological resources for foraging; hydration; cover, shelter, and aestivation/hibernacula[1]; nesting and breeding; movement, dispersal, and migration. Affected wildlife could include monarch butterfly, sensitive amphibians and reptiles, sensitive and native nesting birds, roosting bats, and San Francisco dusky-footed woodrat.
- Increased fragmentation of open spaces.
- Introduction or increases in litter (including human foods).
- Removal of trees, including Heritage, Significant, Protected, and native trees and their understory vegetation; conversion of urban forest into hardscape developments; loss of microclimate and climate mitigation effects from trees/urban forests (carbon sequestration); and loss of the ecological functions and values associated with mature woodlands and forest.

The Buena Vista Landfill Redevelopment Project would result in the removal of 154 trees. At least 115 trees proposed for removal are considered “Significant” by the County of Santa Cruz based on their location within designated sensitive habitats, including coast live oak woodland and mixed willow riparian forest.

Additionally, tree removal would occur for other planned projects, including but not limited to the RTC Coastal Rail Trail Segments and Rail Line Maintenance. For example, Segment 9 would remove approximately 381 trees (City of Santa Cruz 2023), Segments 10–11 would remove approximately 803 trees (Santa Cruz County 2024a), and Segment 12 would remove approximately 527 trees (Caltrans 2024). An undetermined number of trees would be removed for Segments 13–20.

Although most of the SCBRL is currently inactive, the RTC performs maintenance annually along the rail corridor to preserve the rail line infrastructure, provide access for maintenance vehicles and services, and protect public safety. The RTC also performs maintenance to repair rail infrastructure for rail operations as needed and based on funding availability. Annual maintenance may include tree trimming, limbing, or removal; vegetation management through mastication (i.e., reducing to small pieces), mowing, and herbicide application; and culvert cleanout and drainage ditch improvements through clearing and grading. Maintenance of the rail line by the RTC falls under the

[1] Aestivation is a state of animal dormancy, similar to hibernation, although taking place in the summer rather than the winter. Hibernacula is a place where an animal seeks refuge.

provisions of the 1995 Interstate Commerce Commission Termination Act,[2] which subjects these activities to federal law; however, state and local laws and regulations are preempted. Therefore, removal and maintenance of larger trees and those within sensitive habitats (e.g., oak woodland, monarch roost sites) would not necessarily be protected by the Heritage, Significant, and Protected Tree Ordinances. Therefore, the undetermined number of trees that could be removed as part of future RTC maintenance activities, combined with tree removal that would be required for other planned projects listed in **Table 4-1**, would be cumulatively significant.

In regard to habitat connectivity, projects such as the Buena Vista Drive Rehabilitation, RTC Highway 1 Construction, RTC Coastal Rail Trail Segments, and RTC Zero Emission Passenger Rail are similarly located within or adjacent to areas that provide potential movement corridors for local wildlife. Providing functional connectivity between habitat patches and linear habitats is essential to sustaining healthy wildlife populations and allowing for the continued dispersal of native plant and wildlife species amidst increasing fragmentation of natural landscapes. The habitat patches and linear habitats within and near the Proposed Project provide opportunities for plant dispersal and wildlife movement. Because the surrounding areas are fragmented by busy roads, agricultural fields and development (all of which are considered partially permeable to impermeable barriers to movement), retaining and enhancing existing connectivity is important to preserving wildlife corridor functions. Construction and vegetation removal associated with the related projects will contribute to incremental fragmentation of natural habitats, potentially limiting wildlife movement between riparian, grassland, and oak woodland areas. Presumably, the permanent losses of sensitive biological resources associated with these related projects would be mitigated within each project's planning and approval process, as with the Proposed Project. However, the removal of mature trees is unmitigable for all of these projects and is cumulatively unmitigable. In addition, mitigation is not likely to be situated on site due to a lack of available land for such purpose; therefore, movement habitat would be significantly degraded locally. Therefore, this impact is cumulatively significant.

The impacts resulting from tree and vegetation removal would result in degradation and fragmentation of wildlife movement corridors, the suite of habitat types, and associated biological resources that occur within the cumulative setting, and result in overall diminished regional ecological functions and values. This would be a significant cumulative impact to biological resources in the region.

As described in Section 3.4, Biological Resources, the mature coast live oak woodland that would be displaced is adjacent to the Harkins Slough Unit of the Ellicott Slough National Wildlife Refuge (Wildlife Refuge), federally owned land managed by the U.S. Fish and Wildlife Service. Coast live oak woodlands and forests are considered Environmentally Sensitive Habitat Areas by the County of Santa Cruz LCP (Santa Cruz County 2024) and a sensitive habitat pursuant to the County of Santa Cruz Sensitive Habitat Ordinance (Santa Cruz County Code [SCCC] Chapter 16.32). This habitat type is also considered "Especially Valuable Habitat" by the California Coastal Commission based on the "special role" of this habitat to support a diversity of wildlife species, as well as its aesthetic and carbon sequestration values (PRC Section 30107.5). In addition, coast live oak forest in immediate proximity to the Wildlife Refuge has the additional importance of contributing to contiguous habitat

[2] The act preempts the state and local regulation of matters directly regulated by the Surface Transportation Board, such as the construction, operation, and abandonment of rail lines.[2] State and local regulations could be used to deny a railroad the ability to perform part of its operations or proceed with activities authorized by the Surface Transportation Board. The requirement to obtain state and local permits would interfere with the RTC's right to conduct operations, would prevent or delay the repair work, and would conflict with the RTC's obligations to make repairs necessary for freight as required by RTC's Agreement with their contracted rail carrier.

area and creating a vegetative barrier between the Wildlife Refuge and Harkins Slough Road. Coast live oak woodland and forest habitat within the Project area expands and buffers the overall ecological values of the refuge. Impacts associated with the Project reduce the contiguous intact habitat adjacent to the Wildlife Refuge, associated with sensitive resources and connectivity.

The Proposed Project would contribute to cumulative impacts by removing 154 trees and disrupting/displacing sensitive habitats (including Environmentally Sensitive Habitat Areas, as defined by the California Coastal Commission) and wildlife movement areas. Mitigation for biological impacts identified in this EIR include the preparation of a Project-specific Biological Resources Mitigation and Management Plan that includes tree replacement at an undetermined location and the development of features to facilitate wildlife movement including replacing and enhancing culverts and planting shallow-rooted scrub vegetation on portions of the landfill. Wildlife enhancement features reduce the cumulative impacts associated with reducing wildlife connectivity.

The Project area and immediate surroundings provide minimal opportunities for on-site or near site replacement tree planting. Closed Landfill areas are not suitable for planting trees because of the clay or linear low-density polyethylene cap that is used to contain landfill materials and prevent infiltration of surface water. Both types of landfill cap are potentially vulnerable to penetration by tree roots and other deep-rooted vegetation which would compromise the caps' integrity. Sufficient acreage of available land for replacement tree planting on or near the landfill is therefore unavailable. Various options for acquisition of private landholdings or conservation easements on adjacent properties have been explored by the County but, as of yet, are unconfirmed. Planting of replacement trees (and creation of coast live oak woodland and forest) on existing County parks, such as Freedom Lake County Park in Corralitos, has also been considered. This park is located approximately 3.3 miles north of the landfill; therefore, tree replacement planting at this location would be considered off-site mitigation and may require a higher replacement ratio. In addition, replacement trees will require 35–40 years to reach the stature and maturity of the trees being removed.

Proposed mitigation for tree removal, including Significant Trees and trees within County roads rights-of-way, includes planting in available areas near the landfill boundaries. However, additional locations (such as Freedom Lake County Park) would be required to achieve minimum 1:1 replacement ratios for tree loss (anticipated to be higher for Significant Trees) and to replace displaced sensitive habitat (coast live oak woodland and forest) through habitat creation.

Cumulative impacts associated with tree removal for this project, when considered within the geographic scope for cumulative impacts, includes the extensive tree removal associated with the other projects identified above.

Impact BIO-C: Cumulative development would result in a significant cumulative impact. **The Project's contribution would be cumulatively considerable.**

To mitigate for the Project's contribution to significant cumulative impacts, Mitigation Measure BIO-C has been identified to reduce cumulative impacts:

Mitigation Measure BIO-C.1: County-wide Comprehensive Tree Replacement Plan

The County shall prepare a County-wide Comprehensive Tree Replacement Program that will address tree removal from County and other projects and plan for tree replacement geographically, with consideration of equitable distribution of tree planting across the County, taking into account suitable native species for a given location and the development of replacement habitat (i.e. replacement of structure and functions of a given habitat including canopy, shrub layer, and

understory vegetation, wherever feasible). In addition, the program will incorporate relevant goals and elements of the Santa Cruz County Urban Forestry Master Plan (1992).

Mitigation Measure BIO-C.2: Include Cumulative Conservation Goals and Objectives in the Project-Specific Biological Resources Conceptual Mitigation Plan (CMP)

When developing the Project-specific Biological Resources CMP required for Mitigation Measure BIO-8d, the County shall include specific goals, objectives, and qualitative performance criteria to maintain functional connectivity between habitat patches and open spaces, including the functions and values of the existing linear feature composed of non-native forest, sensitive habitats, and aquatic features, for movement, dispersal, migration, and genetic exchange of native plants and animals through conservation of the following:

- Sensitive habitats and edge habitats;
- Ecosystems services and water quality associated with wetlands, streams, drainages, and riparian habitat;
- Wildlife movement habitat, including resources for foraging; hydration; cover, shelter, aestivation/hibernacula; nesting/breeding; and movement, dispersal, and migration.

Cultural Resources

The geographic scope for considering cumulative impacts to cultural resources is based on the historic, ethnographic, and prehistoric period use patterns of the Project area and surrounding region. The geographic extent of cumulative impacts for the historic period is the County of Santa Cruz. For the ethnographic period, the geographic extent includes the entire traditional Ohlone territory. The geographic context for the prehistoric period includes Santa Cruz County and nearby portions of adjacent counties.

The cumulative projects being considered are those listed in **Table 4-1**, as well as the projects considered in the cumulative analysis in the County's Sustainability Update EIR.

The Sustainability Update EIR concluded that cumulative development projects located within Santa Cruz County could result in incremental losses of historical resources on a project-by-project basis, which could combine to constitute a significant cumulative effect. While the potential impacts on historical resources would be substantially reduced through compliance with federal, state, and local regulations and incorporation of mitigation measures, adverse effects on the significance of historical resources could occur as a result of future development facilitated by the Sustainability Update. The effects would be cumulatively considerable and, therefore, could result in a significant cumulative impact. However, as stated under Significant Impacts Identified in the Sustainability Update EIR, the County determined this was not a significant and unavoidable impact.

As discussed in Section 3.5 Cultural Resources, the Project would have a less than significant impact on historic built resources and therefore would not contribute to the cumulative loss of historical resources. The Project could result in inadvertent discoveries of currently unknown archaeological resources or human remains during construction; however, Mitigation Measures CR-2a and CR-2b would reduce impacts to less –than significant Construction activities associated with cumulative projects identified in **Table 4-1** may result in cumulative impacts to archeological resources or human remains. However, the County determined no significant cumulative impact because of the protective requirements in place.

Impact CR-C: Cumulative development would not result in a significant cumulative impact. Therefore, **the Project's contribution would not be cumulatively considerable**.

Energy

The geographic scope for considering cumulative impacts related to electricity and natural gas use are the Central Coast Community Energy and Pacific Gas & Electric (PG&E) service area. This scope is appropriate because cumulative projects in the service areas of the Project area energy providers would impact the ability of these providers to meet renewable portfolio standards. The geographic scope for fuel use includes the jurisdictions in the AMBAG because regional planning to reduce VMT and associated fuel use is guided by the Association of Monterey Bay Area Governments Metropolitan Transportation Plan/Sustainable Community Strategy.

The cumulative projects being considered are those in the **Table 4-1** list of projects, as well as the projects considered in the cumulative analysis in the County's Sustainability Update EIR, as these projects would potentially contribute to electricity and natural gas demand and generate VMT in the AMBAG region.

The Sustainability Update EIR concluded that a significant cumulative impact would not occur even though cumulative projects would result in a cumulative increase in energy use. The cumulative demand would be minimal relative to statewide energy use, cumulative projects would be required to comply with energy efficiency building standards, and statewide regulations related to fuel efficiency would reduce fuel demand.

Similarly, some projects listed in **Table 4-1** would have the potential to result in new sources of energy use, such as the MidPen Green Valley residential project and Hillcrest Estates Subdivision projects in Watsonville. New buildings would be required to demonstrate consistency with energy efficiency standards, including CALGreen and local climate action plan consistency requirements. Some cumulative projects may result in a new decrease in energy demand, including the Coastal Rail Trail Segments 10–11 and Lee Road Trail projects that would encourage use of non-motorized transportation and decrease VMT; and other projects would not result in any change to energy demand, such as the Buena Vista Drive Rehabilitation project. Projects that support transportation decarbonization, such as the Zero Emissions Passenger Rail & Trail Segments 13–20 project, would reduce fossil fuel energy use, but increase electricity use. As such, consistent with the conclusions of the Sustainability Update EIR, cumulative increase in energy demand would be expected to be minimal relative to statewide energy use, cumulative projects would continue to be required to comply with energy efficiency building standards, and statewide regulations would continue to reduce cumulative fuel demand.

Impact EN-C: Cumulative development would not result in a significant cumulative impact. Therefore, **the Project's contribution would not be cumulatively considerable**.

Geology and Soils

The geographic scope for considering cumulative impacts to geology and soils is the Project site and the immediately adjacent areas since geologic materials and soils occur at specific locales and are generally affected by activities directly on or immediately adjacent to the soils and not by activities occurring outside the area. The geographic context for the analysis of impacts regarding soil erosion or topsoil loss encompasses the Watsonville Slough Watershed.

Cumulative projects being considered are those identified within **Table 4-1**. These projects must adhere to required building/engineering design standards, per the most recent version of the

California Building Code, to ensure the safety of building occupants and avoid a cumulative geologic hazard. Additionally, as needed, projects would incorporate individual mitigation or geotechnical requirements for site-specific geologic hazards present on each individual cumulative project site. Potential impacts related to the Project are not added with other projects and are therefore not cumulatively significant.

Additionally, construction associated with those projects could result in an increase in impermeable surfaces, alteration of the hydrology of local streams and drainage, and grading and clearing of vegetation. All of these actions have the potential to contribute to a cumulative increase in erosion or topsoil loss. However, future development of the cumulative projects is subject to federal, state and local runoff and erosion prevention requirements. Compliance with all applicable regulations and implementation of required construction best management practices (BMPs) and stormwater BMPs would minimize soil erosion and topsoil loss. Therefore, the cumulative Project impact would be less than significant.

Impact GEO-C: Cumulative development would not result in a significant cumulative impact. Therefore, **the Project's contribution would not be cumulatively considerable**.

Greenhouse Gas Emissions

Greenhouse gases (GHG) and climate change are, by definition, cumulative impacts. The geographic scope for considering cumulative impacts related to GHG emissions is the State of California. Although GHG emissions have worldwide repercussions, the Project's contribution to the impact is addressed in light of the goal to reduce statewide emissions.

The cumulative projects being considered are those located in the County of Santa Cruz in the **Table 4-1** list of projects, as well as the projects considered in the cumulative analysis in the County's Sustainability Update EIR. These projects and the proposed Project are within the jurisdiction of the County's Climate Action and Adaptation Plan.

There is an existing, statewide significant cumulative impact related to GHG emissions. In response, the California Air Resources Board adopted the 2022 Scoping Plan, and the County of Santa Cruz adopted the County's Climate Action and Adaptation Plan. These plans outline a pathway to achieve statewide emissions reductions goals for reducing cumulative GHG emissions. A project that is consistent with these plans would not result in a cumulatively considerable contribution to GHG emissions.

In the Sustainability Update EIR Section 4.8, Greenhouse Gas Emissions, the County determined the impact of future development on GHG emissions would be less than cumulatively considerable for several reasons, including but not limited to: GHG emissions generated by future development are anticipated to be less than existing emissions due to cleaner on-road mobile sources (zero emission vehicles and charging infrastructure), increased use of alternative transportation options, and increased energy efficiency requirements for buildings. Similarly, as discussed in Section 3.8, Greenhouse Gas Emissions, the Project would be consistent with the 2022 Scoping Plan and the County's Climate Action and Adaptation Plan.

Impact GHG-C: There is an existing statewide cumulative impact related to GHG emissions. However, **the Project's contribution would not be cumulatively considerable**.

Hazards and Hazardous Materials

Cumulative impacts associated with hazards and hazardous materials are generally site specific. As such, the geographic scope for considering cumulative impacts to most hazards is the Project site, the immediately adjacent areas, and primary roadways used to transport hazardous materials.

Cumulative projects being considered are identified in **Table 4-1**. Hazardous materials use and potential impacts are Project and site specific and can be mitigated with adherence to federal, state, and local laws and regulations. These projects would be required to comply with applicable local, state, and federal regulations regarding hazardous materials that would avoid the aggregation of individual effects into a significant cumulative impact. Therefore, the cumulative Project impact would not be significant.

Impact HAZ-C: Cumulative development would not result in a significant cumulative impact. Therefore, **the Project's contribution would not be cumulatively considerable**.

Hydrology and Water Quality

The geographic scope for considering impacts for surface water resources is the Watsonville Slough Watershed. The Watsonville Slough Watershed comprises Harkins, Gallighan, Hanson, and Struve Sloughs (**Figure 3.10-1**, Watsonville Slough Watershed). The sloughs receive runoff from a 13,000-acre watershed area, which includes a mix of urban, industrial, rural residential, agricultural, and open space areas. The geographic scope for groundwater resources is the Pajaro Valley Groundwater Subbasin, which underlies the Project area (**Figure 4-2**, Pajaro Valley Groundwater Subbasin). The geographic scope for exposure to inundation by flood, seiche, tsunami, or mudflow is site specific and not cumulative in nature.

Cumulative projects being considered are identified in **Table 4-1**. The projects that occur within the Watsonville Slough Watershed area or the Pajaro Valley Groundwater Subbasin area could potentially result in a substantial number of new impermeable surfaces that could increase runoff of stormwater pollutants, reduce groundwater recharge, and increase stormwater flows that would contribute to a cumulative increase in impacts on water quality and drainage patterns.

The cumulative projects would be subject to federal, state, and local regulations (e.g., the National Pollutant Discharge Elimination System permit, Central Coast Water Quality Control Plan or Basin Plan) that are designed to reduce stormwater runoff from project sites by promoting infiltration, minimizing impervious surfaces, and requiring a no-net increase in flows over the existing condition through hydromodification processes to improve water quality and not obstruct or conflict with Basin Plan implementation. With the cumulative projects' compliance with applicable laws and regulations and their incorporation of required construction and operational BMPs, the cumulative project impact would not be significant. Further, as described in Section 3.10, Hydrology and Water Quality, the Project has incorporated stormwater BMPs that could reduce the amount of pollutants transported to receiving waters from operation of Project components and would be subject to the same applicable laws.

With respect to drainage patterns and the potential to contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems, the cumulative projects would be subject to County review and would be required to demonstrate project contribution does not contribute to capacity exceedance. Currently, the Buena Vista Drive Tributary on the west side of the landfill has inadequate capacity to convey stormwater in large storm events, and there is localized flooding. The Buena Vista Drive Rehabilitation Project (listed in **Table 4-1**) includes measures to improve stormwater conveyance in the tributary, and the proposed project includes

culvert replacement downstream in Channelized Gallighan Slough (refer to environmental enhancement and restoration features described in Section 2.4). Together, these improvements would provide adequate capacity for stormwater conveyance. Therefore, the project would have a beneficial effect on existing drainage patterns.

The exposure of a project to inundation is based on the upstream location of a seiche or mudflow or location on the coast for a tsunami and would not affect the location of another cumulative project. Future development projects that would be constructed in an inundation area would be required to incorporate applicable building standards related to flood hazards and tsunamis to minimize the impacts from these types of events.

Impact HYD-C: Cumulative development would not result in significant cumulative impact. Therefore, **the Project's contribution would not be cumulatively considerable**.

Land Use and Planning

The geographic scope for considering cumulative impacts to land use and planning is countywide.

The cumulative projects being considered are those in **Table 4-1** list of projects, as well as the projects considered in the cumulative analysis in the County's Sustainability Update EIR.

The Sustainability Update EIR concluded that cumulative development would not combine to have a significant cumulative effect related to physical division of established communities. In addition, the Sustainability Update EIR concluded that impacts related to conflicts with land use plans, policies, and regulations would generally not combine to result in cumulative impacts. The determination of significance related to these issues is based on site-specific conflicts within each jurisdiction and is addressed on a project-by-project basis, thus, the cumulative impact would not be significant. Further, cumulative development projects would be required to comply with applicable policies established by the County General Plan and other adopted planning documents that limit the bounds and extent of development.

Impact LUP-C: Cumulative development would not result in a significant cumulative impact. Therefore, **the Project's contribution would not be cumulatively considerable**.

Mineral Resources

The geographic scope for considering cumulative impacts to mineral resources is countywide. The County mineral resources are identified on **Figure 4-3**, County of Santa Cruz Mineral Resources, and most resources are in the north County area. However, as described in Section 3.12, Mineral Resources, and shown in the southern portion of **Figure 4-3** and on **Figure 3.12-1**, Mineral Resource Area, a small portion of the Project area is designated by the County as a Mineral Resource Area.

The cumulative projects being considered are those in **Table 4-1** list of projects, as well as the projects considered in the cumulative analysis in the County's Sustainability Update EIR.

The Sustainability Update EIR concluded that none of the identified cumulative development or growth in the County would occur on lands containing important mineral resources and thus would not result in cumulative impacts related to loss of availability of mineral resources. As discussed in Section 3.12, the portion of the Project area designated as a Mineral Resource Area was privately mined prior to use of the area as landfill, and the available resource was primarily exhausted before construction of the landfill modules and use of the Project area as a landfill. Therefore, implementation of the Project would not result in the loss of availability of a known mineral resource, and the cumulative impact is not significant.

Impact MIN-C: Cumulative development would not result in a significant cumulative impact. Therefore, **the Project's contribution would not be cumulatively considerable**.

Noise

The geographic scope for the analysis of cumulative construction noise, stationary noise, and vibration impacts is generally limited to areas within 0.5 mile of the Project site, or less, as described below. Beyond this distance, impulse noise may be briefly audible, and steady noise from construction activity or Project operations would generally dissipate such that the level of noise would reduce to below applicable noise standards and blend in with the background noise level. Similarly, vibration is a localized phenomenon that reduces progressively as the distance from the source increases. The geographic scope for ambient vehicle noise levels is the roadways serving the Project site and cumulative projects.

The cumulative projects being considered are those listed in **Table 4-1** within 0.5 mile of the Project site. As noted above under Aesthetics, several projects would occur within this screening distance, including the Buena Vista Drive Rehabilitation, Watsonville Landfill Expansion, Zero Emission Passenger Rail & Trail Segments 13–20, and Rail Corridor Maintenance Vegetation Trimming and Removal. However, construction noise and groundborne vibration from cumulative projects would be limited to the immediate vicinity of active construction activity. As discussed in Section 3.13, Noise, the noise levels from use of a typical construction equipment fleet would be reduced to below the 75 A-weighted decibel (dBA) threshold at 200 feet from equipment, and below the 85 vibration decibel threshold for vibration annoyance at 50 feet from equipment. Construction noise and vibration would be temporary and cease after construction is complete. Construction would occur throughout the landfill property but would generally occur more than 50 feet from the property line. Some components, such as Transfer Station B, would result in construction within 200 of the landfill property line, but not within 200 feet of the construction area for projects identified in **Table 4-1**. It is unlikely that simultaneous construction of any project component and any project in **Table 4-1** would result in combined noise or vibration exposure at any individual receptor and thus would not result in a significant cumulative impact during construction.

The operational noise from cumulative projects would potentially introduce new area noise sources. For example, the City of Watsonville's Landfill Expansion project was completed in 2025 to reestablish the City's active landfill operations within their landfill site southwest of the County's Buena Vista Landfill, and the Zero Emissions Passenger Rail and Trail Segments 13–20 would result in periodic noise from new train trips. However, landfill operation is required to continue to comply with local standards, including applicable local Noise Ordinances. Land uses with the potential to result in noise sources that exceed applicable ordinances would be required to implement noise shielding or other noise attenuating features and thus would not result in a significant cumulative impact. Additionally, as discussed in Section 3.13, operation noise from the Project would generally not exceed applicable noise standards outside the Project property line, with the exception of Transfer Station B, which would have the potential to result in significant noise levels prior to mitigation at the sensitive receptor immediately south of the Project area. As such, due to distance, noise levels from the Project would not combine with new train noise to result in cumulatively higher operational noise exposure. Therefore, the Project's contribution would not be cumulatively considerable.

A cumulative ambient vehicle noise impact would occur if cumulative development would result in an increase in ambient noise of 3 A-weighted decibels on area roadways compared to existing conditions. Cumulative projects, such as new mixed-use development and warehouse/distribution centers, would likely result in an increase in vehicle trips that could increase traffic noise and

ambient noise levels. However, cumulative traffic was incorporated in the vehicle analysis for the Project in Section 3.13. As shown in **Table 3.13-6**, Interim (Year 2032) Buena Vista Drive Vehicle Noise Levels, and **Table 3.13-7**, Cumulative (Year 2045) Buena Vista Drive Vehicle Noise Levels, future cumulative noise levels in 2045 would not be more than 2 dBA more than Year 2032 noise levels. Therefore, cumulative development would not result in a significant cumulative impact.

Impact N-C: Cumulative development would not result in significant cumulative impact. Therefore, **the Project's contribution would not be cumulatively considerable**.

Population and Housing

The geographic scope for considering cumulative impacts to population and housing is countywide.

The cumulative projects being considered are those in **Table 4-1** list of projects, as well as the projects considered in the cumulative analysis in the County's Sustainability Update EIR.

The Sustainability Update EIR concluded that population and housing impacts are regulated by the County through the implementation of its General Plan/LCP and its Measure J growth management system, and in other counties and cities within the AMBAG region by their respective general plans. Once adopted, general plans for jurisdictions within the AMBAG region would serve as the new basis for AMBAG's successive population projections, and any existing discrepancies between AMBAG projections and the growth envisioned by these plans would be resolved. Thus, the five-year updates undertaken by AMBAG would account for changes in population trends, and cumulative population growth would not be considered significant.

Further, as discussed in Section 3.14, Population and Housing, the Project would not induce unplanned population growth in the area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure).

Impact PH-C: Cumulative development would not result in a significant cumulative impact. Therefore, **the Project's contribution would not be cumulatively considerable**.

Public Safety and Services

The geographic scope for considering cumulative impacts to public safety and services includes the service areas for fire and police protection, public health and safety, education, parks, and general public resources, including healthcare facilities. Many of these service areas are County wide, as described in Section 3.15, Public Safety and Services.

The cumulative projects being considered are those in the **Table 4-1** list of projects, as well as the projects considered in the cumulative analysis in the County's Sustainability Update EIR.

The Sustainability Update EIR concluded that cumulative growth would not result in significant impacts to the provision and maintenance of public services. Further, as discussed in Section 3.15, the Project would not introduce new residents or a substantial number of new employees to the Project area, and given the controlled environment of the landfill and the current and planned safety measures in place, the Project is not expected to affect response times or generate a need for fire or police protection personnel that warrants expansion of existing facilities or construction of new facilities nor generate a need for school or park facilities.

Impact PUB-C: Cumulative development would not result in a significant cumulative impact. Therefore, **the Project's contribution would not be cumulatively considerable**.

Recreation

The geographic scope for considering cumulative impacts to recreation would be countywide.

The cumulative projects being considered are those in **Table 4-1** list of projects, as well as the projects considered in the cumulative analysis in the County's Sustainability Update EIR.

The Sustainability Update EIR concluded that cumulative growth would not result in significant impacts to the provision and maintenance of park and recreation services. Further, as discussed in Section 3.16, Recreation, the Project does not include the development of uses, such as residential dwellings or office employment, that would result in the use of nearby parks and recreation facilities nor drive the demand for new or expanded recreational facilities.

Impact REC-C: Cumulative development would not result in a significant cumulative impact. Therefore, **the Project's contribution would not be cumulatively considerable**.

Transportation

The geographic scope for considering cumulative impacts to transportation is the County roadway network leading to and from the Buena Vista Landfill, as well as Highway 1, within an approximately five-mile radius of the landfill.

The cumulative projects being considered are those listed in **Table 4-1**, as well as the projects considered in the cumulative analysis in the County's Sustainability Update EIR.

The Sustainability Update EIR concluded cumulative development would result in a significant cumulative impact related to conflicts with VMT requirements and thresholds. Mitigation includes 1) developing a VMT mitigation program for funding transit, active transportation, and multimodal improvements, and 2) studying parking management strategies to help reduce vehicle travel and fund transit. However, the exact reductions of such programs are not known, so the cumulative development impact remains significant.

As discussed in Section 3.17, Transportation, the Project meets the screening criteria set for by Santa Cruz County and thus does not require a more detailed VMT analysis. Therefore, the County determined the Project trip would not have a considerable contribution to the significant cumulative development impact, as described further below.

The County considers the proposed redevelopment operations (e.g., transfer stations) to fall within the "Office or Service" land use category (metric) for VMT analysis screening. There are currently 40–50 employees working from and reporting to the existing maintenance/office building on site. With Project implementation and operation, the number of employees is expected to remain the same or very similar. However, instead of the employees managing solid waste disposal, they would be managing solid waste transfer (as well as continued operation of the recycling center, household hazardous materials, and organics diversion) from the transfer station offices on site. The landfill operation schedule and employee schedules (days and hours) would remain the same as existing conditions. Thus, there would be no-net increase in employee trips or VMT. Further, the Project can be screened out of VMT analysis based on Small Projects screening criteria and presumed to have a less than significant impact based on the office space within Transfer Station A (1,500 square feet) and Transfer Station B (3,800 square feet). Using the Institute of Traffic Engineers trip generation for small office building (16.19 daily trips per 1,000 square feet), the total office space of 5,300 square feet would generate 86 Project vehicle trips; and projects generating less than 110 net new daily trips are presumed to have a less than significant VMT impact.

The other trips associated with the Project would be the transfer trucks transporting solid waste from the Buena Vista transfer stations in the Project area to the ReGen Monterey Landfill in Marina. The transfer trucks are commercial semi-trucks hauling 40- to 55-foot enclosed trailers, the purpose of which is to consolidate waste into larger trucks and reduce the total truck VMT required for disposal at the ReGen Monterey Landfill; whereas without the transfer stations, there would be more individual truck trips by self-haulers and franchise haulers. The amount of anticipated waste arriving at the Buena Vista transfer stations in the Project area is expected to increase with the increase in population and employment within Santa Cruz County. This increase in waste would be associated with an increase in trips to the Project area. However, it should be noted that the Project itself would not generate this additional traffic and as such would not cause any increase in VMT. Therefore, no VMT transportation impacts are anticipated with the Project.

Impact T-C: Cumulative development would result in a cumulative impact related to transportation (VMT). However, **the Project's contribution would not be cumulatively considerable**.

Tribal Cultural Resources

Tribal cultural resources have the potential to extend across multiple project sites. The geographic scope for considering cumulative impacts to Tribal Cultural Resources is based on the location of development projects adjacent to the Project area and in the region. Therefore, the cumulative setting for Tribal Cultural Resources includes the greater Santa Cruz County region.

The cumulative projects being considered are those listed in **Table 4-1**, as well as the projects considered in the cumulative analysis in the County's Sustainability Update EIR.

Santa Cruz in general has a high sensitivity and potential for buried tribal cultural resources. The County's Sustainability Update EIR did not identify a significant cumulative impact because cumulative projects are required to comply with SCCC Section 16.40.040, which identifies the necessary actions when Native American cultural sites or human remains are discovered during ground-disturbing activities. As described in Section 3.18, Tribal Cultural Resources, no tribal cultural resources have been identified on the site, and potential impacts from inadvertent discovery would be reduced by complying with SCCC Section 16.40.040 and Mitigation Measures CR-2a and CR-2b, which reinforce compliance and require archaeologist and Native American monitoring during construction.

Impact TCR-C: Cumulative development would not result in a significant cumulative impact. Therefore, **the Project's contribution would not be cumulatively considerable**.

Utilities and Service Systems

The geographic scope for considering cumulative impacts related to utilities and service systems is the service area for each, as follows:

- **Water:** Service area for the Pajaro Valley Water Management Agency (PV Water) water service area.
- **Wastewater:** Service area for the Santa Cruz County Sanitation District and the Watsonville Wastewater Treatment Plant.
- **Stormwater Drainage:** Areas of the County of Santa Cruz adjacent to the Project site, as stormwater ultimately drains into Gallighan Slough.

- **Solid Waste:** Service areas for County solid waste collection and disposal, including the County's Buena Vista Landfill.
- **Electric Power and Natural Gas:** Service areas for Central Coast Community Energy and PG&E, as Central Coast Community Energy provides electricity and gas service using PG&E infrastructure.

The cumulative projects being considered are those in **Table 4-1** list of projects, as well as the projects considered in the cumulative analysis in the County's Sustainability Update EIR.

Water. The Sustainability Update EIR concluded that cumulative development and growth would not result in a new significant cumulative impact related to public water utilities except for City of Santa Cruz and Soquel Creek Water District water agencies, which could result in a potentially significant cumulative impact related to water supply. Therefore, as stated above under Significant Impacts in Sustainability Update EIR, the cumulative development impact is considered significant.

As discussed in Section 3.19, Utilities and Service Systems, water for Project operation, including operating the transfer stations, would be provided from the existing water wells on site and from the tanks at the neighboring Rountree Medium (Jail) Facility, located within the PV Water boundaries. The Project would not require water from the City of Santa Cruz, Central Water District, or Soquel Creek Water District water agencies. Further, the Project would have a less than significant impact on groundwater use and recharge from a substantial amount of new impervious surface. Therefore, although cumulative development could result in a significant cumulative impact, the Project's contribution would not be cumulatively considerable.

Wastewater. The Sustainability Update EIR concluded that both the Cities of Santa Cruz and Watsonville have adequate capacities to support growth and development within their service areas. Therefore, no significant cumulative impact to wastewater treatment facility capacities would occur, and the Project would not be contributing to a significant cumulative impact.

Furthermore, as discussed in Section 3.19, wastewater from restrooms and contact water (internal to the transfer stations from waste on the floor or washing the building interior) would be held in separate holding tanks. Wastewater generation under operation of the Project would be similar to wastewater generation under existing landfill conditions.

Stormwater. Buildout of the cumulative projects listed in **Table 4-1** would result in an increase in impervious surfaces that could alter drainage patterns and result in the inability for existing stormwater drainage infrastructure to adequately convey flows. However, any cumulative Project disturbing more than 1 acre of land would be subject to the requirements of the Construction General Permit, resulting in the implementation of a Stormwater Pollution Prevention Plan and BMPs. The County would require adequate drainage facilities for new development through the review of proposed development projects. Therefore, cumulative development would not result in a significant impact, and the project would not be contributing to a significant cumulative impact.

Furthermore, as described in Section 3.19, the Project has incorporated stormwater infrastructure that can convey the anticipated increase in runoff volumes effectively. Existing stormwater runoff within the Project area drains to existing stormwater infrastructure toward Harkins Slough Road or Buena Vista Drive. The Project would not require new or expanded water drainage facilities beyond those proposed or modified as part of the Project, and the Project would be subject to the same applicable laws.

Solid Waste. The Sustainability Update EIR concluded that given regulatory requirements related to reuse and recycling, as well as remaining landfill capacities, area landfills (which includes the ReGen

Monterey Landfill in the City of Marina), would be expected to have adequate capacity to serve cumulative development. Therefore, cumulative development would not result in a significant cumulative impact on landfill capacity, and the Project would not be contributing to a significant cumulative impact.

Furthermore, as discussed in Section 3.19, the Project purpose is to ensure an orderly landfill closure program that meets state requirements and provides ongoing solid waste handling capabilities to allow the County to meet state-required waste management goals for waste reduction, source separation, materials recycling, household hazardous waste management, and organics diversion from landfill disposal. The Project would not generate solid waste in excess of the capacity of local infrastructure or otherwise impair the attainment of solid waste reduction goals and would comply with applicable solid waste statutes and regulations.

Electricity and Natural Gas. Cumulative development would raise the demand for electricity and natural gas in the Central Coast Community Energy service area. However, cumulative development would not be expected to result in wasteful, unnecessary, or inefficient energy use or energy use that would conflict with the utility provider plans to meet future energy consumption. The Sustainability Update EIR did not identify a significant cumulative impact for energy and natural gas; therefore, the Project would not be contributing to a significant cumulative impact.

Furthermore, as described in Section 3.6, Energy, the Project would not result in a wasteful, unnecessary, or inefficient energy use.

Impact UTIL-C: Cumulative development could result in significant cumulative impact concerning water supply, but would not result in significant cumulative impacts to the other utilities and service systems. For potential cumulative impact to water supply, **the Project's contribution would not be cumulatively considerable**.

Wildfire

The geographic scope for considering cumulative impacts for wildfire is countywide.

The cumulative projects being considered are those in **Table 4-1** list of projects, as well as the projects considered in the cumulative analysis in the County's Sustainability Update EIR.

The Sustainability Update EIR concluded that cumulative development would not result in a significant cumulative impact related to wildfire hazards for the following reasons. Potential impacts are project and site specific and can be avoided or minimized with required compliance with state and local regulations, implementation of the County's General Plan/LCP policies and Local Hazard Mitigation Plan strategies, and Project-level review by fire agencies to ensure projects provide adequate emergency access, water supply, and building and site design to minimize risks of exposure to wildfire hazards. Additionally, there are regulations and policies regarding grading, erosion controls, and siting of development in geological hazard areas to avoid or minimize secondary effects related to flooding, stormwater drainage, slope instability, or discharge of pollutants. Furthermore, cumulative development is generally in urban areas, reducing the exposure of people and structures to a significant risk of loss, injury or death involving wildland fires. Although some development could be located in wildfire hazard areas, it would be in rural areas and primarily on existing lots, and would be subject to siting and design requirements to avoid and minimize risks of exposure to fire. Complying with applicable local and state regulations within the County would avoid the aggregation of individual effects into a significant cumulative impact.

Additionally, the Project does not include housing or other structures that would result in permanent occupants. Project activities would be within landfill operational boundaries and would not impair emergency access or an emergency response/evacuation plan. The Project includes on-site controls including weed control, stored water, stockpiled soil, extinguishing equipment, gas monitoring to reduce wildfire risk.

Impact WILD-C: Cumulative development would not result in a significant cumulative impact. Therefore, **the Project's contribution would not be cumulatively considerable.**

4.2 Growth Inducement

Section 15126.2(e) of the CEQA Guidelines requires a discussion of a proposed project's potential to induce growth. Specifically, an EIR must discuss the ways in which a project could foster economic or population growth. Economic and population growth does not necessarily cause significant physical changes to the environment; however, depending upon the type, magnitude, and location of growth, it can result in significant environmental effects. A project's growth-inducing potential is therefore considered significant if growth generated by the Project could result in significant effects in one or more environmental issue areas.

4.2.1 Employment, Household, and Population Growth

Project implementation would not result in the construction of new homes or businesses. The purpose of the Project is to ensure an orderly landfill closure program that meets state requirements and provides ongoing solid waste handling capabilities to allow the County to meet state-required waste management goals for waste reduction, source separation, materials recycling, and organics diversion. The Project is not expected to meaningfully change or substantially increase the number of residents to the County of Santa Cruz.

The Project could directly generate short-term employment during construction; however, jobs created by this additional activity would likely be filled by the local workforce and would not result in a significant source of employment or economic growth.

4.2.2 Removal of Obstacles to Growth

A project would have the potential to induce growth if it would remove obstacles to population growth, for example, through the expansion of public services into an area that does not currently receive these services or through the provision of new roadway access to an area.

The Project would not provide or require the extension of utilities or roadways or otherwise remove obstacles to population growth. The County does not consider the solid waste service system an obstacle to growth. Therefore, the planned improvements and redevelopment would not be removing an obstacle to growth.

The Project would result in the redevelopment of the existing Buena Vista Landfill to include transfer stations and other operational improvements. The landfill is nearing capacity, and the purpose of the Project is to ensure an orderly landfill closure program that meets state requirements and provides ongoing solid waste handling capabilities to serve existing and planned solid waste disposal needs for the County. Accordingly, the redevelopment Project includes adding two transfer stations for waste handling and transport to the regional facility (ReGen Monterey in Marina), improving the existing organics diversion process, and implementing the landfill closure and revegetation plan. ReGen Monterey Landfill is expected to have capacity for approximately 90

more years, and future developments in recycling and diversion are anticipated to extend the life expectancy beyond 90 years (Santa Cruz County 2024b).

In summary, the growth inducement impacts associated with the Project would be **less than significant.**

4.3 Irreversible Environmental Effects

Section 15126.2(d) of the CEQA Guidelines requires a discussion of significant irreversible environmental changes that would result from the Project, including the use of nonrenewable resources. Use of nonrenewable resources during initial and continued phases of a project may be irreversible if a large commitment of such resources makes removal or nonuse thereafter unlikely. In CEQA analyses, nonrenewable resources generally include fossil fuels (oil, diesel, gasoline, natural gas, coal), mineral resources (precious metals, aggregates like sand and gravel), and land (permanent conversion of farmland, open space).

The Proposed Project would not result in the conversion of farmland, protected open space, or otherwise significantly affect land and mineral resources, as described in Sections 3.2 and 3.12.

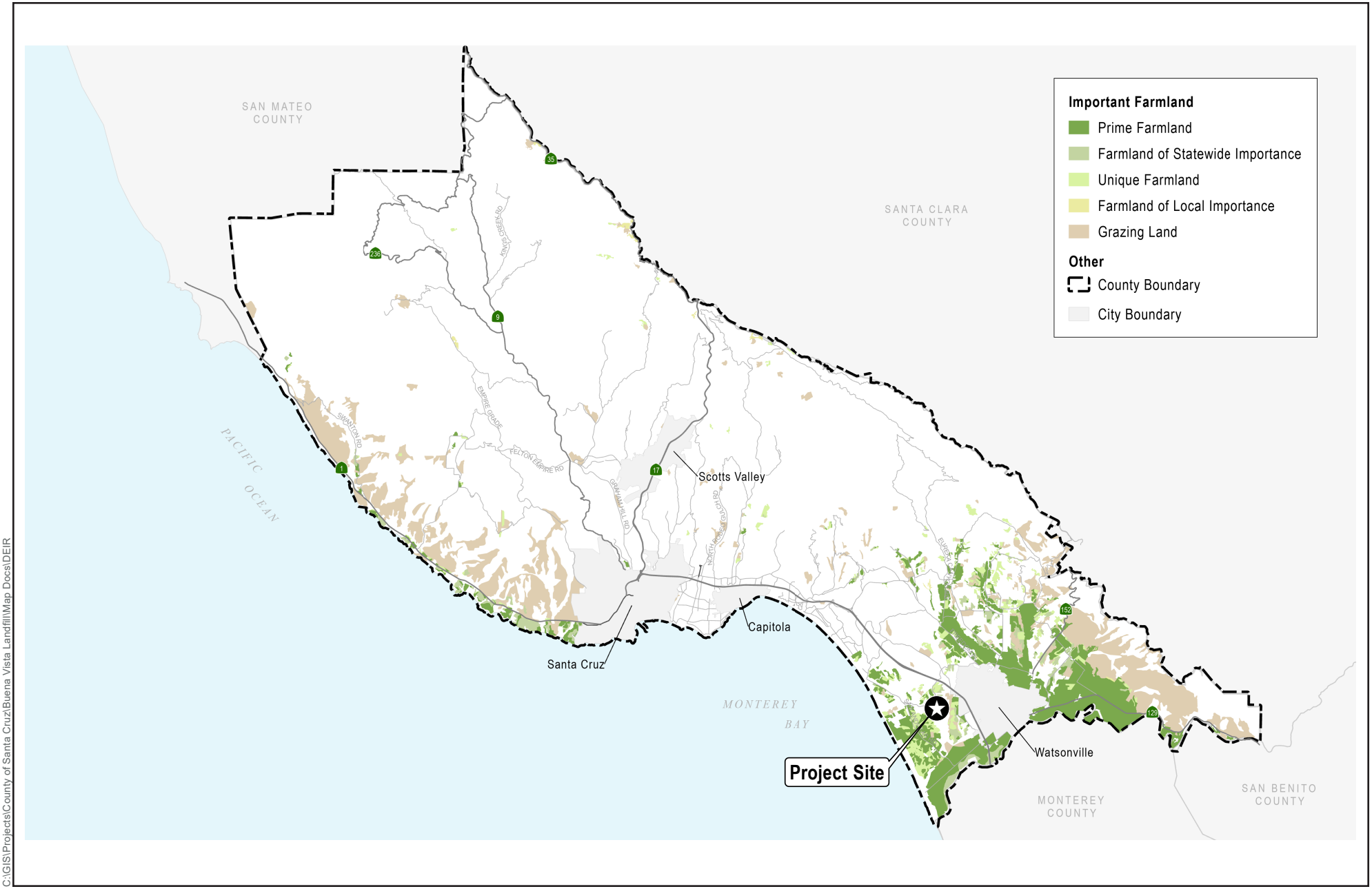
The Project would require the use fossil fuels (diesel, gasoline, oil) for the operation of equipment and vehicles during short-term Project construction and long-term Project operation. Once construction is complete and the landfill is capped and closed, there would be ongoing use of fossil fuels for operation of the transfer stations, organics diversion process, and other facilities operation (e.g., recycling, household hazardous materials collection, fueling at the equipment parking and storage area). However, the use would not be substantially different than the current use for landfill operations, which include disposal of solid waste at the landfill. Additionally, as stated in Section 2.4 (4d. Equipment Parking and Storage Area), the County's diesel trucks will be replaced by alternative fuel vehicles over time. Therefore, the irreversible effects associated with the Project from using fossil fuels would be **less than significant.**

4.4 Significant and Unavoidable Effects

CEQA requires decision makers to balance the benefits of a proposed project against its unavoidable environmental risks in determining project approval.

Based on the analysis contained in this EIR, the Proposed Project would result in significant and unavoidable impacts to biological resources, due to impacts on sensitive habitat from oak woodland tree removal. All other impacts would be less than significant or reduced to less than significant by implementing mitigation measures identified in the EIR.

Of the Project alternatives analyzed in Chapter 5, Alternative 2 (No Project) would result in a significant and unavoidable impact to utilities (solid waste). Alternative 1 (Transfer Station A on South Side of Rountree Lane) and Alternative 3 (Combined Facilities on Adjacent Property) would not result in any significant and unavoidable impacts.



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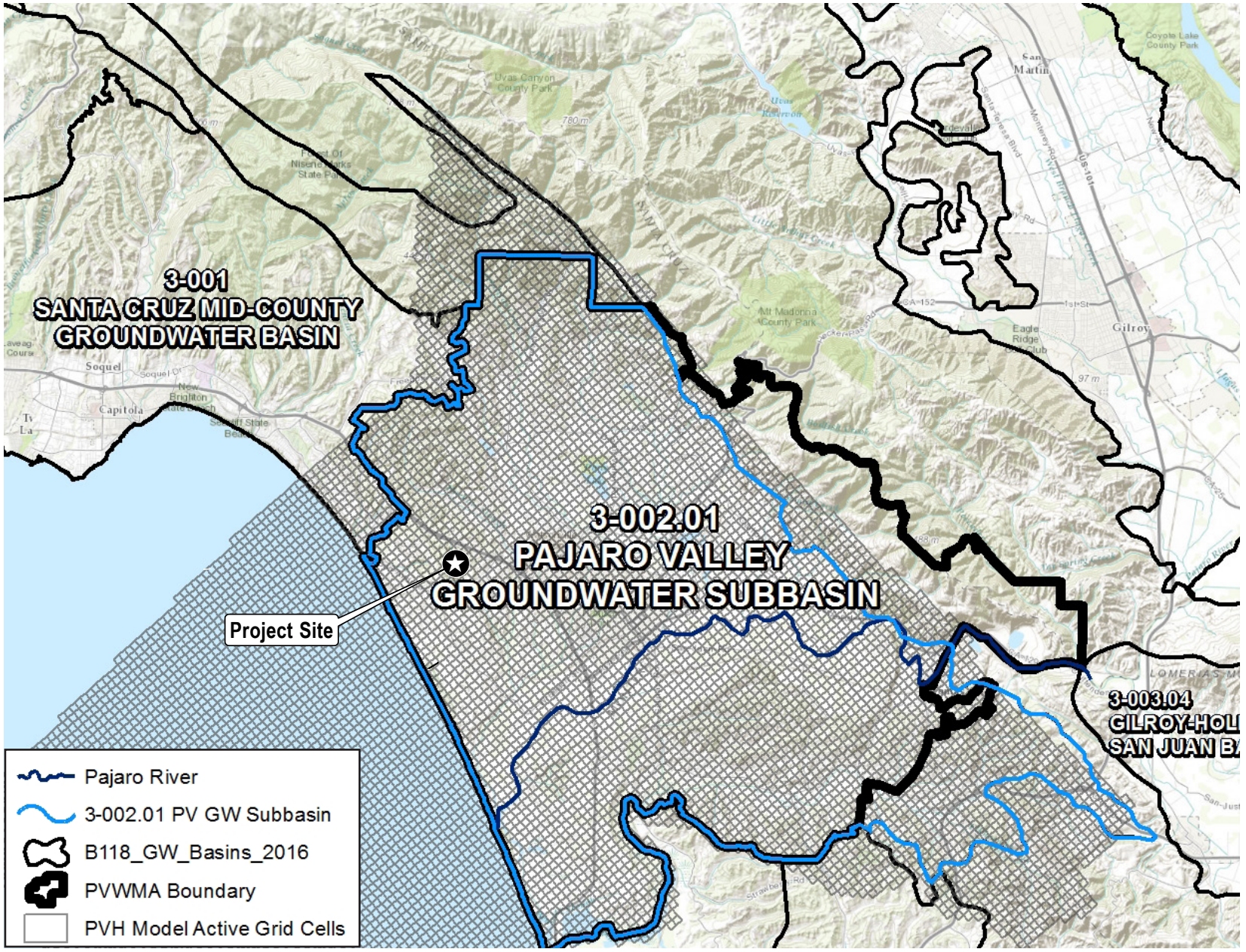
Source: County of Santa Cruz Sustainability Update Draft EIR, 2022.

Harris & Associates

Figure 4-1

County of Santa Cruz Important Farmland

Buena Vista Landfill Redevelopment Project



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Source: Pajaro Valley Water Management Agency, Montgomery & Associates, 2021.

Harris & Associates

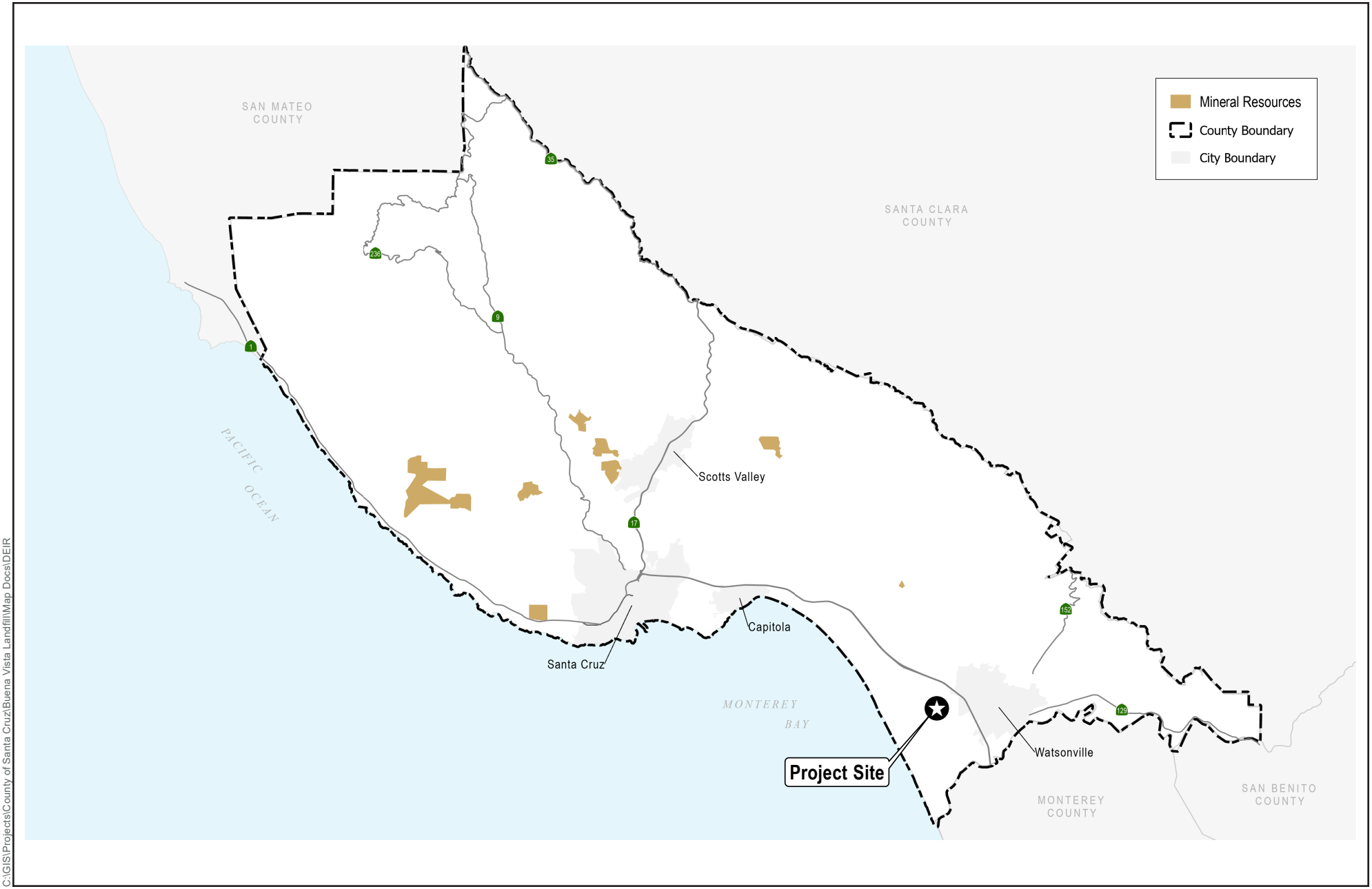
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Figure 4-2

Pajaro Valley Groundwater Subbasin

Buena Vista Landfill Redevelopment Project



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Source: County of Santa Cruz Sustainability Update Draft EIR, 2022.

Harris & Associates

Figure 4-3

County of Santa Cruz Mineral Resources

Buena Vista Landfill Redevelopment Project

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5 Project Alternatives

According to Section 15126.6 of the California Environmental Quality Act (CEQA) Guidelines, an Environmental Impact Report (EIR) shall describe and evaluate a reasonable range of alternatives to the Proposed Project that would feasibly attain most of the project's basic objectives but that would avoid or substantially lessen identified significant environmental impacts of the project. CEQA does not require that an EIR present the alternatives analysis in the same level of detail as the assessment of the Proposed Project, and CEQA does not require that every conceivable alternative to a project be considered. Rather, an EIR must consider a reasonable range of potentially feasible alternatives that will foster informed decision-making.

To develop a reasonable range of alternatives to the **Buena Vista Landfill Redevelopment Project** (Proposed Project), the County of Santa Cruz (County) considered the following:

- Project Objectives
- Significant Impacts of the Proposed Project
- Alternatives Suggested during the Scoping Process
- Alternatives Considered by the County

Through this process, the County identified 15 alternatives, including different project design options or features, for consideration. Of these, one (1) was incorporated into the Proposed Project (Transfer Station A for self-haulers in northeast corner), because the location provided adequate space on County-owned property; two (2) were identified as Project alternatives to be evaluated in this Chapter 5 (Transfer Station A for self-haulers south of Rountree Lane, and Combined Facilities on Adjacent Property), because they would reduce the significant impact to biological resources (oak woodland sensitive habitat); and 12 were considered but dismissed from further evaluation because they did not reduce a significant effect of the Proposed Project, could result in additional impacts, their feasibility is uncertain, or other rationale provided in the discussion below. One of the 12 alternatives dismissed is a new landfill site (offsite alternative), which considered 23 different offsite locations.

This chapter includes a description of how the alternatives were developed (Section 5.1, Development of Alternatives), an evaluation of the alternatives in comparison to the Proposed Project (Section 5.2, Alternatives Evaluated in Draft EIR), and identification of the environmentally superior alternative (Section 5.3, Environmentally Superior Alternative). Figures 5-1 to 5-13 are presented at the end of Chapter 5.

The purpose of the environmental review process is to provide the public and governmental decision-makers with detailed information of the project's likely effect on the environment, to describe ways of minimizing significant effects, and to point out alternatives to the project. The alternatives analysis begins by examining reasonable alternatives that meet most of the project objectives. The next step is to determine if any reasonable project alternative could be environmentally superior by avoiding or substantially lessening the significant adverse impacts of the Proposed Project. The final step is to assess the feasibility of any environmentally superior alternatives.

5.1 Development of Alternatives

5.1.1 Project Objectives

The **purpose** of the project is to ensure an orderly landfill closure program that meets state and federal requirements and provides ongoing solid waste handling capabilities to allow the County to meet state required waste management goals for waste reduction, source separation, materials recycling, household hazardous waste management, and organics diversion.

The **objectives** of the project are to:

1. Provide continuous waste management operation at the Buena Vista Landfill site (waste reduction, resource recovery and recycling, organics diversion, and waste disposal/transfer services) to serve County residents, businesses, and commercial haulers.
2. Reduce illegal dumping within the County by continuing to provide local waste disposal and recycling options for County residents and businesses.
3. Maximize use of existing County property and waste disposal and recycling facilities and/or adjacent property to serve the public without expanding landfill operations onto other property within the County.
4. Minimize interference with existing landfill operations and infrastructure (e.g., scale house, recycle center, household hazardous waste facility).
5. Minimize air quality and greenhouse gas emissions associated with additional trips by consolidating refuse into larger trucks for transfer to a regional landfill.
6. Minimize impacts to the adjacent ecological reserve and other natural resources in the Coastal Zone, and minimize any impacts to the occupants of the adjacent Buena Vista Migrant Center and Tierra Alta affordable housing complex.
7. Meet state mandates for stormwater compliance, landfill gas emissions compliance, waste reduction, mandatory recycling, and organics diversion.
8. Comply with state and federal landfill closure and post-closure requirements.
9. Start Project construction so transfer stations are operating prior to the landfill reaching full capacity.

5.1.2 Significant Impacts of Proposed Project

The CEQA Guidelines, Section 15126.6(f), states that “alternatives shall be limited to ones that would avoid or substantially lessen any of the significant effects of the project.”

As described in Sections 3.1 through 3.20 and summarized in **Table ES-1** in the Executive Summary, the Proposed Project would result in potentially significant impacts (before mitigation) for the following CEQA resource topics; therefore, brief summaries of the potentially significant impacts for these topics are presented below:

- Biological Resources
- Cultural Resources
- Geology and Soils
- Greenhouse Gas Emissions

- Noise
- Tribal Cultural Resources

All impacts to biological resources could not be reduced to a less than significant level with mitigation identified in the analysis; therefore, there would be significant and unavoidable project impacts associated with the following resource topics:

- Biological Resources

Impacts determined less than significant without mitigation measures are not discussed below.

Biological Resources

As described in Section 3.4, Biological Resources, the Proposed Project would result in potentially significant impacts to wildlife and vegetation. All the impacts could be reduced to a less than significant level with identified mitigation measures, except the removal of coast live oak woodland and "significant" trees.

Construction of the Proposed Project may result in impacts to Crotch's bumble bee, California red-legged frog, northwestern pond turtle, avian species, bat species, and San Francisco dusky-footed woodrat houses, individuals, or young. Implementation of mitigation measures BIO-1a, BIO-1b, BIO-1c, BIO-1d, BIO-2a, BIO-2b, BIO-3, BIO-5a, BIO-5b, BIO-6, BIO-7, BIO-8d, BIO-13, and BIO-14 would reduce impacts to a less than significant level. Therefore, potential impacts to these wildlife species would be **Less than Significant with Mitigation**.

Construction of the Proposed Project would result in approximately 0.54 acres of permanent impacts (90 coast live oak trees and one blue gum) and 0.10 acres of temporary impacts. Coast live oak woodland is considered an environmentally sensitive habitat area (ESHA) by the County of Santa Cruz LCP and a sensitive habitat pursuant to the County Sensitive Habitat Ordinance (SCC Chapter 13.32), and trees to be removed are considered significant by the County Significant Tree Protection Ordinance (SCCC Chapter 16.34). Mitigation measures BIO-8a through BIO-8d would reduce the impact, but not to a less than significant level because proposed mitigation would be off-site, out-of-kind, and require 35–40 years for replacement habitat to attain the habitat features and qualities of displaced habitat. Therefore, the impact to coast live oak woodland and significant trees would be **Significant and Unavoidable**.

Construction of the Proposed Project would impact 0.010 acres of riverine habitat associated with the Harkins Slough Road Drainage. In addition, Restoration and Enhancement Features would temporarily disturb 0.015 acres of mixed broadleaf riparian, 0.073 acres of mixed willow riparian forest (also a Coastal Act wetland habitat), 0.003 acres of freshwater emergent marsh, and 0.077 acres of riverine habitat. These restoration-related impacts are associated with Landfill Entrance Culvert Modification, Internal Roadway to the Old Landfill Culvert Replacement, and Harkins Slough Road Drainage Restoration. Impacts would include non-native tree removal (Harkins Slough Road Drainage), displacement of willow riparian scrub (Harkins Slough Road Drainage and minimal impacts at the Landfill entrance), understory vegetation removal (all sites), and recontouring of the elevation profile of Harkins Slough Road Drainage. Implementation of Mitigation Measures BIO-9a, BIO-9b, and BIO-8a through BIO-8d would reduce impacts to a less than significant level. Therefore, the impact to riparian, wetland, and riverine habitats would be **Less than Significant with Mitigation**.

The Proposed Project may result in impacts to wildlife movement, especially in the oak woodland along (east and north of) Harkins Slough Road. The Proposed Project would improve wildlife movement through implementation of a wildlife corridor across the southern end of the landfill

(once capped and closed) that connects Harkins Slough and Channelized Gallighan Slough and through modification of a culvert at the main landfill entrance that would allow for passage of small wildlife species.

The Proposed Project conflicts with several local County ordinances including the Sensitive Habitat Protection Ordinance (Chapter 16.32), Riparian Corridor and Wetlands Protection Ordinance (Chapter 16.30), and Significant Tree Protection Ordinance (Chapter 16.34). In the Coastal Zone, the Project is required to be consistent with the relevant text in Chapter 5 of the 2024 General Plan/Local Coastal Program and conform to the specific requirements in the Coastal Act. Exceptions to these ordinances would be required. Required mitigation measures include the following and are described in full in Section 3.4:

- BIO-1a: Conduct Environmental Training Prior to Construction
- BIO-1b: Schedule Construction to Avoid Impacts to Sensitive Biological Resources
- BIO-1c: Conduct Pre-construction Surveys and Implement Buffers for Crotch's Bumble Bee
- BIO-1d: Restore and Promote Crotch's Bumble Bee Habitat
- BIO-3: Implement Protective Measures and Biological Monitoring for California Red-Legged Frog and Northwestern Pond Turtle
- BIO-5a: Avoid Vegetation Removal during Breeding Bird Season or Conduct Nesting Bird Surveys
- BIO-5b: Conduct Surveys for Wintering Sensitive Bird Species
- BIO-6: Schedule Tree Removal to Avoid Bat Maternity Roosts and Winter Hibernacula and/or Conduct Pre-construction Surveys and Implement Protective Measures for Bat Roosts
- BIO-7: Conduct Pre-construction Surveys and Flag Woodrat Nests
- BIO-8a: Implement Measures to Protect Sensitive and Native Habitats during Construction
- BIO-8b: Implement Best Management Practices during Construction
- BIO-8c: Stabilize and Restore Temporary Impact Areas
- BIO-8d: Prepare and Implement a Habitat Mitigation Plan for Permanent Impacts to Sensitive Habitats, including Aquatic Features, for Proposed Project
- BIO-9a: Replace, Restore, and/or Enhance with In-Kind Riparian Vegetation Onsite
- BIO-9b: Transplant Willows to Restore Riparian Areas
- BIO-13: Install Protective Fencing and Conduct Wildlife Relocation if Necessary
- BIO-14: Implement Tree Replacement Planting and Habitat Enhancement

Cultural Resources

As described in Section 3.5, Cultural Resources, the Proposed Project would result in potentially significant impacts to subsurface archaeological resources or human remains during construction. The impacts could be reduced to a less than significant level with identified mitigation measures.

The Proposed Project area is considered sensitive for archaeological resources based on its proximity to several freshwater sources and known resources. Although the records search did not identify any previously recorded cultural resources within the Project area, four were identified within a 0.25-mile radius. Therefore, the Proposed Project could result in the inadvertent discovery

of subsurface resources during excavation and consequently a substantial adverse change in the significance of previously unknown archaeological resources and also to human remains. Implementation of Mitigation Measures CR-2a and CR-2b would reduce the potential significant adverse effect to a less than significant level. Therefore, potential impacts to archaeological resources and human remains would be **Less than Significant with Mitigation**.

Required mitigation measures include the following and are described in full in Section 3.5:

- CR-2a: Stop Work if Inadvertent Encounter of Undiscovered Archaeological Resources during Ground-Disturbing Activities
- CR-2b: Archeologist and Native American Monitoring during Initial Ground-Disturbing Activities in Specific Areas

Geology and Soils

As described in Section 3.7, Geology and Soils, the Proposed Project would result in potentially significant impacts due to soil instability. The impacts could be reduced to a less than significant level with identified mitigation measures.

ODF Option 2 would be located on a geological unit or soil that could become unstable as a result of lateral spreading, landslides, and liquefaction. This could exacerbate exposure of people working in the area to liquefaction or landslide hazards. Implementation of Mitigation Measure GEO-2 would reduce the potential substantial adverse effects including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction. Therefore, the impact would be **Less than Significant with Mitigation**.

Construction of Transfer Station B would be located on potentially expansive soils, which could exacerbate the existing risk to life or property resulting from expansive soils. Implementation of Mitigation Measure GEO-4 would implement building design measures to reduce impacts to less than significant. Therefore, the impact would **be Less than Significant with Mitigation**.

Required mitigation measures include the following and are described in full in Section 3.7:

- GEO-2: Old Landfill Site Stability Evaluation for Organics Diversion Facility Option 2
- GEO-4: Expansive Soils Design Measures for Specific Structures

Greenhouse Gas Emissions

As described in Section 3.8, Greenhouse Gas Emissions, the Proposed Project would result in a potentially significant impact related to consistency with the California Air Resources Board 2022 Scoping Plan and County Climate Action and Adaptation Plan, because tree removal would conflict with natural and working land goals for carbon sequestration.

Mitigation Measure BIO-14 (Implement Tree Replacement Planting and Habitat Enhancement) includes habitat restoration and tree replacement components that would replace habitat and trees removed during project construction. Therefore, this impact would be **Less than Significant with Mitigation.**

Required mitigation measures include the following and are described in full in Section 3.4:

- BIO-14: Implement Tree Replacement Planting and Habitat Enhancement

Noise

As described in Section 3.10, Noise, the Proposed Project would result in potentially significant impacts from exposing people to excessive operational noise, and construction of the optional equipment storage and parking area. These impacts could be reduced to a less than significant level with identified mitigation measures.

Mitigation Measure N-1 would implement measures to minimize construction noise from construction of the equipment parking and storage area at nearby residences, if construction occurs. Operation of Transfer Station B and ODF Option 2 may expose people to or generate excessive noise levels at Rountree Medium (Jail) Facility, where people reside/sleep. Implementation of Mitigation Measure N-2a (noise-reducing design features) and Mitigation Measure N-2b (noise-reducing features for equipment operation) would reduce noise at nearby sensitive receptors to below County General Plan Noise Element standards. Therefore, the potential noise impacts would be **Less than Significant with Mitigation**.

Required mitigation measures include the following and are described in full in Section 3.10:

- N-1a: Implement Noise-Reducing Measures for Construction Equipment Used within 200 Feet of Occupied Residences
- N-2a: Implement Noise-Reducing Design Features at Transfer Station B
- N-2b: Implement Noise-Reducing Features for Organics Diversion Facility Option 2 Equipment Operation

Tribal Cultural Resources

As described in Section 3.18, Tribal Cultural Resources, the Proposed Project would result in potentially significant impacts to subsurface tribal cultural resources during construction. The impacts could be reduced to a less than significant level with identified mitigation measures.

As stated above, the Proposed Project area is considered sensitive for archaeological resources. Although there are no known tribal cultural resources, the Project could result in the inadvertent discovery of subsurface resources during excavation and consequently a substantial adverse change in the significance of a tribal cultural resource. Further, four Tribal groups expressed concerns during Native American outreach and recommended monitoring. Implementation of Mitigation Measures CR-2a and CR-2b would reduce the potential significant adverse effect to a less than significant level. Therefore, potential impacts to tribal cultural resources would be **Less than Significant with Mitigation**.

Required mitigation measures include the following and are described in full in Section 3.18:

- CR-2a: Stop Work if Inadvertent Encounter of Undiscovered Archaeological Resources during Ground-Disturbing Activities
- CR-2b: Archeologist and Native American Monitoring during Initial Ground-Disturbing Activities in Specific Areas

5.1.3 Alternatives Suggested during the Scoping Process

As stated in Section 1.3, the NOP for the Proposed Project was issued on February 15, 2024, and a public scoping meeting was held on February 28, 2024. The NOP, written comments received, and a summary of the comments on the NOP (i.e., scoping comments) are included in **Appendix C**.

Scoping comments on the NOP include the following suggested design option or project component (hereinafter considered an alternative). The description below also indicates if the alternative has been carried forward for evaluation or dismissed from further consideration.

Biomass Processing Facility

Comments on the NOP include requests for the County to consider developing a biomass processing facility in the County and/or as part of the landfill redevelopment project. Biomass is organic matter that comes from plants and animals. As described in the NOP comments, a biomass processing facility would process woody biomass generated from forestry/fuel reduction work, storm debris cleanup, and construction debris into value-added byproducts such as hydrogen fuel for vehicles, biochar or other agricultural byproducts (i.e., organic matter used as a fuel). Further, the comments suggest the landfill's proximity to the rail line could be utilized to reduce the cost of hauling raw material and the byproducts to and from the biomass facility.

This alternative has been dismissed from further consideration and evaluation in this EIR because it introduces a new complicated project component, requires research and investigation to develop a description and appropriate location that can be evaluated, and thus would compromise the project schedule, which is critical in light of the landfill nearing capacity. The County is interested in this idea and prefers to take the appropriate time to develop a proposed biomass processing facility as a separate stand-alone project. Further, if located at the Buena Vista Landfill and included as part of the Proposed Project, it would likely increase impacts related to air quality, GHG emissions, and transportation. If located at another site in the County, it would likely increase impacts and create new impacts with these and other environmental topics.

Combine Transfer Stations A and B

During agency coordination discussions about the Proposed Project, the California Coastal Commission inquired about one larger transfer station for both self-haulers and franchise haulers, rather than two separate transfer stations. The Proposed Project includes Transfer Station A for self-haulers with an approximately 32,700 SF structure in the northeast corner of landfill property, and Transfer Station B for franchise haulers with an approximately 26,000 SF structure where the existing maintenance shop and office building are located (refer to **Figure 2-1,** Project Overview, in Chapter 2). A larger combined facility would require adequate space for at least a 53,400 SF structure and circulation for both self-haulers and franchise haulers.

As described in Section 5.1.4 under "Transfer Station Alternatives," the County considered a larger combined facility at the following locations and dismissed from further consideration for the reasons described in the discussion below.

- Location 1 – Option B: 53,400 SF Facility near Buena Vista Drive
- Location 2 – 53,400 SF Facility on Old Landfill Top Deck
- Location 3 – 53,400 SF Facility on North Side of Rountree Lane
- Location 6 – Option A: 57,935 SF Facility on South Side of Rountree Lane

5.1.4 Alternatives Considered by the County

As described in Section 1.2, the County has been planning for the closure of the Buena Vista Landfill for over 30 years and considered several alternatives to meet the disposal needs with the least impact to the environment and surrounding residents.

As part of this effort, in 1990, the County convened an Integrated Waste Management Local Task Force (Task Force), a commission composed of elected officials from the County and each of the four incorporated cities (Capitola, Santa Cruz, Scotts Valley, Watsonville), and a citizen representative. The Task Force explored landfill post-closure options, including potential sites for new landfills; transfer stations; waste processing plants; and large-scale composting. This effort resulted in the Integrated Waste Management Facilities project, whereby the County would collaborate with the four incorporated cities to develop facilities in north and south Santa Cruz County.

In 2000, as a subcommittee to the Task Force, the County convened a Citizens Advisory Group (CAG) to identify, review, and rank possible locations for three types of solid waste disposal facilities: landfills, transfer stations, and transfer stations in combination with ancillary facilities to support materials recovery, composting, and residuals conversion operations. The CAG decided to first examine potential locations for a new landfill, and then look at locations for transfer stations and transfer station combinations. This effort resulted in consideration of 23 potential sites for a new landfill, New Landfill Site.

Subsequently, the Task Force recommended that a new landfill site should not be selected until other waste management alternatives have been considered, including converting refuse to a reusable energy product, Waste-to-Energy Conversion; and transferring refuse from the Buena Vista Landfill to landfills outside the County, Transfer Station Alternatives.

This Section 5.1.4 summarizes the following alternatives considered by the County as the process evolved and the Buena Vista Landfill Redevelopment Project was developed.

- Integrated Waste Management Facilities (City/County Collaboration)
- New Landfill Site
- Waste-to-Energy Conversion
- Transfer Station Alternatives

Integrated Waste Management Facilities (City/County Collaboration)

The Integrated Waste Management Facilities (IWMF) project (1991–1996) was conducted by County Public Works in collaboration with the Integrated Waste Management Local Task Force as a project related to the Facilities Siting Study required under the Integrated Waste Management Act of 1989 (AB 939). The Task Force member jurisdictions collaborated with County Public Works and a consultant team to plan and site facilities needed to maximize countywide waste diversion through increased material recycling and composting operations. The planned new facilities and rehabilitated existing facilities were intended to reduce the amount of waste disposed in landfills by maximizing diversion programs to extend the useful life of the four landfills then operating in Santa Cruz County (Ben Lomond and Dimeo Lane landfills in north county and Buena Vista and Watsonville City landfills in south county).

The IWMF project identified existing waste sites in north and south county for redevelopment projects and identified six (6) potential new waste sites in the unincorporated south county to add needed south county recycling and composting facilities. The IWMF project recommended a single

countywide composting facility in south county capable of accepting both organic waste and sewage sludge. If it had been approved, the IWMF project would have developed or redeveloped waste sites for use as transfer stations, materials recovery facilities, and landfill sites in both north and south county to serve self-haulers and franchise collection vehicles. The IWMF project also would have developed a consolidated compost facility in the unincorporated county to serve all local jurisdictions, as well as a materials recovery facility in south county to serve south county residents. The County prepared an environmental impact report for the two preferred new waste sites in the unincorporated south county, based on the conceptual facility designs recommended by the Task Force. The IWMF project EIR was never certified because of a change in County direction for the project, based on lack of policy **support** for the new facilities proposed in south county.

New Landfill Site

From 2000 to 2004, after the 1996 IWMF EIR failed to be certified, the CAG worked with County Public Works to explore locations for a new landfill and prepared the Santa Cruz County Disposal Facility Siting Study (Siting Study) (Santa Cruz County 2003[1]) (**Appendix M**).

The CAG identified potential landfill sites based on the process and criteria outlined in the Siting Element of the Santa Cruz County Integrated Waste Management Plan (Santa Cruz County 1996[2]). This includes basic parameters for selecting landfill sites, including: at least 100 acres to provide at least 20 years of disposal capacity; and exclusion areas including active fault zone, floodplain, liquefaction zone, groundwater recharge area, reservoir protection areas, public land (e.g., state or local parks), and privately held dedicated open space (e.g., Sempervirens, Coast Dairies and Land Company). Parcels that were not entirely within the exclusion constraints were considered, and 31 study areas were identified.

A more detailed examination of the 31 study areas was conducted using practical exclusion factors (i.e., access, watershed/water supply, and unsuitable topography); biotic resources (i.e., presence of sensitive habitat and species); and environmental justice factors (i.e., proximity to minority and low-income populations). As a result, 8 study areas were eliminated because there was not sufficient acreage outside of the exclusion areas to meet the size threshold, leaving 23 study areas for consideration. These 23 sites are shown on **Figure 5-1,** New Landfill Site (Offsite Alternatives Considered).

The 23 potential sites for a new County landfill were presented at a public meeting held on September 9, 2004, to determine which of the 23 locations would be studied further. Because there was substantial public opposition to developing any new landfills in Santa Cruz County, the Task Force recommended the County Board of Supervisors dismiss all potential landfill sites under review and not consider development of a new County landfill until other waste management alternatives had been fully studied. The two alternatives recommended by the Task Force and approved by the County Board of Supervisors on February 15, 2005, were 1) transferring refuse to landfills outside Santa Cruz County and/or 2) conversion of waste to a reusable energy product, which are addressed below.

Therefore, the new landfill (offsite alternative) was dismissed from further consideration because the County Board of Supervisors decided not to pursue a new landfill site and instead directed County staff to evaluate transferring solid waste to an existing landfill outside the County. Additionally, a new landfill at a currently undeveloped site would result in a substantial increase in

[1] Santa Cruz County Department of Public Works. 2003. Citizens Advisory Group Final Report, Santa Cruz County Disposal Facility Siting Study, A Summary of Work Performed by the Santa Cruz County Integrated Waste Management Local Task Force Citizens Advisory Group. December 11, 2003.

[2] Santa Cruz County. 1996. Integrated Waste Management Plan, including a Siting Element describing landfill disposal capacity and criteria for siting new or expanded solid waste facilities, adopted by the County Board of Supervisors in September 1996.

all the potential impacts identified for the Proposed Project and is not anticipated to reduce any of the identified impacts.

Waste-to-Energy Conversion

In 2008, the County Board of Supervisors considered a proposal from AdaptiveARC for converting waste to energy using plasma arc technology. The County Board of Supervisors received a detailed presentation and directed the Public Works Department to sign a letter of intent conditional on the County's ability to secure appropriate permits and approvals for a pilot project. In November 2008, the Board of Supervisors ended its relationship with AdaptiveARC for failure to present a proven technology ready for a pilot project. At this same time, the Department of Public Works and several members of the Task Force continued to investigate a waste-to-energy component to be included in the EcoPark proposed for the Buena Vista site. However, in September 2009, the County pared back the EcoPark proposal to remove the waste-to-energy component as a cost-savings measure, and the Board of Supervisors directed Public Works to refrain from considering waste-to-energy alternatives until the technology had proven to be commercially and environmentally viable in California on a scale suitable to the County of Santa Cruz's waste stream.

Therefore, the waste-to-energy conversion alternative was dismissed from further consideration and evaluation because the County does not consider it technologically feasible at this time.

Transfer Station Alternatives

Large-scale refuse transfer from the Buena Vista Landfill site to landfills outside Santa Cruz County requires development of transfer station infrastructure. The County prepared the Buena Vista Transfer Station Opportunities and Constraints Analysis that considered several alternative locations and facilities at the Buena Vista Landfill site, described below and shown as Locations 1–4 on **Figure 5-2** (Santa Cruz County 20203).

The County also considered three additional alternatives: develop a new transfer station on other property already owned by the County (called Location 5); develop a combined facility on the south side of Rountree Lane (called Location 6); and develop a combined facility on the adjacent property to the north of the Buena Vista Landfill site (called Location 7).

Location 1 – Option A: 28,900 SF Facility near Buena Vista Drive

As shown on **Figure 5-3**, the transfer station would be a 28,900 SF facility located on the west side of the Buena Vista Landfill, where the existing scale house and self-serve recycling area are located near Buena Vista Drive. This option requires a new entrance on Harkins Slough Road, in addition to relocating the scale house and recycling area.

This alternative was dismissed from further consideration and evaluation because of the following constraints:

- The tipping floor would be limited to 70 feet wide, which is too narrow to be functional. Refuse would have to be loaded as soon as it hits the tipping floor, and there would be limited capacity for bulk storage.
- New inbound/outbound scales would be required.

[3] Santa Cruz County. 2020. Buena Vista Landfill Proposed Transfer Station Opportunities and Constraints Analysis. Prepared by County staff using data from SCS Engineers' Draft Buena Vista Landfill Transfer Station Design Report (March 12, 2020). September 9, 2020.

- New self-serve recycling area would be required.
- Locating a new entrance at the Harkins Slough Road/Buena Vista Drive intersection could pose operational and traffic/safety concerns.
- Existing services would be disrupted during construction or require a temporary re-route.
- Drop-offs to the compost facility would travel through the transfer station, unless new scale house/entrance at Harkins Slough Road/Rountree Lane.

Additionally, this alternative would increase environmental impacts to:

- Aesthetics by introducing a new large structure and removing vegetation that currently screens the landfill from some public views along Buena Vista Drive, which is a County-designated scenic roadway;
- Biological Resources by encroaching into the riparian area between the landfill property and Buena Vista Drive; and
- Transportation by introducing a potential design hazard (traffic/safety concerns) with a new entrance on Harkins Slough Road.

Location 1 – Option B: 53,400 SF Facility near Buena Vista Drive

As shown on **Figure 5-4**, the transfer station would be a 53,400 SF facility located on the west side of the Buena Vista Landfill, similar to Option A, but includes a larger facility and expands east into the closed landfill and/or west towards Buena Vista Drive. Like Option A, this option requires a new entrance on Harkins Slough Road near the intersection with Buena Vista Drive, in addition to relocating the scale house and recycling area.

This alternative was dismissed from further consideration and evaluation because of the following constraints:

- Critical timing to coordinate with Buena Vista Drive improvement project with Road Operations to not cause delays to Road project.
- Expansion to the west would require environmental clearances and mitigation due to impacts to the riparian area along Buena Vista Drive.
- Buena Vista Drive is a scenic roadway, as designated by the County General Plan, and would require visual considerations.
- Location of new entrance off Harkins Slough Road/Buena Vista Drive could pose operational and traffic/safety concerns.
- Expansion to the east would require building foundation on waste and re-closure of that section of landfill.
- New self-serve recycling center would be required.
- Drop-offs to the compost facility would travel through transfer station unless new scale house/entrance at Harkins Slough Road/Rountree Lane.
- Existing services would be disrupted during construction or require a temporary re-route.
- Coordination with the planned Buena Vista Drive rehabilitation project would be required and could delay the roadway rehabilitation project.

Additionally, like Option A, it would increase environmental impacts to:

- Aesthetics by introducing a new large structure and removing vegetation that currently screens the landfill from some public views along Buena Vista Drive, which is a County-designated scenic roadway;
- Biological Resources by encroaching into the riparian area between the landfill property and Buena Vista Drive; and
- Transportation by introducing a potential design hazard (traffic/safety concerns) with a new entrance on Harkins Slough Road.

Location 2 – Option A: 53,400 SF Facility on Old Landfill Top Deck with South Buena Vista Drive Exit

As shown on **Figure 5-5**, the transfer station would be a 53,400 SF facility located on the top deck of the Old Landfill in the southwest portion of the Buena Vista Landfill site. This alternative includes a new entrance on Harkins Slough Road, and use of the existing exit further south on Buena Vista Drive that isn't currently open to the public.

The facility would accommodate the transfer station 44,400 SF, a bulk storage area 7,500 SF, office 1,500 SF, and 105-foot-wide tipping floor for efficient operations. The location near the rail line allows for potential rail transport to the regional landfill.

This alternative was dismissed from further consideration and evaluation because of the following constraints:

- Location on Old Landfill would preclude using the area for a composting facility, staging, or storage.
- Location on Old Landfill would have complex foundation requirements.
- Load out tunnel may not be possible on top of waste and may need to use Grappler (higher building ceiling and additional equipment).
- Improvements to road leading to the Old Landfill would be required.
- The facility would be highly visible from Buena Vista Drive (scenic roadway).

Additionally, it would increase environmental impacts to:

- Aesthetics by introducing a new large structure that would likely be visible from some public views along Buena Vista Drive, which is a County-designated scenic roadway;
- Biological Resources by encroaching into the drainage area to the south and by increasing traffic over Gallighan Slough riparian area between the Old Landfill and the active landfill area; and
- Transportation by introducing a potential design hazard (traffic/safety concerns) with a new entrance on Harkins Slough Road and public use of the exit further south on Buena Vista Drive.

Location 2 – Option B: 53,400 SF Facility on Old Landfill Top Deck with Rountree Entrance

As shown on **Figure 5-6**, the transfer station would be a 53,400 SF facility located on the top deck of the Old Landfill in the southwest portion of the Buena Vista Landfill site, similar to Option A. This alternative includes a new public entrance on Rountree Lane and a new exit on Buena Vista Drive, which would be north of the existing main entry, that would be used as the transfer truck entrance. Additionally, the existing self-service recycling area would be relocated to Rountree Lane. This

would minimize cross traffic of transfer trucks entering on Buena Vista Drive and haulers entering on Rountree Lane.

This alternative was dismissed from further consideration and evaluation because of the constraints described above for Option A and the following constraints:

- New self-serve recycling area would need to be constructed.
- Increased potential for collisions with maintenance activities and increased traffic.
- Increased traffic on Harkins Slough Road/Rountree Lane may not be compatible with other County uses.

Additionally, it would increase environmental impacts to:

- Aesthetics by introducing a new large structure that would likely be visible from some public views along Buena Vista Drive, which is a County-designated scenic roadway;
- Biological Resources by encroaching into the drainage area to the south and by increasing traffic over Gallighan Slough riparian area between the Old Landfill and the active landfill area; and
- Transportation by introducing a potential design hazard (traffic/safety concerns) from increased potential for collisions with maintenance activities and increased traffic. Additionally, increased traffic on Rountree Lane/Harkins Slough Road may not be compatible with other County uses.

Location 3 – 53,400 SF Facility on North Side of Rountree Lane

As shown on **Figure 5-7**, the transfer station would be a 53,400 SF facility located adjacent to Rountree Lane near the existing maintenance building. This alternative includes a new transfer truck entrance on Rountree Lane and a new exit on Buena Vista Drive, which would be north of the existing main entry.

This alternative was dismissed from further consideration and evaluation because of the following constraints:

- The site would not accommodate bulk waste storage.
- Increased traffic on Harkins Slough Road/Rountree Lane may not be compatible with other County uses.
- The “Back Road” would require improvements to accommodate traffic flow.
- There is an existing ground lease with State located in center of Rountree Lane. If improvements encroach, amendment of the ground lease could take 12–24 months.
- There would be increased traffic and potential for collisions with maintenance activities.
- Existing maintenance building and offices would need to be relocated during construction.

Additionally, it would increase environmental impacts to:

- Transportation by introducing a potential design hazard (traffic/safety concerns) from increased potential for collisions with maintenance activities and increased traffic. Additionally, increased traffic on Rountree Lane/Harkins Slough Road may not be compatible with other County uses.

Location 4 – 34,900 SF Facility in Northeast Corner

As shown on **Figure 5-8**, the transfer station would be a 34,900 SF facility located in the northeast corner of the Buena Vista Landfill site near the National Wildlife Refuge. This alternative includes realigning Harkins Slough Road around the facility along the property boundary. The main entry/exit would continue to be used.

The primary constraint at this site is the proximity to the National Wildlife Refuge to the east. However, the site provides adequate space for efficient operations, stable ground for building foundation, and current services would not be disrupted during construction.

This alternative was carried forward and incorporated into the Proposed Project. To provide enough operational capacity for both self-haulers and transfer trucks, a second transfer station was added where the existing maintenance building and offices are located. Thus, the Proposed Project described in Chapter 2, Project Description, and evaluated in Chapter 3, Environmental Impact Analysis, includes Transfer Station A for self-haulers in the northeast corner and Transfer Station B for transfer trucks where the existing maintenance building is located.

Location 5 – Option A: County Property Other than Buena Vista Landfill Site

Option A includes construction of a new transfer station facility on property already owned by the County, other than the Buena Vista Landfill site. This would avoid many of the constraints identified above, and current services would not be disrupted during construction.

This alternative was dismissed from further consideration and evaluation because there is a lack of suitable, available sites already owned by the County.

Location 5 – Option B: Agency Partner for Regional Transfer Station

Option B is to partner with another agency to provide a regional transfer station at a location other than the Buena Vista Landfill site.

This alternative was dismissed from further consideration and evaluation because of the following constraints:

- There is too much uncertainty and additional time required to find and coordinate with a partner agency.
- The required collaboration with another agency would be politically challenging and time-consuming, and the County would have less control over timing.
- Depending on location, there could be increased illegal dumping and additional traffic to the Ben Lomond Transfer Station or to the Monterey Peninsula Landfill in Marina.

Additionally, constructing a larger regional facility at an undeveloped site would likely result in a substantial increase in all the potential impacts identified for the Proposed Project and is not anticipated to reduce any of the identified impacts.

Location 6 – Option A: 57,935 SF Facility on South Side of Rountree Lane

As shown on **Figure 5-9**, the transfer station would be a 57,935 SF facility located on the south side of Rountree Lane and would be a combined facility, serving both self-haulers and franchise haulers. This alternative includes realigning Rountree Lane around the south side of the transfer station to separate

public traffic accessing the Rountree Medium (Jail) Facility to the west and residential area to the southeast. This alternative would enable current services to be maintained during construction.

This alternative was dismissed from further consideration and evaluation because of the following constraints:

- There would be substantial operational constraints for dual operation (self-haulers and franchise haulers) at this relatively small site. The large facility would need to be configured in a square due to fit between the existing land uses, including the Jail to the west and residences to the east, and allow for the realignment of Rountree Lane to the south. The building would be too narrow to accommodate the large equipment and circulation required to accommodate self-haulers and franchise haulers.
- The facility would encroach onto the existing active leach field.
- The facility would encroach onto the existing access easement for the active leach field for the jail and may encroach onto other easements established in the area for wastewater treatment and housing.
- The facility would encroach onto the small square-shaped parcel owned by the City of Watsonville requiring acquisition, as well as approval to develop from the FAA.

Additionally, this alternative would increase environmental impacts to:

- Air Quality by substantially increasing emissions and odors adjacent to sensitive receptors (residences at the Buena Vista Migrant Center and Tierra Alta affordable housing complex).
- Noise by exposing adjacent sensitive receptors to increased temporary construction noise and ongoing operational noise.
- Transportation by introducing a potential design hazard (traffic/safety concerns) from increased operational traffic and potential for collisions from both self-haulers and franchise haulers operating in the same area.
- Utilities by conflicting with the existing leach field. Facility design would require the space where the leach field is currently located to be utilized for the realignment of Rountree Lane. This could impact the accessibility of the leach field if there are repairs/maintenance to be completed, could shut down the new Rountree Lane if extensive repairs are needed, and could cause damage to the system from additional vehicle loading in this area.

Location 6 – Option B: 36,190 SF Facility on South Side of Rountree Lane

After completion of the technical analyses of the Proposed Project in Chapter 3, the County decided to revisit this location for a smaller facility, specifically to relocate Transfer Station A (self-haulers) from the northeast corner of the land to reduce impacts to biological resources (oak woodland habitat). The vacant site was the previous location of a Hope Services building, which was used as an office space and meeting room, with an additional small storage building also located on the site, and thus was not considered in the 2020 Opportunities and Constraints Analysis.

As shown on **Figure 5-10**, the transfer station would be an approximately 36,190 SF facility located on the south side of the Rountree Lane/Harkins Slough Road intersection. Rountree Lane would be realigned from the Harkins Slough Road intersection to extend around the south side of the facility to maintain public access to the County's Rountree Medium (Jail) facility. The smaller facility would not encroach on the existing leach field.

This alternative is carried forward for further evaluation in Section 5.2, Alternatives Evaluated in EIR, because it would reduce impacts to biological resources (oak woodland habitat). Although it is anticipated to increase air quality and noise impacts on nearby sensitive receptors, it would be substantially less than a larger facility at this location.

Location 7 – Combined Facilities on Adjacent Property

After completion of the technical analyses of the Proposed Project in Chapter 3, the adjacent property north of the Buena Vista Landfill site was put on the market. The County is evaluating property acquisition to accommodate a transfer station, as well as other project components, at this location to reduce impacts of the Proposed Project to biological resources (oak woodland habitat) from locating Transfer Station A in the northeast corner of the County's landfill property. Although an offsite property (Location 5) was considered and dismissed, the proximity of the adjacent property allows existing infrastructure to be utilized and does not introduce a new use of recycling and solid waste services to a new neighborhood.

This alternative is carried forward for further evaluation in this Chapter 5, Project Alternatives, because it would reduce impacts to biological resources (oak woodland habitat); enable consolidation of Transfer Stations A and B, organics diversion, and recycling at one site; and would not disrupt current landfill activities during construction of the new facilities.

5.1.5 Summary of Alternatives Considered

Table 5-1 presents a summary of the alternatives considered for evaluation and either carried forward for evaluation in Section 5.2, Alternatives Evaluated in EIR; Chapter 3, Environmental Impact Analysis (as part of the Proposed Project); or dismissed from further consideration. The table also includes the No Project alternative, as required by CEQA.

Table 5-1. Summary of Alternatives Considered

Alternative	Feasible?	Meet Most of Basic Project Objectives?	Reduce Project Impacts	Rationale for Alternatives Dismissed
Alternatives Evaluated in EIR Chapter 5 (Project Alternatives)				
1. Transfer Station A on South Side of Rountree Lane (Location 6, Option B)	Yes	Yes	Yes[1]	--
2. No Project	No[2]	No	Yes[3]	--
3. Combined Facilities on Adjacent Property (Location 7)	Yes	Yes	Yes[4]	--
Alternatives Evaluated in EIR Chapter 3 (Proposed Project Environmental Impact Analysis)				
Transfer Station A (Location 4 – 34,900 SF Facility in Northeast Corner)	Yes	Yes	No	--
Alternatives Dismissed from Further Evaluation				
Biomass Processing Facility	Yes	No	No[5]	Introduces a new complicated project component; requires research and investigation to develop a description and appropriate location; and would compromise the project schedule due to landfill closure timeline.
Integrated Waste Management Facilities (City/County Collaboration)[6]	Yes	Yes	No	Lack of policy support for the new facilities proposed in south county
New Landfill Site (23 sites considered)[7]	No	Yes	No	Development of a new County landfill would not be considered until other waste management alternatives had been fully studied, and it would increase environmental impacts at the site and in the surrounding area.
Waste-to-Energy Conversion	No	No	No	Technology has not been proven to be commercially and environmentally viable in California.
Transfer Station Alternatives:				
Location 1 – Option A: 28,900 SF Facility near Buena Vista Dr	No	Yes	No[8]	There is limited capacity for bulk storage. A new entrance would be required, resulting in new traffic/safety concerns. New inbound and outbound scales and self-serve recycling area would be required. Drop-offs to the compost facility would travel

Table 5-1. Summary of Alternatives Considered

Alternative	Feasible?	Meet Most of Basic Project Objectives?	Reduce Project Impacts	Rationale for Alternatives Dismissed
				through the transfer station, unless new scale house/entrance at Harkins Slough Road/Rountree Lane. Existing services would be disrupted during construction.
Location 1 – Option B: 53,400 SF Facility near Buena Vista Dr[9]	Yes	Yes	No[10]	A new entrance would be required, resulting in traffic/safety concerns along Buena Vista Drive. Expansion to the east would require building foundation on waste and re-closure of that section of landfill. A new self-serve recycling center would be required. Drop-offs to the compost facility would travel through transfer station. Existing services would be disrupted during construction.
Location 2 – Option A: 53,400 SF Facility on Old Landfill Top Deck with Buena Vista Dr exit[9]	No	Yes	No[11]	This location would preclude using the area for composting facility and would have complex foundation requirements due to unstable soils, which may require the use of Grappler (higher building ceiling and additional equipment). The road leading to the Old Landfill would need to be improved.
Location 2 – Option B: 53,400 SF Facility on Old Landfill Top Deck with Rountree Ln entrance[9]	No	Yes	No[12]	New self-serve recycling area would need to be constructed; increased potential for collisions with maintenance activities and increased traffic; and resulting traffic may not be compatible with other County uses.
Location 3 – 53,400 SF Facility on North Side of Rountree Ln[9]	Yes	Yes	No[13]	No bulk waste storage; resulting traffic may not be compatible with other County uses; potential lengthy amendment of the existing ground lease with the state; potential for collisions with maintenance activities; and existing

Table 5-1. Summary of Alternatives Considered

Alternative	Feasible?	Meet Most of Basic Project Objectives?	Reduce Project Impacts	Rationale for Alternatives Dismissed
				maintenance building and offices would need to be relocated during construction.
Location 5 – Option A: County Property Other than Buena Vista Landfill	No	Yes	Unknown	Lack of suitable, available sites already owned by the County.
Location 5 – Option B: Agency Partner for Regional Transfer Station	No	Yes	No[14]	Too much uncertainty and additional time required to find and coordinate with a partner agency and would be politically challenging and time-consuming; the County would have less control over timing; and increased illegal dumping.
Location 6 – Option A: 57,935 SF Facility on South Side of Rountree Ln[8]	No	Yes	No[15]	Operational constraints for dual operation (self-haulers and franchise haulers) at this relatively small site; requires the facility to be configured to fit between the existing land uses which results in a building too narrow to accommodate the large equipment and circulation required for both self-haulers and franchise haulers; would encroach onto the existing active leach field and existing access easement for the active leach field for the jail and may encroach onto other easements established in the area for wastewater treatment and housing; and requires acquisition of land from the City of Watsonville.

Notes:

[1] Alternative 1 reduces impacts to biological resources, but increases impacts to air quality and noise.

[2] Alternative 2 (No Project) is not considered feasible because the County could not meet state diversion requirements without a solid waste facility capable of managing the volume of materials received at the Buena Vista Landfill site. On average, Buena Vista Landfill receives 2,052 tons of waste each week. Gate fees collected on those materials support operations; environmental compliance staff; and diversion, environmental, recycling, and HHW programs that are not self-sustaining. Without waste transfer facilities, the Buena Vista site could not accept that volume of waste. It would also not be feasible to manage this added waste and waste management traffic at the County's Ben Lomond Transfer Station.

[3] Alternative 2 reduces impacts to aesthetics, biological resources, cultural resources, geology/soils, hazards/hazardous materials, hydrology/water quality, land use, mineral resources, noise, public safety, tribal cultural resources, and wildfire; but increases impacts to air quality, energy, GHG, and transportation.

Table 5-1. Summary of Alternatives Considered

Alternative	Feasible?	Meet Most of Basic Project Objectives?	Reduce Project Impacts	Rationale for Alternatives Dismissed

[4] Alternative 3 reduces impacts to biological resources, but increases impacts to agricultural resources.

[5] A biomass facility increases impacts to air quality, GHG emissions, and transportation. If located at another site in the County, it would likely increase impacts and create new impacts with these and other environmental topics.

[6] The IWMF project identified existing waste sites in north and south county for redevelopment projects and identified six (6) potential new waste sites in the unincorporated south county to add needed south county recycling and composting facilities. The IWMF project recommended a single countywide composting facility in south county capable of accepting both organic waste and sewage sludge. The EIR was never certified.

[7] The 23 potential sites for a new County landfill were presented at a public meeting held on September 9, 2004, to determine which of the 23 locations would be studied further. Because there was substantial public opposition to developing any new landfills in Santa Cruz County, the Task Force recommended the County Board of Supervisors dismiss all potential landfill sites under review and not consider development of a new County landfill until other waste management alternatives had been fully studied. The two alternatives recommended by the Task Force and approved by the County Board of Supervisors on February 15, 2005—1) transferring refuse to landfills outside Santa Cruz County and/or 2) conversion of waste to a reusable energy product—are addressed as alternatives in this table.

[8] Increases impacts to aesthetics, biological resources, and transportation

[9] Represents a larger combined facility for both self-haulers and franchise haulers, as suggested during the scoping process.

[10] Increases impacts to aesthetics, biological resources, and transportation

[11] Increases impacts to aesthetics, biological resources, and transportation

[12] Increases impacts to aesthetics, biological resources, and transportation

[13] Increases impacts to transportation

[14] Includes constructing a larger regional facility at an undeveloped site would likely result in a substantial increase in all the potential impacts identified for the Proposed Project and is not anticipated to reduce any of the identified impacts.

[15] Increases impacts to air quality, noise, transportation, and utilities.

5.2 Alternatives Evaluated in EIR

This section presents a description of the project alternatives the County decided to carry forward for further consideration and includes an evaluation for the environmental topics addressed in Sections 3.1 to 3.20, although at a more general level to compare the merits of the alternatives to the Proposed Project, as allowed by CEQA (CEQA Guidelines, Section 15126.6[d]). Alternative 1 (Transfer Station A on South Side of Rountree Lane) and Alternative 2 (No Project) are evaluated at this more general level in comparison to the Proposed Project. However, Alternative 3 (Combined Facilities on Adjacent Property) is evaluated at a similar level of detail as the Proposed Project to provide a comprehensive understanding of a combined facility adjacent to the Buena Vista Landfill site.

5.2.1 Alternative 1. Transfer Station A on South Side of Rountree Lane

Description

Transfer Station A would serve self-haulers (residents and businesses) and operate similar to the Proposed Project, as described in Section 2.4 under "Transfer Station A (Self Haulers)." However, instead of being located on undeveloped land in the northeast corner of the landfill property, Transfer Station A would be located on undeveloped land near the southeast corner of the landfill property on the south side of Rountree Lane. This site is shown on **Figure 2-1** in Chapter 2 with blue shading for the location of the optional Equipment Parking and Storage Area for the Proposed Project.

The Alternative 1 site for Transfer Station A is located south of the Rountree Lane/Harkins Slough Road intersection and between the Rountree Medium (Jail) Facility to the west and the Buena Vista Migrant Center to the east (**Figures 5-11a and 5-11b**). The site includes land owned by the County, as well as a small square-shaped parcel (APN 052-531-02) owned by the City of Watsonville, and it is in the Watsonville Airport overflight zone (like all the landfill property). Therefore, the County would need to acquire the parcel from the City of Watsonville and obtain approval from the FAA.

Self-haulers would use the main landfill entrance on Buena Vista Drive and an internal roadway to access Transfer Station A to unload their solid waste and materials for diversion (appliances, mattresses, carpet, etc.). Transfer trucks would use the same access roads to collect and transport materials to a regional waste disposal facility or recycling facilities. Construction and operation of Transfer Station A at this location requires the realignment of Rountree Lane. **Figure 5-11c** illustrates the circulation pattern for accessing Transfer Station A with red arrows. It also shows the circulation pattern for other project components, which would be similar to the Proposed Project (**Figure 2-3,** Project Traffic Flow**,** in Chapter 2).

Building Structure. Similar to the Proposed Project, the transfer station structure would be approximately 36,190 SF (instead of 32,700 SF) and include office and visitor spaces, restroom, and approximately eight (instead of nine) parking spaces for County employees. The transfer station would use a full-depth tunnel for transfer trailer loading, requiring excavation up to 25 feet deep. The exterior building height would be approximately 35 feet tall. The location where Transfer Station A would be constructed is approximately 106 feet above mean sea level, and Transfer Station A would be approximately 140 feet above mean sea level. Refer to Section 2.4 for additional information about construction and operation of Transfer Station A.

Rountree Lane Realignment. Rountree Lane is located between the active landfill area to the north and the Alternative 1 site to the south. From the Rountree Lane/Harkins Slough Road intersection, Rountree Lane is used to access the Rountree Medium (Jail) Facility to the west and Tierra Alta Drive (and the Buena Vista Migrant Center and Tierra Alta affordable housing complex) to the east and southeast. To separate local/public traffic from transfer station traffic, Rountree Lane would be realigned to extend around the south side of Transfer Station A. This realignment would keep the general public on Rountree Lane, outside the facility fence.

Other Project Components. Under this alternative, the northeast corner would remain undeveloped, and Harkins Slough Road would not be realigned. All the other project components (Transfer Station B; Organics Diversion Facility Options 1 or 2; Landfill Closure and Revegetation, including the Environmental Enhancement and Habitat Restoration Features; and General Plan/LCP Land Use Designation and Zoning Map Amendments) would be the same as described for the Proposed Project in Section 2.4. Regarding the Optional Improvements, the Internal Access Road Improvements, Scale House Upgrades, and Recycling Center Upgrades would be the same as the Proposed Project. However, the optional Equipment Parking and Storage Area would not be constructed as proposed, because Transfer Station A would occupy the entire site.

Therefore, the impact analyses below focus on the difference between locating Transfer Station A on the undeveloped site southeast of the current landfill, instead of the undeveloped site northeast of the current landfill.

Impact Analysis

In summary, the overall impacts of Alternative 1 would be similar to the Proposed Project because all the project components would be the same, except the location of Transfer Station A. Transfer

Station A would be located south of Rountree Lane in the southeast corner of the County's landfill property, instead of the northeast corner. This would substantially reduce impacts to biological resources (from Significant and Unavoidable to Less than Significant with Mitigation). However, it would increase air quality and noise impacts to adjacent residents (sensitive receptors) from construction and operation of Transfer Station A, requiring additional noise mitigation to reduce the impact to Less than Significant with Mitigation. It would also increase aesthetics (light) impacts from removal of existing trees for construction of Transfer Station A.

Aesthetics

The aesthetic impacts of Alternative 1 would be similar to the Proposed Project, which are discussed in Section 3.1, Aesthetics. The overall impact determination would be Less than Significant, which is the same as the Proposed Project.

Visual Character and Public Views. Under Alternative 1, Transfer Station A would be constructed on the undeveloped site on the south side of Rountree Lane, instead of the undeveloped site in the northeast corner of the County's landfill property. All other components of the Project would remain the same as the Proposed Project.

The Alternative 1 Transfer Station A site consists of a vacant dirt lot with scattered vegetation and eucalyptus trees along portions of the site and surrounding edges. Existing public views of the site occur from Rountree Lane as drivers leave the Rountree Medium (Jail) Facility, Tierra Alta Drive as drivers approach Harkins Slough Road, and Harkins Slough Road as drivers approach the Alternative 1 Transfer Station A site and either turn west on Rountree Lane or east on Tierra Alta Drive. There are limited pedestrians and bicyclists on these roadways due to the remote location and lack of sidewalks and bike lanes, although some residents in the Buena Vista Migrant Center and Tierra Alta affordable housing complex (located southeast of the landfill on Tierra Alta Drive) occasionally walk along the Harkins Slough Road shoulder. Surrounding land uses and views from the Alternative 1 site include landfill operations to the north, the Rountree Medium (Jail) Facility to the west, and the Buena Vista Migrant Center and Tierra Alta housing complex to the southeast. Refer to **Figure 5-11a**.

Under Alternative 1, Transfer Station A would be similar to the Proposed Project and include the transfer station structure with a full-depth tunnel for transfer trailer loading, as well as office, employee and visitor spaces, restrooms, and parking areas. Similar to the Proposed Project, Transfer Station A would be located on an undeveloped site and require removal of several trees. Alternative 1 would remove several eucalyptus trees, and the Proposed Project would remove several oak trees (refer to the Biological Resources discussion below). Although Alternative 1 would introduce new structures and paved surfaces with more intensive uses at the site than the Proposed Project (which would locate equipment parking and storage at the site), the new facilities would be similar in character to existing operational uses at the Buena Vista Landfill and surrounding public service facilities in the area. The change in views (from an undeveloped site to a transfer station) from public roadways would be similar under Alternative 1 and the Proposed Project (albeit at a different location), and the impact would be less than significant.

Alternative 1 would require the realignment of Rountree Lane to extend around the south side of Transfer Station A to separate public traffic from transfer station traffic, and to provide public access to the Rountree Medium (Jail) Facility. This is similar to the realignment of Harkins Slough Road under the Proposed Project. Although these roadway modifications would occur in different locations, the resulting visual changes would be similar in character, and the impact would be less than significant.

Scenic Resources within a State Scenic Highway. Similar to the Proposed Project, Transfer Station A under Alternative 1 would be located approximately one mile south of SR-1 (an eligible state scenic highway) and less than a mile from Buena Vista Drive (designated as a County scenic roadway), and would not be visible from these roadways due to intervening land uses and topography, including hills and vegetation, which block any direct line of sight between SR-1 and the development site. The impact would be less than significant.

Light and Glare. Similar to the Proposed Project, the Transfer Station A site under Alternative 1 is currently undeveloped and has no lighting. The construction of Transfer Station A would add new nighttime lighting to this area. Like the Proposed Project, the exterior site lighting would be kept to a minimum to what is required for safety and operational needs during normal operating hours from 7:00 a.m. to 5:00 p.m. Lighting may include motion sensor site lighting, but all lighting would be affixed to structures or on standards not exceeding the structure height, and would be directed downward and away from adjacent land to the south and east, so it would not create substantial light that could adversely affect nighttime views in the area. Further, the existing conditions include nighttime lighting from the Rountree Medium (Jail) Facility and the Buena Vista Landfill office and maintenance area to the west, as well as lighting from the residential area to the southeast. Many of the existing eucalyptus trees, located between the residential area and the Jail and Landfill, would be removed to construct Transfer Station A, potentially exposing those using Tierra Alta Drive and residents to more light. Thus, the light and glare impact would be slightly greater under Alternative 1 than the Proposed Project. However, the impact would still be less than significant given the distance of those facilities and the existing lighting in the area.

In summary, the aesthetics impacts of Alternative 1 would be **Less than Significant**, with no mitigation required, which is the same as the Proposed Project.

Agricultural Resources

The impacts of Alternative 1 on agricultural resources would be similar to those identified for the Proposed Project, which are addressed in Section 3.2, Agricultural Resources. The overall impact determination would be Less than Significant, which is the same as the Proposed Project.

Similar to the Proposed Project, the Transfer Station A site under Alternative 1 is not designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance; and there is no existing Williamson Act contract. The site is within the Coastal Zone, where timberland production is not a permitted use; and the site does not meet the definition of forest land, timberland, or timberland production and is not zoned Timber Production (TP). Therefore, no impact would occur.

The existing zoning of the Transfer Station A site under Alternative 1 is Public and Community Facilities (PF), as shown on **Figure 2-2,** Landfill Parcels and Current Zoning, in Chapter 2. Therefore, unlike the Proposed Project, rezoning from Commercial Agriculture (CA) to PF would not be required for Transfer Station A, and no impact would occur.

Similar to the Proposed Project, Alternative 1 in its entirety would include 35 acres that are currently zoned Commercial Agriculture and Airport Combining Zone (CA-AIA) and would require amendments to parcel APN 052-021-33 (Agricultural Resource Map, General Plan/LCP Map, Zoning Map) to support the historical use of the property as a landfill, landfill closure, and the proposed redevelopment. The legal requirements to maintain landfill cap integrity make the closed landfill unsuitable for agricultural use. Further, the Agricultural Viability Study prepared for the Proposed Project (**Appendix B**) concluded that the 35-acre area is not suitable for agricultural use due to poor and highly variable soil quality, native vegetation, proximity to the wildlife refuge, and topography.

Neither Alternative 1 nor the Proposed Project would involve other changes in the existing environment, which could result in the conversion of farmland to non-agricultural use, and the impact would be less than significant.

In summary, the impact to agricultural resources from Alternative 1 would be **Less than Significant**, with no mitigation required, which is the same as the Proposed Project.

Air Quality

The air quality impacts of Alternative 1 would be similar to but slightly greater for localized emissions than those identified for the Proposed Project, which are addressed in Section 3.3, Air Quality. The overall impact determination would be Less than Significant, which is the same as the Proposed Project.

Conflict with Adopted Air Quality Management Plan. According to the MBARD Guidelines, a project would conflict with or obstruct implementation of the AQMP if it is inconsistent with the growth assumptions included in the AQMP in terms of population, employment, or regional growth in vehicle miles traveled (MBARD 2008). Like the Proposed Project, Alternative 1 would result in changes to operation from redevelopment activities at the existing Buena Vista Landfill to meet solid waste disposal needs from current use and from anticipated growth as the landfill reaches capacity, but it would not increase the residential population or employment in the area. Therefore, the impact would be less than significant.

Net Increase in Criteria Pollutants. Alternative 1 would require a similar construction effort and result in similar operational emissions compared to the Proposed Project, because the developed components would be the same. Total Alternative 1 emissions may be less than the Proposed Project because the optional Equipment Parking and Storage Area would not be constructed (because Transfer Station A would be situated on the site). The Equipment Parking and Storage Area would potentially result in construction emissions and vapor emissions from new gas dispensing facilities during operation that are conservatively assumed to occur under the Proposed Project. This optional improvement would not occur under Alternative 1; therefore, Alternative 1's total contribution to regional emissions would potentially be reduced. The impact would still be less than significant.

Sensitive Receptors. Under Alternative 1, Transfer Station A and thus the self-hauler vehicles (not the larger franchise and commercial haul vehicles) would be located closer to sensitive receptors at the Buena Vista Migrant Center (farmworker housing and childcare facility) and Tierra Alta affordable housing complex than the Proposed Project. The closest residence is within 100 feet of the realigned roadway and Transfer Station A. However, the total truck trips from Alternative 1 would be the same as the Proposed Project and would not exceed the CARB screening level of 100 trucks per day. Therefore, impacts related to construction emissions of diesel particulate matter and carbon monoxide hotspots would be similar to the Proposed Project, because the construction effort and operational traffic would be similar, although the localized emissions would be slightly greater due to the closer proximity to sensitive receptors. However, like the Proposed Project, the impact would be less than significant.

Odor. Alternative 1 would involve the handling of solid waste similar to the Proposed Project. However, Alternative 1 would relocate Transfer Station A closer to sensitive receptors at the Buena Vista Migrant Center (farmworker housing and childcare facility) and Tierra Alta affordable housing complex (approximately 200 feet). This would be similar to the distance between Transfer Station B and sensitive receptors at the occupied buildings at Rountree Medium (Jail) Facility (approximately 200 feet), which would occur under Alternative 1 and the Proposed Project. As discussed in Section

3.3, Air Quality, for the Proposed Project, a distance of approximately 200 feet between a transfer station and sensitive receptors would not result in significant new odor exposure, compared to existing conditions. All other project components would stay the same under Alternative 1 compared to the Proposed Project and would be less than significant.

In summary, the air quality impacts of Alternative 1 would be slightly greater than the Proposed Project because Transfer Station A would be located closer to sensitive receptors. However, the impact would be **Less than Significant**, with no mitigation required, which is the same as the Proposed Project.

Biological Resources

Impacts to biological resources associated with Alternative 1 would be substantially less than those identified for the Proposed Project, which are addressed in Section 3.4, Biological Resources. The overall impact determination would be Less than Significant with Mitigation, unlike the Proposed Project, which would be Significant and Unavoidable.

Sensitive Plant and Wildlife Species

Under Alternative 1, no impacts to sensitive plants are anticipated. Therefore, impacts to sensitive plant species would be the same as the Proposed Project and would be less than significant.

Like the Proposed Project, Alternative 1 may affect sensitive wildlife species with potential to occur in the Study Area, including Crotch's bumble bee, California red-legged frog, northwestern pond turtle, avian species, roosting bats, and San Francisco dusky-footed woodrat.

Crotch's Bumble Bee (Bombus crotchii). Similar to the Proposed Project, Alternative 1 may have an adverse impact on individual Crotch's bumble bees and active nests, if present, and on potential habitat, from clearing, grubbing, and grading the areas proposed for Alternative 1 Transfer Station A and Transfer Station B and from capping and closing the Landfill. Under Alternative 1, potential impacts to Crotch's bumble bee would be slightly less than those of the Proposed Project because Alternative 1 would avoid the 0.17-acre grassland area in the northeastern corner of the Project area that provides the most suitable habitat for this species. Therefore, impacts to Crotch's bumble bee under Alternative 1 would be slightly reduced compared to the Proposed Project but would remain less than significant with mitigation. For both the Proposed Project and Alternative 1, impacts to this species are unlikely due to its rarity.

Western Monarch Butterfly (Danaus plexippus). Similar to the Proposed Project, although individual western monarch butterflies were observed during field surveys, no autumnal or winter roosting monarchs were observed within the Study Area; and only marginal potential roost habitat is present. Alternative 1 Transfer Station A would be located within and adjacent to the eucalyptus stand located in the southeast corner of the Study Area (the Proposed Project's optional Equipment Parking and Storage Area). This stand of eucalyptus trees provides marginal roosting habitat as it is located 2.0 miles from the ocean (greater than the typical distance of within 1.5 miles) and consists of a monospecific stand of eucalyptus trees of the same age. Because of how densely planted the trees are, they have grown tall and thin, lack many mid-tier branches, and restrict sunlight penetration into the center of the stand. The grove lacks nectar plants such as English ivy. Nearby grassland and coyote brush scrub support some nectary vegetation. Therefore, the potential impact is less than significant, and no further discussion of monarch butterfly is necessary.

California Red-Legged Frog (Rana draytonii). Similar to the Proposed Project, Alternative 1 may result in adverse impacts to the California Red-Legged Frog (CRLF) through construction and

operation-related harassment, injury, mortality, or temporary habitat destruction. Locating Transfer Station A on the undeveloped site southeast of the existing landfill would not significantly alter impacts to CRLF; therefore, impacts under Alternative 1 would be similar to those of the Proposed Project. With implementation of CRLF protective measures, impacts would be less than significant with mitigation.

Northwestern Pond Turtle (Actinemys marmorata). Similar to the Proposed Project, Alternative 1 may result in adverse impacts to Northwestern Pond Turtle (NWPT), although unlikely. If NWPT are present during construction, activities such as grubbing, vegetation removal, grading, work within or adjacent to aquatic habitat, and equipment and vehicle operation may result in impacts to this species. Additionally, operation of Alternative 1, including increased traffic on internal roadways, could result in increased mortality of NWPT if individuals are present within the Project Area, although unlikely. Locating Transfer Station A on the undeveloped site southeast of the existing landfill would not significantly alter impacts to NWPT; therefore, impacts under Alternative 1 would be similar to those of the Proposed Project. With implementation of protective measures, impacts to NWPT would be less than significant with mitigation.

Avian Species. Like the Proposed Project, construction and operation of Alternative 1 may result in adverse impacts to avian species, their habitats, and nesting activities. However, under Alternative 1, potential impacts to avian species would be notably less than those of the Proposed Project because there would be no impact to coast live oak woodland habitat, located along Harkins Slough Road. Locating Transfer Station A on the undeveloped site southeast of the existing landfill would avoid impacting 0.54 acres of coast live oak woodland, a habitat type known to support high avian species diversity because of the complex multi-tiered structure of the woodland and diverse habitat features (branches, foliage, cavities, leaf litter, and understory). Alternative 1 would still result in the displacement of non-native grassland and non-native forest (including eucalyptus), which would reduce foraging, roosting, and nesting habitat for birds in the vicinity. Overall, impacts under Alternative 1 would be less than those of the Proposed Project and implementation of protective measures would reduce potential impacts to less than significant with mitigation.

Roosting Bats. Like the Proposed Project, construction and operation of Alternative 1 may result in adverse impacts to bat species, their habitats, and roosting activities. However, under Alternative 1, potential impacts to roosting bats would be notably less than those of the Proposed Project because there would be no impacts to coast live oak woodland habitat. Locating Transfer Station A on the undeveloped site southeast of the existing landfill would avoid impacting 0.54 acres of coast live oak woodland, including 0.17 acres within or adjacent to mature trees that contain suitable bat roost features, as part of the Harkins Slough Road Realignment. Alternative 1 would still result in the displacement of non-native forest and any demolition of buildings or other structures may also impact roosting bats. Removal of trees with suitable bat roost features would largely be limited to the eucalyptus grove in the southeast corner of the Study Area and impacts at this location would be similar to or slightly greater than the Proposed Project. Overall, impacts under Alternative 1 would be notably less than those of the Proposed Project, and implementation of protective measures would reduce potential impacts to less than significant.

San Francisco Dusky-footed Woodrat (Neotoma fuscipes annectens). Like the Proposed Project, construction of Alternative 1 may result in adverse impacts to San Francisco dusky-footed woodrat houses, individuals, or young, although potential impacts would be notably less than the Proposed Project because coast live oak woodland would be avoided. Tree and vegetation removal may directly impact woodrat stick houses and individuals; however, these impacts are less than for the

Proposed Project. Implementation of protective measures would reduce potential impacts to less than significant.

Overall, impacts to sensitive wildlife species would be substantially less compared to the Proposed Project, but would remain less than significant with mitigation.

Sensitive Habitats and Wetlands/Other Waters. Alternative 1 would result in no adverse impacts to sensitive habitats, including wetlands and other waters, or ESHA, and is therefore notably less impactful than the Proposed Project. Alternative 1 would avoid impacts to coast live oak woodland, a sensitive habitat and ESHA.

Restoration and enhancement activities would temporarily impact sensitive habitats, including mixed broadleaf riparian, mixed willow riparian, wetland, and riverine habitats, and these impacts would be the same as those of the Proposed Project.

Overall, impacts to sensitive habitats under Alternative 1 would be substantially less than those of the Proposed Project. With implementation of mitigation measures, impacts to sensitive habitats would be reduced to less than significant with mitigation, whereas the Proposed Project would result in significant and unavoidable impacts.

Wildlife Movement. Like the Proposed Project, construction of Alternative 1 may result in impacts to wildlife movement. However, under Alternative 1, potential impacts to wildlife movement would be substantially less than the Proposed Project because coast live oak woodland (a wildlife movement corridor) would be avoided.

Restoration and enhancement activities would temporarily impact sensitive habitats that provide wildlife movement features, including mixed broadleaf riparian, mixed willow riparian, wetland, and riverine habitats, and these impacts would be the same as those of the Proposed Project. Both Alternative 1 and the Proposed Project would improve wildlife movement through implementation of a wildlife corridor across the southern end of the landfill (once capped and closed) that connects Harkins Slough and Channelized Gallighan Slough and through modification of a culvert at the main landfill entrance that would allow for passage of small wildlife species.

Overall, impacts to wildlife movement under Alternative 1 would be substantially less than those of the Proposed Project, but would remain less than significant with mitigation.

Local Policies and Ordinances. Alternative 1 would avoid project-related conflicts with several local County ordinances including the Sensitive Habitat Protection Ordinance (Chapter 16.32), Riparian Corridor and Wetlands Protection Ordinance (Chapter 16.30), and Significant Tree Protection Ordinance (Chapter 16.34). An exception to the Riparian Corridor and Wetlands Protection Ordinance would be required for proposed restoration activities within Buena Vista Drive Tributary and Channelized Gallighan Slough. Project-related construction and restoration within Harkins Slough Road Drainage would not occur; therefore, both temporary project-related and beneficial impacts would not occur, and no exception to the ordinance would be required for this feature. An exception to the Sensitive Habitat Protection Ordinance would not be required since there would be no impacts to ESHA associated with Alternative 1, except for enhancement and restoration.

Similar to the Proposed Project, Alternative 1 would require a permit to comply with the County's Significant Tree Protection Ordinance and Tree Removal Policy due to the removal of 2 significant trees; however, significant tree removal associated with Alternative 1 Transfer Station A would be limited to non-native and ornamental trees. Impacts to significant trees under Alternative 1 would be substantially less compared to the Proposed Project because there would be no impacts to coast live oak woodland habitat nor a disallowed use within ESHA. Locating Transfer Station A on the

undeveloped site southeast of the existing landfill would avoid the removal of 91 coast live oak trees within this sensitive habitat.

Therefore, impacts would be considered less than significant with mitigation, unlike the Proposed Project, which would be significant and unavoidable. Because Alternative 1 would not result in impacts to or project activities within sensitive habitats and ESHA, except for proposed environmental enhancement and restoration features, all potential impacts would likely qualify for the necessary exceptions to perform these activities.

Habitat Conservation Plans. Like the Proposed Project, Alternative 1 would not conflict with the provisions of any adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. Therefore, no impact would occur.

In summary, the biological resources impacts of Alternative 1 would be substantially less than the Proposed Project. The impacts would be **Less than Significant with Mitigation**, unlike the Proposed Project, which would be Significant and Unavoidable.

Required mitigation measures include the following and are described in full in Section 3.4.4:

- BIO-1a: Conduct Environmental Training Prior to Construction
- BIO-1b: Schedule Construction to Avoid Impacts to Sensitive Biological Resources
- BIO-1c: Conduct Pre-construction Surveys and Implement Buffers for Crotch's Bumble Bee
- BIO-1d: Restore and Promote Crotch's Bumble Bee Habitat
- BIO-3: Implement Protective Measures and Biological Monitoring for California Red-Legged Frog and Northwestern Pond Turtle
- BIO-5a: Avoid Vegetation Removal during Breeding Bird Season or Conduct Nesting Bird Surveys
- BIO-5b: Conduct Surveys for Wintering Sensitive Bird Species
- BIO-6: Schedule Tree Removal to Avoid Bat Maternity Roosts and Winter Hibernacula and/or Conduct Pre-construction Surveys and Implement Protective Measures for Bat Roosts
- BIO-7: Conduct Pre-construction Surveys and Flag Woodrat Nests
- BIO-8a: Implement Measures to Protect Sensitive and Native Habitats during Construction
- BIO-8b: Implement Best Management Practices during Construction
- BIO-8c: Stabilize and Restore Temporary Impact Areas
- BIO-8d: Prepare and Implement a Habitat Mitigation Plan for Permanent Impacts to Sensitive Habitats, including Aquatic Features, for Proposed Project
- BIO-9a: Replace, Restore, and/or Enhance with In-Kind Riparian Vegetation Onsite
- BIO-13: Install Protective Fencing and Conduct Wildlife Relocation if Necessary
- BIO-14: Implement Tree Replacement Planting and Habitat Enhancement

Cultural Resources

The cultural resource impacts of Alternative 1 would be similar to the Proposed Project, which are discussed in Section 3.5, Cultural Resources. The overall impact determination would be Less than Significant with Mitigation, which is the same as the Proposed Project.

Historical Resources. Like the Proposed Project, Alternative 1 requires building demolition to construct Transfer Station B and the optional scale house upgrades and recycling center upgrades. The other project components do not require building demolition. These structures were evaluated for historical significance by a qualified architectural historian, and none were determined eligible. Therefore, the impact to historical resources would be less than significant.

Archaeological Resources and Human Remains. Alternative 1 would result in similar earthmoving activities that could inadvertently disturb previously unknown subsurface archaeological resources, which could result in a substantial adverse change in the significance of the resources, or human remains. Compared to the Proposed Project, the only difference is the location of excavation activities for Transfer Station A, which would be at an undeveloped site south of Rountree Lane instead of an undeveloped site in the northeast corner. The same mitigation measures would be required to reduce the impact to a less-than-significant level. Therefore, the impact would be less than significant with mitigation.

In summary, the cultural resources impacts of Alternative 1 would be **Less than Significant with Mitigation**, which is the same as the Proposed Project.

Required mitigation measures include the following and are described in full in Section 3.5.4:

- CR-2a: Stop Work if Inadvertent Encounter of Undiscovered Archaeological Resources during Ground-Disturbing Activities
- CR-2b: Archeologist and Native American Monitoring during Initial Ground-Disturbing Activities in Specific Areas

Energy

The energy impacts of Alternative 1 would be similar to those identified for the Proposed Project, which are addressed in Section 3.6, Energy. The overall impact determination would be Less than Significant, which is the same as the Proposed Project.

Energy Consumption. Alternative 1 would result in a similar energy demand compared to the Proposed Project during construction and operation because similar components would be developed under Alternative 1. Alternative 1 does not include any unique components that would result in wasteful or inefficient use of energy. The impact would be less than significant.

Energy Efficiency Plans. Alternative 1 would result in the development of the same components as the Proposed Project, resulting in similar energy demand; and neither Alternative 1 nor the Proposed Project would result in new natural gas use. Alternative 1 would not include the possibility of new electric vehicle charging stations, because Transfer Station A would be located on the site where the optional Equipment Parking and Storage Area would be located. However, new electric vehicle charging stations are not required for consistency with County Climate Action and Adaptation Plan. Therefore, like the Proposed Project, the impact would be less than significant.

In summary, the energy impacts of Alternative 1 would be **Less than Significant**, with no mitigation required, which is the same as the Proposed Project.

Geology and Soils

The geology and soils impacts of Alternative 1 would be similar to but slightly less than the Proposed Project, which are addressed in Section 3.7, Geology and Soils. The overall impact determination would be Less than Significant with Mitigation, which is the same as the Proposed Project.

Seismicity. Under Alternative 1, Transfer Station A would be constructed on the undeveloped site on the south side of Rountree Lane, instead of the undeveloped site in the northeast corner of the County's landfill property. All other components of the Project would remain the same as the Proposed Project. Like the Proposed Project, all structures would be designed and constructed in conformance with the most recently adopted California Building Code design parameters, which are specifically tailored to minimize the risk of structure failure due to seismic hazards. Therefore, the impact of Alternative 1 would be similar to the Proposed Project and the impact would be less than significant.

Soil Stability. Like the Proposed Project, Alternative 1 could include the construction of ODF Option 2, which would be located on loose soils subject to liquefaction. Thus, like the Proposed Project, implementation of ODF Option 2 could cause potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction. This impact would be mitigated by requiring a site stability evaluation of the Old Landfill during the final design process and incorporating any recommended measures. Transfer Station A would not be subject to this risk at the Alternative 1 site nor the Proposed Project site. Therefore, the impact of Alternative 1 would be similar to the Proposed Project, and the impact would be less than significant with mitigation to prepare a site stability evaluation of the Old Landfill during the final design process and incorporate any recommended measures (Mitigation Measure GEO-2).

Under Alternative 1, Transfer Station A would be constructed on the undeveloped site on the south side of Rountree Lane, which is anticipated to have expansive soils[4], instead of the undeveloped site in the northeast corner of the County's landfill property, which is known to have expansive soils due to the clay-rich sediment. Structures on clay-rich sediment are subject to damage from expansive soils. Like the Proposed Project, Alternative 1 includes construction of Transfer Station B, which would be on expansive soils. Thus, like the Proposed Project, construction of Transfer Station A and Transfer Station B could exacerbate the existing risk to life or property resulting from expansive soils. Therefore, the impact would be less than significant with mitigation to include appropriate design measures for Transfer Stations A and B (Mitigation Measure GEO-4).

There would be use of septic tanks or alternative wastewater disposal tanks requiring supporting soils.

Soil Erosion and Loss of Topsoil. The impact associated with soil erosion and loss of topsoil from Alternative 1 would be less than the Proposed Project because Alternative 1 would require less grading for construction of Transfer Station A and the associated roadway realignment. The Alternative 1 site is flat, whereas the Proposed Project site is sloped, requiring more grading for both the transfer station and the realignment for Harkins Slough Road (which requires a 2:1 slope to support the roadway near the oak woodland). The impacts related to erosion and loss of topsoil would be less than significant for Alternative 1, which is the same as the Proposed Project.

Paleontological Resources. Similar to the Proposed Project, Alternative 1 is not located in an area of known paleontological resources within Santa Cruz County (Santa Cruz County 2024). In addition, no unique paleontological resources or sites or unique geologic features are known to occur in the vicinity of the Project. Therefore, the potential for discovering resources would be low. The impact would be less than significant.

In summary, the geology and soils impacts of Alternative 1 would be slightly less than the Proposed Project because there would be less grading and thus less soil erosion and loss of topsoil, but it

[4] **Appendix H2** includes a geotechnical memorandum summarizing the evaluation of subsurface conditions and identified expansive soils at the location of Transfer Station B. Expansive soils are also identified to the east in Gallighan Slough Area. Therefore, it is reasonable to infer the site for Transfer Station A under Alternative 1 also contains expansive soils.

would still require mitigation for construction on unstable soils. The impact would be **Less than Significant with Mitigation**, which is the same as the Proposed Project.

Required mitigation measures include the following and are described in full in Section 3.7.4:

- GEO-2: Old Landfill Site Stability Evaluation for Organics Diversion Facility Option 2
- GEO-4: Expansive Soils Design Measures for Specific Structures

Greenhouse Gas Emissions

The greenhouse gas emissions (GHG) impacts of Alternative 1 would be similar to those identified for the Proposed Project, which are addressed in Section 3.8, Greenhouse Gas Emissions. The overall impact determination would be Less than Significant, which is the same as the Proposed Project.

Generate GHG Emissions/GHG Reduction Plan Consistency: Alternative 1 would require a similar construction effort and result in similar operational GHG emissions compared to the Proposed Project, because the developed components would be the same, regardless if Transfer Station A is in a different specific location. Alternative 1 would be consistent with the California Air Resources Board 2022 Scoping Plan and County Climate Action and Adaptation Plan because it would support waste diversion, implement landfill gas controls, and potentially reduce truck VMT compared to conditions without the Project. Alternative 1 would result in less oak tree removal than the Proposed Project, but more eucalyptus tree removal, such that tree removal would be similar to the Project. Mitigation Measure BIO-14 (Implement Tree Replacement Planting and Habitat Enhancement) would also be required for Alternative 1 for consistency with the 2022 Scoping Plan and CAAP goals for natural and working lands. Therefore, the impact would be less than significant with mitigation.

Flood Risk from Sea Level Rise and Storms: Impacts related to flood risk related to climate change would be similar to the Project because Alternative 1 would also be located within the existing landfill boundary. No new project components are proposed in the identified flood area mapped by the County's Coastal Climate Change Vulnerability Reports (Central Coast Wetlands Group 2017) or the California Coastal Commission's Our Coast Our Future hazard viewer mapping tool (CCC 2026). Therefore, although the landfill could experience intermittent flooding, it would not expose people or structures to potential substantial adverse effects. Therefore, the impact would be less than significant.

In summary, the GHG emissions impacts of Alternative 1 would be **Less than Significant with Mitigation**, which is the same as the Proposed Project.

Required mitigation includes the following measure, described in full in Section 3.4:

- BIO-14: Implement Tree Replacement Planting and Habitat Enhancement

Hazards and Hazardous Materials

The hazards and hazardous materials impacts of Alternative 1 would be similar to those identified for the Proposed Project, which are addressed in Section 3.9, Hazards and Hazardous Materials. The overall impact determination would be Less than Significant, which is the same as the Proposed Project.

Use and Exposure to Hazardous Materials. Similar to the Proposed Project, Alternative 1 would include construction activities that would require the operation of heavy equipment, which could involve the use of hazardous materials. Compliance with all applicable federal, state, and local requirements related to the routine transport, use, or disposal of hazardous materials would maximize

containment through safe handling and storage practices and provide for prompt and effective cleanup if an accidental release occurs. Therefore, the impact would be less than significant.

Similar to the Proposed Project, Alternative 1 would construct two new waste transfer stations to implement transfer station operations for waste handling and transport. Under Alternative 1, Transfer Station A would continue to serve self-haulers (residents and businesses) but would be constructed on the undeveloped site on the south side of Rountree Lane, as opposed to the undeveloped site in the northeast corner of the County's landfill property. Regardless of the transfer station site and consistent with current operations, the transfer station would accept household hazardous waste but would not accept hazardous waste, asbestos (friable and non-friable), radioactive waste, and untreated medical waste (biohazardous or infectious waste) for disposal. In addition, all common hazardous materials for cleaning and maintenance would be contained, stored, and used on site in accordance with manufacturers' instructions, applicable standards and federal, state, and local regulations.

Similar to the Proposed Project, Alternative 1 Transfer Station A would include gas monitoring sensors to ensure gas levels do not exceed CalRecycle's standard of 5%. All the other project components (Transfer Station B, Organics Diversion Facility Options 1 and 2, Landfill Closure and Revegetation) would be the same as described for the Proposed Project.

Therefore, impacts related to the routine transport, use, disposal, or release of hazardous materials would be less than significant.

Proximity to Schools. Similar to the Proposed Project, there are no schools located within 0.25 mile, and Alternative 1 would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school. Therefore, no impact would occur.

Listed Hazardous Materials Sites. Similar to the Proposed Project, there are no sites listed on the Cortese List of hazardous materials sites (pursuant to Government Code Section 65962.5) within 100 feet of the Alternative 1 area. Therefore, no impact would occur.

Proximity to Airports. Like the Proposed Project, Alternative 1 is located within the designated Airport Influence Area (AIA) for the Watsonville Municipal Airport, which is located approximately 1 mile northeast of the Buena Vista Landfill. Specifically, the entire project site, including Transfer Station A (both the Alternative 1 site and the Proposed Project site), is located in Safety Compatibility Zone 6 or the Traffic Pattern Zone, as well as the Overflight Zone. Transfer Station A would be approximately 140 feet above mean sea level under Alternative 1 and approximately 150 feet above mean sea level under the Proposed Project. All the other project components (Transfer Station B, Organics Diversion Facility Options 1 and 2, Landfill Closure and Revegetation) would be the same as described for the Proposed Project. Therefore, similar to the Proposed Project, the elevation for the various Project components and associated structures would be below the 200-foot limit, with Transfer Station A at the south of Rountree Lane location being slightly lower. The impact would be less than significant, which is the same as the Proposed Project.

Emergency Response or Evacuation Plan. Under Alternative 1, Rountree Lane would be realigned to extend around the south side of Transfer Station A to keep the general public on Rountree Lane, outside the facility fence. Therefore, the realignment of Harkins Slough Road, which was part of the Proposed Project, would not occur. Similar to the Proposed Project, the road realignment would separate waste hauling traffic/trucks from the public roadway and thus would not interfere with emergency access in and out of this area, nor with an Emergency Response Plan or Emergency Evacuation Plan. In addition, similar to the Proposed Project, there would be no planned road closures.

Emergency access and general access to land uses in the area – including Rountree Medium (Jail) Facility, Buena Vista Migrant Center (farmworker housing and childcare facility), Tierra Alta affordable housing complex, and other facilities – would be retained throughout construction with traffic controls and during long-term operation. Therefore, impacts would be less than significant.

Exposure to Wildfire Risk. Regardless of the locations, the transfer stations would include fire detection and fire suppression systems in accordance with the California Fire Code. There would be onsite controls (e.g., weed control, stored water, stockpiled soil, extinguishing equipment, gas monitoring) that reduce wildfire risks and would not expose people or structures to a significant risk of loss, injury, or death involving wildland fires. The impact would be less than significant.

In summary, the hazards and hazardous materials impacts of Alternative 1 would be **Less than Significant**, with no mitigation required, which is the same as the Proposed Project.

Hydrology and Water Quality

The hydrology and water quality impacts of Alternative 1 would be similar to but slightly less than the Proposed Project, which are addressed in Section 3.10, Hydrology and Water Quality. The overall impact determination would be Less than Significant, which is the same as the Proposed Project.

Water Quality Standards. During construction, the impact associated with soil erosion and loss of topsoil from Alternative 1 would be slightly less than the Proposed Project because Alternative 1 would require less grading for construction of Transfer Station A and the associated roadway realignment. The Alternative 1 site is flat, whereas the Proposed Project site is sloped, requiring more grading for both the transfer station and the realignment of Harkins Slough Road. Similar to the Proposed Project, Alternative 1 could potentially result in the accidental release of hazardous materials such as diesel fuel, gasoline, lubricant oils, hydraulic fluid, antifreeze, transmission fluid, cement slurry, and other fluids required for the operation of construction vehicles or equipment. Implementation of the BMPs to be included in the construction specifications and compliance with the NPDES-required SWPPP and County's grading regulations would reduce the risk of onsite/offsite water degradation from soil erosion and other pollutants related to construction activities.

Similar to the Proposed Project, Alternative 1 Transfer Station A would include stormwater filtration measures to prevent unwanted solid waste or contaminated stormwater from entering the stormwater system, including Stormceptors or filtration inlet bags. In addition, contact water from inside Transfer Station A would be collected and held in a storage tank for pump and haul removal.

Therefore, the impacts related to water quality standards would be less than significant for Alternative 1, which is the same as the Proposed Project.

Groundwater Supplies and Recharge. Similar to the Proposed Project, Alternative 1 would not use additional groundwater and therefore would not deplete groundwater resources compared to existing conditions. The existing landfill is designed to prevent groundwater infiltration that could mobilize materials disposed in the waste body and contaminate groundwater. Under Alternative 1, Transfer Station A would be constructed on the undeveloped site on the south side of Rountree Lane, instead of the undeveloped site in the northeast corner of the County's landfill property. Therefore, the overall increase in the amount of impervious surfaces would be similar to the Proposed Project. The impact related to groundwater supplies and recharge would be less than significant for Alternative 1, which is the same as the Proposed Project.

Drainage Patterns. Under Alternative 1, Transfer Station A would be constructed on the undeveloped site on the south side of Rountree Lane, requiring the realignment of Rountree Lane, instead of the undeveloped site in the northeast corner of the County's landfill property, requiring the realignment of Harkins Slough Road. Construction of Transfer Station A on the undeveloped site would increase the impervious surface and thus the volume of stormwater runoff, altering the localized drainage pattern. The transfer station site plan includes grading and drainage facilities to effectively manage the stormwater and connect it to the existing stormwater drainage system. In addition, similar to the Proposed Project, Alternative 1 would include the Environmental Enhancement and Habitat Restoration Features, such as the culvert replacement under the road to the Old Landfill as described in Section 2.4, which would have a beneficial effect on overall drainage patterns on the west side of the Buena Vista facility. Therefore, Alternative 1 would not substantially alter drainage patterns in the project area, and the impact would be less than significant, like the Proposed Project.

Release of Pollutants due to Flood Hazard. Similar to the Proposed Project, Alternative 1 is not located in any FEMA-designated Special Flood Hazard Areas, seiche zone, or tsunami inundation zone. Therefore, there would be no impact related to release of pollutants from flood hazards, like the Proposed Project.

In summary, the hydrology and water quality impacts of Alternative 1 would be **Less than Significant**, with no mitigation required, which is the same as the Proposed Project.

Land Use and Planning

The land use and planning impacts of Alternative 1 would be similar to the Proposed Project, which are addressed in Section 3.11, Land Use and Planning. The overall impact determination would be Less than Significant, which is the same as the Proposed Project.

Physically Divide Established Community. Under Alternative 1, Transfer Station A would be constructed on the undeveloped site on the south side of Rountree Lane, as opposed to the northeast corner of the County's landfill property. Compared to the Proposed Project, Alternative 1 would require the realignment of Rountree Lane, rather than the realignment of Harkins Slough Road, to provide public access around the transfer station and separate local/public traffic from transfer station traffic. The road realignment would keep the general public on Rountree Lane, outside the facility fence and would not impede traffic or physically divide the community. All the other project components (Transfer Station B, Organics Diversion Facility Options 1 and 2, Landfill Closure and Revegetation) would be the same as described for the Proposed Project. The impact would be less than significant.

Conflict with Land Use Plan, Policy, or Regulation. Similar to the Proposed Project, the entirety of Alternative 1 would include 35 acres that are currently zoned Commercial Agriculture and Airport Combining Zone (CA-AIA) and would require amendments to parcel APN 052-021-33, including General Plan/LCP Land Use Designation and zoning map amendments, to Public and Community Facilities (PF-AIA) to support the historical use of the property as a landfill and the proposed landfill redevelopment. The existing zoning for the Transfer Station A site on the south side of Rountree Lane (Alternative 1) is PF-AIA, whereas the existing zoning for the Transfer Station A site in the northeast corner of the landfill property (Proposed Project) is CA-AIA (**Figure 2-2** in Chapter 2). Even with implementation of Alternative 1, the zoning would be amended in the northeast corner to accommodate the existing and continued use of the area for staging and storage associated with County facility operations. The impact would be less than significant.

A detailed policy consistency analysis was not conducted for Alternative 1; but it would be similar to the Proposed Project, with Alternative 1 being consistent with most of the relevant policies identified. As described under Biological Resources, Alternative 1 would avoid project-related conflicts with several local County ordinances including the Sensitive Habitat Protection Ordinance (Chapter 16.32), Riparian Corridor and Wetlands Protection Ordinance (Chapter 16.30), and Significant Tree Protection Ordinance (Chapter 16.34).

In summary, Alternative 1 would not physically divide an established community and would be consistent with relevant policies adopted for the purpose of avoiding or mitigating an environmental effect. Therefore, the land use impacts would be **Less than Significant**, with no mitigation, which is the same as the Proposed Project.

Mineral Resources

The mineral resource impacts of Alternative 1 would be similar to but slightly less than the Proposed Project, which are addressed in Section 3.12, Mineral Resources. The overall impact determination would be Less than Significant, which is the same as the Proposed Project.

Availability of Known Mineral Resource. Similar to the Proposed Project, Alternative 1 would include a small portion of an area designated by the County as a Mineral Resource Area (**Figure 3.12-1**) where the proposed landfill closure and revegetation, as well as the optional scale house and recycling center upgrades, would take place. Transfer Station A would be outside this area for Alternative 1, as well as the Proposed Project.

Similar to the Proposed Project, Alternative 1 would require imported aggregate but at a reduced demand since there would be less fill needed for the construction of Transfer Station A on the flatter site, and there would not be construction of both Transfer Station A and the optional equipment parking and storage area. Similar to the Proposed Project, Alternative 1 would not represent a significant impact on that supply, and the impact would be less than significant.

Loss of Availability. Similar to the Proposed Project, Alternative 1 is comprised of County-owned parcels zoned Public Facilities-Airport Influence Area (PF-AIA) and Commercial Agriculture-Airport Influence Area (CA-AIA), which are not considered to be Extractive Use Zones (M-3) for mineral resources nor does it have a land use designation with a Quarry Designation Overlay (Q) (County of Santa Cruz 1994). Therefore, no impact would occur.

In summary, the mineral resources impacts of Alternative 1 would be slightly less than the Proposed Project because there would be less aggregate demand. The impact would be **Less than Significant**, with no mitigation required, which is the same as the Proposed Project.

Noise

The noise impacts of Alternative 1 would be similar to but more than those identified for the Proposed Project, which are addressed in Section 3.13, Noise. The overall impact determination would be Less than Significant with Mitigation, which is the same as the Proposed Project.

Construction Noise. Alternative 1 would require a similar construction effort compared to the Proposed Project, because the developed components would be similar. The difference is that Transfer Station A would be constructed in the southeast corner, where the equipment parking and storage area was planned for the Proposed Project; the parking and storage area would not be constructed; and the northeast corner would remain undeveloped. Therefore, the screening

distance of 200 feet for construction noise impacts calculated for Proposed Project construction would also apply to Alternative 1.

Under Alternative 1, construction of Transfer Station A would be located closer to sensitive receptors at the Buena Vista Migrant Center (farmworker housing and childcare facility) and Tierra Alta affordable housing complex than under the Proposed Project. Some of these receptors (e.g., the residence closest to the beginning of Tierra Alta Drive and Harkins Slough Road) would be located within 200 feet of the transfer station construction area, similar to the optional equipment storage and parking area evaluated for the Proposed Project. As such, these receptors would be within the construction noise screening distances. Implementing noise-reducing measures during construction (Mitigation Measure N-1) would reduce noise at nearby residences to below the County Noise Ordinance and General Plan Noise Element standards. Therefore, impacts from Transfer Station A construction would be less than significant with mitigation. This would be similar to but more than the Proposed Project, which would also require Mitigation Measure N-1 if the optional equipment parking and storage area is constructed at the same site.

Operational Noise. Operation of Alternative 1 would be similar to the Project, because the developed components would be the same. Less than significant increases to ambient noise levels on surrounding roadways would be similar because traffic generation would be the same.

However, under Alternative 1, Transfer Station A would be located closer to sensitive receptors at the Buena Vista Migrant Center (farmworker housing and childcare facility) and Tierra Alta affordable housing complex than the Proposed Project. The screening level of 800 feet for impacts to residential development calculated for Transfer Station operation for the Proposed Project would also apply to Alternative 1 because transfer station operation would be the same. As such, Alternative 1 would place Transfer Station A within the screening distance for impacts to the Buena Vista Migrant Center (farmworker housing and childcare facility) and Tierra Alta affordable housing complex. This impact would be reduced by requiring noise shielding design features for Transfer Station A (Mitigation Measure N-2c). Impacts from remaining components would be the same as the Proposed Project, which includes requiring noise-reducing design features for Transfer Station B and ODF Option 2 equipment operation due to proximity to sensitive receptors at the Rountree Medium (Jail) Facility (Mitigation Measure N-2b). Therefore, similar to the Proposed Project, this impact would be less than significant with mitigation.

Construction Vibration. The screening distance of 50 feet for vibration-related impacts calculated for the Proposed Project would also apply to Alternative 1 because construction effort would be similar. Alternative 1 would not result in any construction within 50 feet of existing receptors; therefore, like the Proposed Project, this impact would be less than significant.

Aircraft Noise. Alternative 1 would also be located within the existing landfill boundary, which is not located within the 60 dBA CNEL contour for any airport. Therefore, like the Proposed Project, Alternative 1 would result in a less than significant impact.

In summary, the noise impacts of Alternative 1 would be greater than the Proposed Project because Transfer Station A would be located closer to sensitive receptors. The impact would be reduced by incorporating noise-reducing design features in transfer station design and equipment operation. Therefore, the impact would be **Less than Significant with Mitigation**, which is the same as the Proposed Project.

Required mitigation measures include the following and are described in full in Section 3.13.4:

- N-1: Implement Noise-Reducing Measures for Construction Equipment Used within 200 Feet of Occupied Residences
- N-2a: Implement Noise-Reducing Design Features at Transfer Station B
- N-2b: Implement Noise-Reducing Design Features for Organics Diversion Facility Option 2 Equipment Operation

Additionally, Alternative 1 includes the following mitigation measure.

- **N-2c: Implement Noise-Reducing Design Features at Transfer Station A south of Rountree Lane**. Before the start of any operations of Transfer Station A, the County of Santa Cruz shall demonstrate that noise shielding features have been incorporated into Transfer Station A design to reduce noise levels to below an hourly average of 60 dBA at the nearest occupied building at the Buena Vista Migrant Center (farmworker housing and childcare facility) and Tierra Alta affordable housing complex. Measures to reduce noise exposure may include, but are not limited to, installation of industrial sound-proofing panels or curtains on all building walls or individual pieces of equipment to dampen noise.

Population and Housing

The population and housing impacts of Alternative 1 would be similar to those identified for the Proposed Project, which are addressed in Section 3.14, Population and Housing. The overall impact determination would be No Impact, which is the same as the Proposed Project.

Population Growth. Alternative 1 would have the same project components as the Proposed Project, except Transfer Station A would be in a different location and there would be no new equipment parking and storage area. Additionally, Rountree Lane would be realigned to extend around the transfer station, instead of Harkins Slough Road, to separate local/public traffic from transfer station traffic. Neither the project components nor the realignment of the roadway would cause population growth directly or indirectly, and there would be no impact.

Housing. Similar to the Proposed Project, Alternative 1 is limited to developed areas of the existing Buena Vista Landfill and adjacent vacant lands owned by the County. Instead of Transfer Station A being located on vacant land owned by the County in the northeast corner, it would be located on vacant land owned by the County (as well as a small piece of vacant land owned by the City of Watsonville) in the southeast corner. None of the vacant lands are designated or zoned for future residential development. In addition, the existing Buena Vista Landfill does not support any housing. Therefore, like the Proposed Project, Alternative 1 would not displace existing people or housing, necessitating the construction of replacement housing elsewhere. Therefore, no impact would occur.

In summary, the population and housing impacts of Alternative 1 would result in **No Impact**, which is the same as the Proposed Project.

Public Safety and Services

The public safety and services impacts of Alternative 1 would be similar to those identified for the Proposed Project, which are addressed in Section 3.15, Public Safety and Services. The overall impact determination would be Less than Significant, which is the same as the Proposed Project.

Similar to the Proposed Project, Alternative 1 would not introduce new residents or a substantial number of new employees to the Project area, which could result in the need for additional public services or facilities (fire, police, schools, parks), the construction of which could cause

environmental impacts. Additionally, given the controlled environment of the landfill and the current and planned safety measures (e.g., gas monitoring at the transfer stations), the project components including the transfer stations would not require new or expanded fire or police protection facilities.

Therefore, the public safety and services impacts of Alternative 1 would be **Less than Significant**, with no mitigation required, which is the same as the Proposed Project.

Recreation

The recreation impacts of Alternative 1 would be similar to those identified for the Proposed Project, which are addressed in Section 3.16, Recreation. The overall impact determination would be No Impact, which is the same as the Proposed Project.

Similar to the Proposed Project, Alternative 1 does not include the development of uses, such as residential dwellings or office employment, that would place demands on or result in the use of nearby parks and recreation facilities. In addition, Alternative 1 does not propose the construction of new or expanded recreational facilities, which could result in adverse physical effects to the environment and would not result in the need for the construction or expansion of recreational facilities.

Therefore, the recreation impacts of Alternative 1 would be **No Impact**, which is the same as the Proposed Project.

Transportation

The transportation impacts of Alternative 1 would be similar to those identified for the Proposed Project, which are addressed in Section 3.17, Transportation. The overall impact determination would be Less than Significant, which is the same as the Proposed Project.

Alternative 1 would have the same project components as the Proposed Project, including the two transfer stations, but there would be no new equipment parking and storage area. Thus, the overall trips and travel patterns for Alternative 1 would be the same as the Proposed Project. Self-haulers (residents and businesses) would use the main landfill entrance on Buena Vista Drive to access Transfer Station A to unload their solid waste and materials for diversion (recycling, household hazardous waste, organics, appliances, mattresses, carpet, etc.). Transfer trucks would use the same access roads to collect and transport materials to a regional waste disposal facility or recycling facilities.

The only difference would be the internal circulation patterns and required roadway realignment to separate local/public traffic from transfer station traffic. Alternative 1 would require the realignment of Rountree Lane to extend around the south side of Transfer Station A to keep the local traffic on Rountree Lane, outside the facility fence; whereas the Proposed Project would require the realignment of Harkins Slough Road.

Under Alternative 1, the northeast corner would remain undeveloped, and Harkins Slough Road would not be realigned. It should be noted that the County of Santa Cruz Public Works Division, Roads & Transportation, approved the realignment of Harkins Slough Road and the addition of stop signs at this location for the Proposed Project, and determined it would not present a design hazard or disrupt traffic flow because of the relatively low volume of vehicle trips to land uses on this portion of Harkins Slough Road. Similarly, traffic impacts of Alternative 1 would not present a design hazard or disrupt traffic flow because of the relatively low volume of vehicle trips to land uses on Rountree Lane, nor result in inadequate emergency access.

Therefore, like the Proposed Project discussed in Section 3.17, Alternative 1 would not conflict with a program, plan, ordinance, or policy addressing the circulation system (refer to Impact T-1 and **Table 3.17-2**) and would meet the screening criteria for a less than significant vehicle miles traveled (refer to Impact T-2). Neither construction nor operation would substantially increase hazards due to a geometric design feature or incompatible use, and there would be adequate emergency access (refer to Impacts T-3 and T-4).

In summary, the transportation impacts of Alternative 1 would be **Less than Significant**, with no mitigation required, which is the same as the Proposed Project.

Tribal and Cultural Resources

The tribal cultural resource impacts of Alternative 1 would be similar to the Proposed Project, which are discussed in Section 3.18, Tribal Cultural Resources. The overall impact determination would be Less than Significant with Mitigation, which is the same as the Proposed Project.

Alternative 1 would result in similar ground disturbance that may unearth or adversely affect previously undiscovered tribal cultural resources. Compared to the Proposed Project, the only difference is the location of excavation activities for Transfer Station A, which would be at an undeveloped site south of Rountree Lane instead of an undeveloped site in the northeast corner. The same mitigation measures would be required to reduce the impact to a less than significant level. Therefore, the impact would be less than significant with mitigation.

In summary, the tribal cultural resources impacts of Alternative 1 would be **Less than Significant with Mitigation**, which is the same as the Proposed Project.

Required mitigation measures include the following and are described in full in Section 3.4.4:

- CR-2a: Stop Work if Inadvertent Encounter of Undiscovered Archaeological Resources during Ground-Disturbing Activities
- CR-2b: Archeologist and Native American Monitoring during Initial Ground-Disturbing Activities in Specific Areas

Utilities and Service Systems

The utilities and service systems impacts of Alternative 1 would be similar to those identified for the Proposed Project, which are addressed in Section 3.19, Utilities and Service Systems. The overall impact determination would be Less than Significant, which is the same as the Proposed Project.

Utility Modifications. Similar to the Proposed Project, Alternative 1 would require the extension of utilities to the undeveloped Transfer Station A site. New water service lines for operational use and fire suppression would be extended to the site from the existing water tanks located at the neighboring Rountree Medium (Jail) Facility, located immediately west of the site. The new connection pipelines would be shorter compared to the Proposed Project due to the proximity. In addition, like the Proposed Project, Alternative 1 would construct a new underground holding tank for contact water and separate one for restroom use at the Transfer Station A facility. Electricity would be provided by electrical infrastructure already serving the site. Similar to the Proposed Project, the potential construction-related impacts of the utility modifications are analyzed by topic throughout this EIR, and impacts would be less than significant.

Water Supply. Similar to the Proposed Project, operation of Alternative 1 would require a small increase in the permanent demand for water to operate Transfer Station A (regardless of the

location), Transfer Station B, and ODF Option 1 or 2. The existing water supply would be sufficient, and the impact would be less than significant.

Wastewater. Similar to the Proposed Project, the transfer stations would generate wastewater from the proposed restrooms and from periodic cleaning of the interior transfer station walls where solid waste is collected, regardless of the location of Transfer Station A. The wastewater volume associated with restroom use is expected to be similar to the amount currently being generated by employees and existing landfill operations, although redistributed to the transfer stations. There would be a nominal amount of additional wastewater from periodic cleaning of the interior transfer station walls (called contact water). Like the Proposed Project, wastewater generated by Alternative 1 would be similar to existing landfill conditions, and Alternative 1 would not generate wastewater in excess of existing treatment capacity. Therefore, the impact would be less than significant.

Solid Waste. Similar to the Proposed Project, Alternative 1 would ensure an orderly landfill closure program that meets state requirements and provides ongoing solid waste handling capabilities to allow the County to meet state-required waste management goals for waste reduction, source separation, materials recycling, household hazardous waste management, and organics diversion. Similar to the Proposed Project, Alternative 1 would not generate solid waste in excess of the capacity of local infrastructure or otherwise impair the attainment of solid waste reduction goals. The impact would be less than significant.

In summary, the utilities and service system impact of Alternative 1 would be **Less than Significant**, with no mitigation required, which is the same as the Proposed Project.

Wildfire

The utilities and service systems impact of Alternative 1 would be similar to those identified for the Proposed Project, which are addressed in Section 3.20, Wildfire. The overall impact determination would be Less than Significant, which is the same as the Proposed Project.

As described in Section 3.20, the eastern portion of the Buena Vista Landfill is in a Very High Fire Severity Zone, and the western portion in a High Fire Severity Zone.

Evacuation and Emergency Response Plan. Under Alternative 1, Rountree Lane would be realigned to extend around the south side of Transfer Station A to keep the general public on Rountree Lane, outside the facility fence. The realignment of Harkins Slough Road, which would be required for the Proposed Project with Transfer Station A in the northeast corner, would not occur. Similar to the Proposed Project, the road realignment around the transfer station would separate local/public traffic from transfer station traffic, maintain traffic flow, and would not interfere with emergency access in and out of this area, nor with an Emergency Response Plan or Emergency Evacuation Plan. In addition, similar to the Proposed Project, there would be no planned road closures. Emergency access and general access to Rountree Medium (Jail) Facility, Buena Vista Migrant Center (farmworker housing and childcare facility), Tierra Alta affordable housing complex, and other facilities would be retained throughout construction with traffic controls. Therefore, impacts would be less than significant.

Pollutant Concentrations. Regardless of the locations, the transfer stations would include fire detection and fire suppression systems in accordance with the California Fire Code. There would be onsite controls (e.g., weed control, stored water, stockpiled soil, extinguishing equipment, gas monitoring) that reduce wildfire risks and thereby exposure of the transfer station occupants to potential pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. The impact would be less than significant.

Maintenance of Infrastructure. Similar to the Proposed Project, Alternative 1 includes the installation or maintenance of associated infrastructure, including power lines, emergency water sources, and utilities. Specifically, as stated above, new water service lines for domestic and fire suppression would be extended onto the Transfer Station A site (regardless of the location) and Transfer Station B site from the existing water tanks. In addition, Transfer Station A along with other components would connect to existing electrical infrastructure that already serves the site. Rountree Lane would be realigned to extend around the south side of Transfer Station A. Internal access roadway improvements could include asphalt paving of existing unpaved roads and repaving of existing worn and deteriorated roads. Similarly, associated infrastructure under Alternative 1, including the primary components and optional improvements, would not exacerbate fire risk. The impact would be less than significant.

In summary, the wildfire impact of Alternative 1 would be **Less than Significant**, with no mitigation required, which is the same as the Proposed Project.

5.2.2 Alternative 2. No Project

Description

CEQA requires analysis of a No Project alternative to allow decision-makers to compare the impacts of approving a project with the impacts of not approving a project (CEQA Guidelines, Section 15126.6[e]). The No Project analysis must discuss the existing conditions at the time the NOP is published, as well as what would be reasonably expected to occur in the foreseeable future if the Proposed Project were not approved, based on current plans and consistent with available infrastructure. If future uses of the land are predictable, such uses should be discussed as possible No Project conditions.

As such, under the No Project alternative, the Buena Vista Landfill would not be redeveloped as proposed. The Buena Vista Landfill or Facility would no longer accept solid waste (refuse), and the landfill would be closed in accordance with the Landfill Closure Plan (**Appendix D**) when the landfill reaches full capacity. The Buena Vista Facility provides many other waste management services, and it is anticipated the facility would continue to accept household hazardous waste, organics/green waste, self-haul recyclables, and bulk waste (e.g., appliances, e-waste, mattresses), with some minor modifications to current practices. Self-haulers and franchise haulers transporting these items to the Facility would continue to use the main entrance on Buena Vista Drive. However, as stated, refuse would no longer be accepted. Thus, there would be fewer employees compared to current conditions, as well as compared to the Proposed Project and Alternatives 1 and 3, because the transfer station(s) would not be operating and disposal into the landfill would cease once closed, except for limited ongoing maintenance.

Following is a description of what would be reasonably expected to occur with respect to each of the primary components of the Proposed Project.

Transfer Stations. Transfer Stations A and B would not be constructed. Therefore, the solid waste collection provider (currently Greenwaste Recovery) would transport the collected waste (refuse) for disposal at the regional landfill facility, ReGen Monterey in Marina, rather than the Buena Vista Landfill. The Transfer Station A site would remain undeveloped and would continue to be used for storage as needed, and Harkins Slough Road would not be realigned. At the Transfer Station B site, the existing vehicle maintenance building and landfill office building would remain in use and continue current non-landfill waste management operations, with no demolition of these facilities or site improvements (redevelopment) occurring at this site. Recycling and household hazardous waste

would still be accepted at the Buena Vista Facility near the main entrance on Buena Vista Drive, with no substantial changes to the current operation or traffic pattern anticipated.

After the landfill closes, less traffic would come to the Buena Vista site, but traffic to other regional waste sites would increase. Without a transfer station in south county, it is estimated that 107 commercial waste hauling trips (franchise hauler and commercial drop boxes) per week would be diverted from the Buena Vista site to ReGen Monterey in Marina. It is also estimated that 1,372 self-haul waste disposal trips per week would self-select to haul their loads to either the Ben Lomond Transfer Station in north county or to ReGen Monterey in Marina. The additional self-haul waste disposal trips to Ben Lomond would increase waste volume at that location and increase the number of waste hauling transfer truck trips sent from Ben Lomond to ReGen Monterey for landfill disposal. It is also anticipated that illegal dumping and littering could increase due to self-haulers' unwillingness to drive the additional distance to ReGen Monterey, located in Marina 19 miles south of the Buena Vista site.

Organics Diversion Facility. The organics diversion operation would continue to preprocess organic materials at its current location in the northern portion of the landfill for offsite composting, consistent with the current operations. The organics diversion area would be relocated to a suitable site on top of the closed landfill to allow for cap installation with no additional improvements. Neither ODF Option 1 nor ODF Option 2 would be implemented. ODF Option 1 would have provided onsite improvements at or near its current location, including: asphalt paving, a roof structure covering the area where food and yard waste is received and preprocessed, contact water management features, and stormwater management features. ODF Option 2 would have relocated the operation to the Old Landfill top deck and added onsite composting facilities. After landfill closure, organic waste would still be accepted at the Buena Vista site with no substantial changes to the current organics operation or traffic pattern anticipated.

Landfill Closure and Revegetation. The Landfill Closure Plan and Post-closure Maintenance Plan would still be implemented, as described in Section 2.4 and **Appendix D**, to meet current California Waste Discharge Requirements in Title 27 of the California Code of Regulations and Title 40 of the Code of Federal Regulations.

However, the proposed Environmental Enhancement and Habitat Restoration Features also described in Section 2.4 would not be implemented. These include: Restoration of Harkins Slough Road Drainage, Culvert Modification with Small Wildlife Crossing at Main Entrance, Culvert Replacement under Internal Roadway to Old Landfill, Restoration of Old Landfill Wetland and Drainage (ODF Option 2 Only), Wildlife Movement Corridor between Gallighan Slough and Harkins Slough, and Wildlife Directional Features at Key Locations.

Optional Improvements. The following optional improvements (shown on **Figure 2-1** in Chapter 2) would not be implemented.

a. Internal Access Road Improvements. Internal dirt/gravel roads would not be paved.

b. Scale House Upgrades. The existing scale house would not be upgraded with new scales that have radio frequency identification to improve traffic flow and scale operations.

c. Recycling Center Upgrades. The existing recycling center would not be expanded at its current location or relocated to the northeast landfill area to accommodate more materials and increase transportation efficiency. Recycling is currently free at the Buena Vista site, because staffing and other costs associated with materials handling are subsidized by the sale of recyclables and the fees charged for trash disposal at the site. With the continued decline in cost recovery for

recyclable materials and closure of landfilling operations, the County would likely begin charging a fee to cover the costs to continue diverting recyclable materials as required by law. If the County charges a recycling fee to cover the cost of these services, the community may recycle less, and recycling trips may decrease.

d. Equipment Parking and Storage Area. A new equipment parking and storage area for facility trucks and equipment would not be constructed on the vacant County-owned site south of Rountree Lane.

General Plan/Local Coastal Program Land Use Designation and Zoning Map Amendments. Even under the No Project alternative, the County would close the landfill when it reaches capacity as required by federal and state law, and bring the landfill into compliance with current land use and zoning designations. The legal requirements to maintain landfill cap integrity make the closed landfill unsuitable for agriculture. Therefore, the following amendments would proceed in conjunction with the landfill closure plan.

- Agricultural Resource Map Amendment
- General Plan/Local Coastal Program Map Amendment
- Zoning Map Amendment

Impact Analysis

Aesthetics

The aesthetic impacts of the No Project Alternative (Alternative 2) would be less than the Proposed Project, which are discussed in Section 3.1, Aesthetics. The overall impact determination would be Less than Significant, which is the same as the Proposed Project.

Visual Character and Public Views. Under Alternative 2, the visual character and quality of the project area and surrounding lands would generally remain similar to existing conditions (refer to Section 3.1.1). The proposed redevelopment of the Buena Vista Landfill would not occur, including construction of Transfer Stations A and B, ODF Option 1 or 2, and the optional improvements (paving roadways, scale house and recycling center upgrades, equipment parking and storage area). As a result, changes to visual character associated with new facilities would not occur.

With implementation of the No Project Alternative, the Buena Vista Landfill would continue operating until reaching capacity and would subsequently close in accordance with the Landfill Closure Plan and Post-closure Maintenance Plan. Like the Proposed Project, the closure activities would result in visible changes to the landfill surface, including a more uniform landform and increased vegetative cover, and active landfill operations would no longer be visible from surrounding roadways, which is considered a beneficial effect.

However, unlike the Proposed Project, there would be no visual changes associated with new facility development, particularly views of Transfer Station A from Harkins Slough Road and the optional equipment parking and storage area from the Rountree Lane/Tierra Alta Drive intersection. Therefore, the impact on scenic resources and the existing visual quality of public views of the site would be less than the Proposed Project, which was determined to be less than significant.

Scenic Resources within a State Scenic Highway. As discussed in Section 3.1.4 (Impact AES-2), the Buena Vista Facility is not currently visible from Highway 1 due to the distance and intervening

topography, and there would be no damage to scenic resources within Highway 1. There would also be no impact under the No Project scenario.

Light and Glare. Alternative 2 would not create a new source of light and glare because Transfer Station A would not be constructed on the undeveloped site in the northeast corner; therefore, there would be no impact. Transfer Stations A and B are the only components of the Proposed Project that would include lighting; and the impact was determined less than significant because there would be no nighttime operation, and the low-level lighting for security would not exceed the building height and would be directed downward. However, with no construction of Transfer Station B where the existing landfill office and maintenance area are located, the existing exterior lighting in this area would remain.

In summary, the aesthetics impacts of Alternative 2 would be less than the Proposed Project because there would be less change to the visual character and public views, particularly from construction of new Transfer Station A and the optional equipment parking and storage area, and there would not be a new source of light from Transfer Station A. The impact would be **Less than Significant**, with no mitigation required, which is the same as the Proposed Project.

Agricultural Resources

The impact of Alternative 2 on agricultural resources would be similar to those identified for the Proposed Project, which are addressed in Section 3.2, Agricultural Resources. The overall impact determination would be Less than Significant, which is the same as the Proposed Project.

With implementation of the No Project Alternative, the Buena Vista Landfill would continue operating until reaching capacity and would subsequently close in accordance with the Landfill Closure Plan. Following closure, the site would be subject to long-term maintenance requirements, including preservation of the landfill cap, which would preclude the use of the site for agricultural purposes. Although the Buena Vista Facility would no longer accept refuse, it would continue to accept household hazardous waste, organics/green waste, self-haul recyclables, and bulk waste (e.g., appliances, e-waste, mattresses).

Even under the No Project Alternative, the County would bring the landfill into compliance with current land use and zoning designations and amend the Agricultural Resource Map to remove the site from agricultural designation, consistent with regulatory requirements and the physical limitations of the closed landfill. The legal requirements to maintain landfill cap integrity make the closed landfill unsuitable for agricultural use. Further, the Agricultural Viability Study prepared for the Proposed Project (**Appendix B**) concluded that the 35-acre area is not suitable for agricultural use due to poor and highly variable soil quality, native vegetation, proximity to the wildlife refuge, and topography. Therefore, no conversion of agricultural land or loss of agricultural resources would occur.

In summary, the impacts to agricultural resources from Alternative 2 would be **Less than Significant**, with no mitigation required, which is the same as the Proposed Project.

Air Quality

The air quality impacts of the No Project Alternative (Alternative 2) would be similar, but more for regional emissions and less for localized emissions, than those identified for the Proposed Project, which are addressed in Section 3.3, Air Quality. The overall impact determination would be Less than Significant, which is the same as the Proposed Project.

Conflict with Adopted Air Quality Management Plan. According to the MBARD Guidelines, a project would conflict with or obstruct implementation of the AQMP if it is inconsistent with the growth assumptions included in the AQMP in terms of population, employment, or regional growth in vehicle miles traveled (MBARD 2008). Like the Proposed Project, Alternative 2 would not result in any increase in residential population or employment in the area, and the impact would be less than significant.

Net Increase in Criteria Pollutants. Alternative 2 would result in fewer impacts associated with construction-related emissions than the Proposed Project because there would be no construction of Transfer Stations A and B, ODF Option 1 or 2, nor the optional improvements (internal access road improvements, scale house and recycling center upgrades, equipment parking and storage area) that would expose sensitive receptors to pollutant concentrations. However, there would be construction-related emissions from implementing the Landfill Closure Plan and Post-closure Maintenance Plan, which involves earth movement as described in Section 2.4, **Table 2-2**, and **Appendix D**.

Compared to the Proposed Project, no new operational emissions would occur onsite under Alternative 2 because there would be no new transfer stations in operation to collect solid waste. The Buena Vista Facility would continue to operate the recycling center, household hazardous waste collection, and organics diversion consistent with current operations and traffic patterns (existing conditions). However, the No Project Alternative would likely result in additional regional emissions from waste disposal trips because the Buena Vista Landfill would be closed, and the Buena Vista Facility would not provide a central local site to consolidate refuse for transfer to the regional facility, resulting in more vehicular/truck trips to other facilities. Individuals and businesses would self-select to haul their loads each week to either the Ben Lomond Transfer Station, located approximately 25 miles of the Buena Vista Landfill in north county, or to the ReGen Monterey facility, located 19 miles south of the Buena Vista Landfill in Marina. Therefore, impacts associated with operational emissions would be increased compared to the Proposed Project, but would likely continue to be less than significant.

Sensitive Receptors. The No Project Alternative would not result in any new or increased pollutant sources or localized emissions near sensitive receptors near the Buena Vista Landfill, including residences and living quarters located south of the Project area (Buena Vista Migrant Center, Tierra Alta affordable housing complex, Rountree Medium (Jail) Facility). Construction during landfill closure would be the only new source of emissions under the No Project Alternative. Emissions would be temporary and, similar to the Proposed Project, the impact would be less than significant. However, there would likely be increased localized emissions near sensitive receptors (residences) along north County roadways to the Ben Lomond Transfer Station (e.g., Zayante Road, Quail Hollow Road, Glen Arbor Road). There are no sensitive receptors along the roadways to ReGen Monterey (Highway 1, Del Monte Boulevard, Charles Benson Road).

Odor. The No Project Alternative would not result in any new sources of odor compared to existing conditions. The landfill and potentially the existing organics diversion are existing sources of odor, which would reduce upon landfill closure, and there would be no potential odors from transfer stations. Similar to the Proposed Project, the impact would be less than significant.

In summary, the overall air quality impacts of Alternative 2 would be similar to but potentially more than the Proposed Project, due to the additional self-haul trips that would be required to the Ben Lomond Transfer Station or to the ReGen Monterey facility after closure of the Buena Vista Landfill. The impact would be **Less than Significant**, with no mitigation required, which is the same as the Proposed Project.

Biological Resources

Impacts to biological resources associated with the No Project Alternative (Alternative 2) would be substantially less than the Proposed Project, which are discussed in Section 3.4, Biological Resources. The overall impact determination would be Less than Significant with Mitigation, unlike the Proposed Project, which would be Significant and Unavoidable.

Under Alternative 2, Transfer Stations A and B, ODF Option 1 or Option 2, and the optional improvements (including internal access road improvements, scale house and recycling center upgrades, and equipment parking and storage areas) would not be constructed. As a result, construction and operation-related impacts to biological resources associated with these project components would not occur. However, similar to the Proposed Project, implementation of the Landfill Closure Plan and Post-Closure Maintenance Plan would still occur and would result in limited biological resources impacts. The environmental enhancement and habitat restoration features that were included as part of the Proposed Project would not be implemented as part of Alternative 2.

Sensitive Plant and Wildlife Species. Under Alternative 2, no impacts to sensitive plants are anticipated. Therefore, impacts to sensitive plant species would be less than significant, which is the same as the Proposed Project.

Closure activities under Alternative 2 would result in minimal impacts to sensitive wildlife species. Unlike the Proposed Project, no impacts are anticipated to the following wildlife species:

- **San Francisco Dusky-footed Woodrat (Neotoma fuscipes annectens).** Tree work associated with closure activities would be limited to pruning and limbing of trees in areas that do not provide suitable habitat for this species. In addition, no woodrat houses were observed within the Alternative 2 Project Area. Therefore, implementation of Alternative 2 would not impact this species, and impacts would be less than significant.

The following sensitive wildlife species may be affected by implementation of the Landfill Closure Plan and Post-Closure Maintenance Plan:

- **Crotch's Bumble Bee (Bombus crotchii).** Like the Proposed Project, landfill capping and closing activities associated with Alternative 2 may result in impacts to individual Crotch’s bumble bees, active nests, and potential habitat, although unlikely due to the rarity of this species. However, because Alternative 2 would not include most of the construction and operational activities associated with the Proposed Project, impacts to this species would be notably less. Due to the marginal habitat within the Alternative 2 Project Area and undetermined presence of this species, these potential impacts would be considered less than significant with mitigation.
- **California red-legged frog (Rana draytonii)**. Like the Proposed Project, landfill closure activities may result in impacts to the California red-legged frog (CRLF) through construction and operation activities. However, because Alternative 2 would not include most of the construction and operational activities associated with the Proposed Project, impacts to this species would be notably less. With implementation of protective measures, impacts to CRLF would be considered less than significant with mitigation.
- **Northwestern Pond Turtle (Actinemys marmorata).** Like the Proposed Project, landfill closure activities may result in impacts to northwestern pond turtle (NWPT), if present, during closure activities, including grading and equipment and vehicle operation and access. In the unlikely event that this species is present within the Project Area, these activities could result in injury or mortality of NWPT. However, because Alternative 2 would not include most of the construction

and operational activities associated with the Proposed Project, impacts to this species would be notably less. With implementation of protective measures, impacts to NWPT would be considered less than significant with mitigation.

- **Avian Species.** Like the Proposed Project, landfill closure activities may result in impacts to avian species and nesting activities. Construction-related Project activities which occur during the avian breeding season (February 1 to September 1) may disrupt breeding activities, cause nest abandonment or failure, premature fledging, or directly harm or cause mortality to nesting birds, eggs, and young located within the Project Area and surroundings. Tree pruning and limbing may directly impact active nests present in trees. However, because Alternative 2 would not include most of the construction and operational activities associated with the Proposed Project, impacts to this species would be notably less and would largely be limited to ground nesting birds and indirect impacts (noise and vibrations) to nesting birds. With implementation of preconstruction surveys and protective measures, impacts to avian species would be considered less than significant with mitigation.
- **Roosting Bats.** Like the Proposed Project, landfill closure activities may impact bat species, their habitats, and roosting activities. Potential impacts could include disturbance, injury, or mortality if active individual roosts or maternity colonies are present during tree work or demolition of buildings or other structures. However, because Alternative 2 would not include most of the construction and operational activities associated with the Proposed Project, impacts to this species would be notably less. With implementation of preconstruction surveys and protective measures, impacts to roosting bats would be considered less than significant with mitigation.

Because impacts to sensitive wildlife species would be limited to closure-related activities and would occur largely within existing developed, ruderal, and poor-quality non-native grassland habitats that provide limited habitat value for sensitive wildlife species, impacts would be considered less than significant with mitigation, which is the same as the Proposed Project.

Sensitive Habitats and Wetlands/Other Waters. Alternative 2 would not result in impacts to sensitive habitats and wetlands/other waters because no transfer stations, organics diversion facilities, or optional improvements would be constructed, and no sensitive habitats would be impacted by closure-related activities.

Because Alternative 2 would not include restoration and enhancement activities, no beneficial impacts to riverine, broadleaf and willow riparian, and wetland habitats would occur.

Overall, impacts to sensitive habitats under Alternative 2 would be substantially less than those of the Proposed Project. Impacts to sensitive habitats would **be less than significant**, whereas the Proposed Project would result in significant and unavoidable impacts.

Wildlife Movement. Like the Proposed Project, construction of Alternative 2 may result in impacts to wildlife movement. However, landfill closure and post-closure activities would result in only temporary disturbance to wildlife movement from construction-related noise, vibration, dust, and human activity. Because no transfer stations, organics diversion facilities, or optional improvements would be constructed, displacement of wildlife movement habitat features would be avoided. Therefore, impacts to wildlife movement would be substantially less than the Proposed Project and would be considered less than significant. Alternative 2 would not include implementation of the wildlife movement corridor between Harkins Slough and Channelized Gallighan Slough; therefore, this beneficial impact would not occur.

Local Policies and Ordinances. Unlike the Proposed Project, Alternative 2 would comply with applicable local policies and ordinances. No impacts to sensitive habitats, including aquatic features, would occur. No significant trees would be removed, and all impacts in wooded areas would be temporary. Alternative 2 would not require exceptions or exemptions from the following ordinances:

- Sensitive Habitat Protection Ordinance and Local Coastal Program
- Riparian Corridor and Wetlands Protection Ordinance
- Significant Tree Protection Ordinance

Therefore, the impact would be less than significant.

Habitat Conservation Plans. Like the Proposed Project, Alternative 2 would not conflict with the provisions of any adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. Therefore, no impact would occur.

In summary, the biological resources impacts of Alternative 2 would be substantially less than the Proposed Project. The impact determination would be **Less than Significant with Mitigation**, unlike the Proposed Project, which would be Significant and Unavoidable.

Required mitigation measures include the following and are described in full in Section 3.4.4:

- BIO-1a: Conduct Environmental Training Prior to Construction
- BIO-1b: Schedule Construction to Avoid Impacts to Sensitive Biological Resources
- BIO-1c: Conduct Pre-construction Surveys and Implement Buffers for Crotch's Bumble Bee
- BIO-1d: Restore and Promote Crotch's Bumble Bee Habitat
- BIO-3: Implement Protective Measures and Biological Monitoring for California Red-Legged Frog and Northwestern Pond Turtle
- BIO-5a: Avoid Vegetation Removal during Breeding Bird Season or Conduct Nesting Bird Surveys
- BIO-5b: Conduct Surveys for Wintering Sensitive Bird Species
- BIO-6: Schedule Tree Removal to Avoid Bat Maternity Roosts and Winter Hibernacula and/or Conduct Pre-construction Surveys and Implement Protective Measures for Bat Roosts

Cultural Resources

The cultural resources impacts of the No Project Alternative (Alternative 2) would be much less than the Proposed Project, which are addressed in Section 3.5, Cultural Resources. The overall impact determination would be Less than Significant, unlike the Proposed Project, which would be Less than Significant with Mitigation.

Historical Resources. Unlike the Proposed Project, Alternative 2 would not require building demolition to construct Transfer Station B nor the upgrade of the existing scale house and recycling center. Thus, there would be no impact to potentially historic structures, unlike the Proposed Project, which would result in a less than significant impact from demolishing the structures since they were determined ineligible for listing.

Archaeological Resources and Human Remains. The No Project Alternative would still result in earth movement associated with landfill closure, but it would be on the above-grade landfill slopes with minimal risk of discovering archaeological resources or human remains. There would be no earth movement and subsurface excavation activities associated with the construction of Transfer

Stations A and B, ODF Options 1 or 2, culvert replacement/modification (associated with restoration and enhancement features), nor the optional improvements (recycling and scale house upgrades, roadway improvements, equipment parking and storage area). Therefore, there would be substantially less earth movement, which would reduce the risk of discovering and adversely affecting unknown archaeological resources or human remains. The impact would be less than significant with no mitigation required, whereas the Proposed Project would require mitigation to protect the inadvertent discovery of unknown resources below grade.

In summary, the cultural resources impacts of Alternative 2 would be substantially less than the Proposed Project because there would be little to no subsurface excavation. The impact would be **Less than Significant**, unlike the Proposed Project, which would be Less than Significant with Mitigation.

Energy

The ongoing energy impacts of the No Project Alternative (Alternative 2) would be more than those identified for the Proposed Project, which are addressed in Section 3.6, Energy. The overall impact determination would be Less than Significant, which is the same as the Proposed Project.

Energy Consumption. Under the No Project Alternative, there would be no construction-related energy use from the construction of Transfer Stations A and B, ODF Option 1 or 2, nor the optional improvements (internal access road improvements, scale house and recycling center upgrades, equipment parking and storage area). However, similar to the Proposed Project, construction-related energy use from the Landfill Closure Plan and Post-closure Maintenance Plan would still occur. Therefore, the overall energy consumption impacts associated with construction emissions would be less than the Proposed Project.

Compared to the Proposed Project, no new energy consumption would occur onsite under Alternative 2, because there would be no new transfer stations operating. The Buena Vista Facility would continue to operate the recycling center, household hazardous waste collection, and organics diversion consistent with current operations and energy use (existing conditions).

However, the No Project Alternative would likely result in additional energy consumption offsite from fuel consumption associated with waste disposal trips elsewhere in the region because the Buena Vista Landfill would be closed, and the Buena Vista Facility would not provide a central local site to consolidate waste for transfer to the regional facility, resulting in more vehicular/truck trips to other facilities. Individuals and businesses would self-select to haul their loads to either the Ben Lomond Transfer Station in north county or to the ReGen Monterey facility in Marina each week. However, the fuel use would be required for necessary solid waste disposal and thus would not be unnecessary or wasteful. Therefore, this impact would be less than significant, like the project.

Energy Efficiency Plans. Alternative 2 would not include the possibility of new electric vehicle charging stations because the optional equipment parking and storage area would not be developed on the south side of Rountree Lane. Additionally, the No Project Alternative would not be as fuel efficient as the Proposed Project for future solid waste disposal, because it would not consolidate the refuse for transport to the regional facility, resulting in more fuel consumption as described above. However, the No Project Alternative does not include components that would conflict with CAAP implementation, such as removing existing waste diversion facilities or resulting in new tree removal. Therefore, the overall energy efficiency would be similar to the Proposed Project, and the impact would be less than significant.

In summary, the fuel use impacts of Alternative 2 would likely be more than the Proposed Project during operation, because without the transfer stations to consolidate the solid waste for transport

to the regional facility, additional self-haul trips would be required to transport the waste to the Ben Lomond Transfer Station or to the ReGen Monterey facility after closure of the Buena Vista Landfill. However, the fuel use impacts during construction and electricity use impacts during operation would be less than the Proposed Project, because construction and operation of new components (primarily the transfer stations) would not occur. Therefore, the impact would be **Less than Significant**, with no mitigation required, which is the same as the Proposed Project.

Geology and Soils

The geology and soils impacts of Alternative 2 would be less than the Proposed Project, which are addressed in Section 3.7, Geology and Soils. The overall impact determination would be Less than Significant, unlike the Proposed Project, which would be Less than Significant with Mitigation.

Under the No Project Alternative, there would be no ground-disturbing activities from the construction of Transfer Stations A and B, ODF Options 1 or 2, nor the optional improvements. However, the Landfill Closure Plan and Post-closure Maintenance Plan would still be implemented.

Seismicity. Alternative 2 would not involve the construction of Transfer Stations A and B, ODF Options 1 or 2, nor the optional improvements, and thus would require fewer employees than the Proposed Project. Similar to the Proposed Project, the landfill closure cover system would comply with seismic design criteria as outlined in Section 20370(e) of Title 27 of the California Code of Regulations and with the U.S. Environmental Protection Agency Seismic Design Guidance for Municipal Solid Waste Landfill Facilities requirements for design of landfills located in seismic impact zones. Impacts would be less than significant, but slightly less than the Proposed Project due to no construction of the transfer stations and associated employees exposed to potential seismic risks.

Soil Stability. Alternative 2 would not result in impacts related to slope stability because there would be no new construction on unstable soils, nor the use of septic tanks or alternative wastewater disposal tanks requiring supporting soils; therefore, the impact would be less than significant. However, the Proposed Project would result in potential impacts from construction activities related to ODF Option 2 (located on loose soils subject to liquefaction) and Transfer Stations A and B (expansive soils), which would require mitigation.

Soil Erosion and Loss of Topsoil. Alternative 2 would result in soil erosion and loss of topsoil due to earth-moving activities associated with the Landfill Closure Plan, which involves installing the final cover system, monitoring systems, and final grading as described in Section 2.4. The impact would be similar to but substantially less than the Proposed Project, which also involves construction of the transfer stations, ODF, and potentially other improvements involving earth movement. The impact for Alternative 2 and the Proposed Project would be less than significant.

Paleontological Resources. The Buena Vista Landfill is not located in an area of known paleontological resources, and none are known to occur in the vicinity. Further, the only ground disturbance associated with Alternative 2 would be implementing the Landfill Closure Plan, which is comprised of refuse and fill, well above the base grade. The impact would be less than significant, like for the Proposed Project.

In summary, the geology and soils impacts of Alternative 2 would be less than the Proposed Project because there would be no development on unstable soils and substantially less earth movement. The impact would be **Less than Significant**, unlike the Proposed Project, which would be Less than Significant with Mitigation.

Greenhouse Gas Emissions

The ongoing GHG impacts of Alternative 2 would be more than those identified for the Proposed Project, which are addressed in Section 3.8, Greenhouse Gas Emissions. The overall impact determination would be Less than Significant, which is the same as the Proposed Project.

Generate GHG Emissions/GHG Reduction Plan Consistency: Under the No Project Alternative, landfill redevelopment including the construction of Transfer Stations A and B, ODF Options 1 or 2, and optional improvements (roadway pavement, scale house and recycling center upgrades, equipment parking and storage area) would not occur. Greenhouse gas (GHG) emissions associated with construction equipment, construction vehicles (e.g., haul trucks and vendor/delivery trucks), and worker vehicles would be avoided compared to the Proposed Project. However, similar to the Proposed Project, construction-related GHG emissions from the Landfill Closure Plan and Post-closure Maintenance Plan would still occur. Overall impacts associated with construction emissions would be less than the Proposed Project.

Alternative 2 would not result in new operational GHG emissions onsite compared to existing conditions and to the Proposed Project, because there would be no new transfer stations in operation. However, the No Project scenario would likely result in additional regional GHG emissions from waste disposal trips because the Buena Vista Landfill would be closed, and the Buena Vista Facility would not provide a central local site to consolidate waste for transfer to the regional facility, resulting in more vehicular/truck trips to the other facilities. Individuals and businesses would self-select to haul their loads to either the Ben Lomond Transfer Station in north county or to ReGen Monterey in Marina each week. Therefore, the net overall emissions would likely be more than the Proposed Project due to increased fuel use.

Additionally, although the No Project scenario would continue organics diversion (as described for ODF Option 1 of the Proposed Project), it precludes the possibility of implementing ODF Option 2, which would add onsite composting with an aeration facility to the organics diversion process, resulting in a net benefit for organic waste-related GHG emissions.

Finally, as stated above, Alternative 2 would not result in tree removal, which is consistent with the CAAP and 2022 Scoping Plan strategies related to conservation of natural habitat and carbon sequestration, nor would Alternative 2 implement the Proposed Project's environmental enhancement and restoration features. Implementation of Alternative 2 would result in a less short-term impact related to sequestration because it would not result in tree removal. Long-term sequestration would be reduced compared to the tree replacement and habitat restoration that would occur under the Proposed Project. The Proposed Project was determined not to conflict with the CAAP and 2022 Scoping Plan, with implementation of these features and the mitigation measures identified in the Biological Resources analysis.

Thus, compared to the Proposed Project, Alternative 2 would result in less construction and operational emissions onsite but more operational vehicle emissions regionally, resulting in slightly more GHG emissions overall compared to the Proposed Project. Both Alternative 2 and the Proposed Project would be consistent with relevant GHG reduction plans. Mitigation Measure BIO-14 would not be required under Alternative 2; however, as noted above, sequestration under Alternative 2 may be reduced compared to the Proposed Project without implementation of mitigation.

Flood Risk from Sea Level Rise and Storms: No new development would occur under the No Project Alternative. Therefore, although the landfill could experience intermittent flooding, it would not expose people or structures to potential substantial adverse effects. The impact would be less than significant, which is the same determination for the Proposed Project.

In summary, the overall GHG emissions impacts of Alternative 2 would be similar to but potentially more than the Proposed Project, due to the additional self-haul trips that would be required to the Ben Lomond Transfer Station or to the ReGen Monterey facility after closure of the Buena Vista Landfill. The impact would be **Less than Significant**, with no mitigation required, which is reduced compared to the Proposed Project because tree removal would not occur. However, as noted above, actual GHG emissions would be potentially increased compared to the Proposed Project.

Hazards and Hazardous Materials

The hazards and hazardous materials impacts of Alternative 2 would be less than those identified for the Proposed Project, which are addressed in Section 3.9, Hazards and Hazardous Materials. The overall impact determination would be Less than Significant, which is the same as the Proposed Project.

Use and Exposure to Hazardous Materials. Under Alternative 2, there would be no construction activities related to Transfer Stations A and B, ODF Options 1 or 2, nor the optional improvements. However, the Landfill Closure Plan and Post-closure Maintenance Plan would still be implemented, requiring the operation of heavy equipment, which could involve the use of hazardous materials. Additionally, the existing recycling, household hazardous waste collection, and organics diversion activities would continue similar to existing conditions. Compliance with all applicable federal, state, and local requirements related to the routine transport, use, or disposal of hazardous materials would maximize containment through safe handling and storage practices and provide for prompt and effective cleanup if an accidental release occurs. Additionally, landfill gas migration would be controlled by the landfill gas well controls and the landfill gas collection and conveyance system. The potential release of harmful gases into the area surrounding the landfill would be controlled, monitored, and reduced to acceptable levels. Therefore, impacts related to the routine transport, use, disposal, or release of hazardous materials would be less than significant, like the Proposed Project.

Proximity to Schools. There are no existing or planned schools located within 0.25 mile; therefore, Alternative 2 would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school. Therefore, no impact would occur, like the Proposed Project.

Listed Hazardous Materials Sites. There are no sites listed on the Cortese List of hazardous materials sites (pursuant to Government Code Section 65962.5) within 100 feet of the Alternative 2 area. Therefore, no impact would occur, like the Proposed Project.

Proximity to Airports. Alternative 2 is located within the designated Airport Influence Area (AIA) for the Watsonville Municipal Airport, which is located approximately 1 mile northeast of the Buena Vista Landfill. Specifically, the entire project site is located in Safety Compatibility Zone 6 or the Traffic Pattern Zone, as well as the Overflight Zone. Under Alternative 2, there would be no construction activities related to Transfer Stations A and B, ODF Options 1 or 2, nor the optional improvements. However, the Landfill Closure Plan and Post-closure Maintenance Plan would still be implemented and would be the same as described for the Proposed Project. Additionally, the recycling center, household hazardous waste collection, and organics diversion operation (preprocessing only) would continue similar to existing conditions with no substantial changes to the current operation and location. The elevation for all the activities under the No Project scenario would be below the 200-foot limit. Therefore, the impact would be less than significant, which is the same as the Proposed Project.

Emergency Response or Evacuation Plan. Under Alternative 2, there would be no temporary disruption or realignment of Harkins Slough Road, which would remain in its current location.

Therefore, there would be no potential impacts to emergency response due to construction-related delays and temporary lane closures, nor need for traffic controls, like there would be for the Proposed Project. There would be no impact under Alternative 2, whereas there would be a less than significant impact for the Proposed Project.

Exposure to Wildfire Risk. Under Alternative 2, there would be no construction activities related to Transfer Stations A and B, ODF Options 1 or 2, nor the optional improvements. However, the Landfill Closure Plan and Post-closure Maintenance Plan would still be implemented. Similar to the Proposed Project, the No Project Alternative 2 would have on-site controls in place (weed control, stored water, stockpiled soil, extinguishing equipment, gas monitoring) to reduce the exposure of people or structures to a significant risk of loss, injury, or death involving wildland fires. The impact would be less than significant.

In summary, the hazards and hazardous materials impacts of Alternative 2 would be less than the Proposed Project because there would be less construction and operational activities at the site, reducing the risk of accidental release of hazardous materials; and there would be no temporary lane closures or delays for roadway realignment, reducing the risk of slowing emergency access. The impact would be **Less than Significant**, with no mitigation required, which is the same as the Proposed Project.

Hydrology and Water Quality

The hydrology and water quality impacts of Alternative 2 would be less than the Proposed Project, which are addressed in Section 3.10, Hydrology and Water Quality. The overall impact determination would be Less than Significant, which is the same as the Proposed Project.

Water Quality Standards. Under Alternative 2, landfill redevelopment including the construction of Transfer Station A (including the realignment of Harkins Slough Road), Transfer Station B, ODF Option 1 or 2, and optional improvements (e.g., paving roadways and equipment parking and storage area) would not occur. However, under the No Project alternative, the Landfill Closure Plan and Post-closure Maintenance Plan would still be implemented.

Alternative 2 would result in soil erosion and loss of topsoil due to earth-moving activities associated with the Landfill Closure Plan, which involves installing the final cover system, monitoring systems, and final grading as described in Section 2.4. The impact would be similar to, but substantially less than, the Proposed Project, which also involves construction of the transfer stations, ODF, and potentially other improvements involving earth movement. The ODF operation would continue to preprocess organic materials at its current location with no substantial changes to the current operation, which could result in increased water quality/stormwater impacts compared to the Proposed Project because no drainage improvements would occur. As part of the Preliminary Landfill Closure Plan, a surface water management system would be implemented after the final cover has been placed, which would control flows on the surface of the landfill cap; prevent infiltration, inundation, and ponding on the landfill final cover; minimize erosion of final cover; minimize erosion, slope failure, washout, and over-topping of associated surface water conveyances; and minimize sediments carried off site. Therefore, the potential impact associated with water quality and meeting standards would be less than significant for Alternative 2, like for the Proposed Project.

Groundwater Supplies and Recharge. Under Alternative 2, landfill redevelopment as described above would not occur. Therefore, no new impervious surfaces would be created, and infiltration

would be similar to existing conditions. There would be no impact to groundwater supplies and recharge, which is less than the Proposed Project.

Drainage Patterns. Under Alternative 2, landfill redevelopment as described above would not occur, although the Landfill Closure Plan and Post-closure Maintenance Plan would still be implemented. As part of the Preliminary Landfill Closure post closure, a surface water management system would be implemented after the final cover has been placed, which would control flows on the surface of the landfill cap to prevent infiltration, inundation, and ponding on the landfill final cover; minimize erosion of final cover; minimize erosion, slope failure, washout, and over-topping of associated surface water conveyances; and minimize sediments carried off site. These modifications would alter drainage patterns on the landfill, but they are requirements of the landfill closure process to protect water quality and are not substantially different than existing drainage patterns at the landfill. In addition, Alternative 2 would not include any of the Environmental Enhancement and Habitat Restoration Features described in Section 2.4, which include replacing the culvert under the road to the Old Landfill and improving existing drainage patterns on the west side of the Buena Vista facility. The impact related to existing drainage patterns would be less than significant, like the Proposed Project.

Release of Pollutants due to Flood Hazards. Similar to the Proposed Project, Alternative 2 is not located in any FEMA-designated Special Flood Hazard Areas, seiche zone, or tsunami inundation zone. Therefore, there would be no impact related to release of pollutants from flood hazards, like the Proposed Project.

In summary, the hydrology and water quality impacts of Alternative 2 would be less than the Proposed Project because there would be less construction activities potentially affecting water quality and less alteration to drainage patterns. The impact would be **Less than Significant**, with no mitigation required, which is the same as the Proposed Project.

Land Use and Planning

The land use and planning impacts of Alternative 2 would be similar to but less than those identified for the Proposed Project, which are addressed in Section 3.11, Land Use and Planning. The overall impact determination would be Less than Significant, which is the same as the Proposed Project.

Physically Divide Established Community. Under Alternative 2, the proposed redevelopment of the Buena Vista Landfill would not occur. Transfer Stations A and B would not be constructed, and Harkins Slough Road would not be realigned. The site would continue to operate as an existing waste management facility until it reaches capacity and would then close in accordance with the Landfill Closure Plan. Following closure, the site would remain subject to long-term maintenance requirements associated with the landfill cap. Additionally, the existing recycling center, household hazardous waste collection, and organics diversion activities are anticipated to continue similar to existing conditions. The Transfer Station A site would continue to be used by the County for storage, and the Transfer Station B site would continue to be used for existing vehicle maintenance and office facilities. Because the No Project Alternative would not result in new development or changes in land use, and because the ongoing maintenance activities for the closed landfill would be less than current landfill activities, it would not conflict with surrounding land uses or physically divide an established community, and the potential impacts in the Buena Vista Landfill area would be negligible and considered less than significant.

The Proposed Project would also have a less than significant impact. Although the Proposed Project includes construction of Transfer Stations A and B, possible relocation of the organics diversion

facility, the realignment of Harkins Slough Road, and other optional improvements, the new development would occur within the existing landfill footprint and vacant adjacent parcels. The roadway realignment would maintain separation of public traffic from landfill operation traffic, but would not physically divide a community.

Conflict with Land Use Plan, Policy, or Regulation. Even under the No Project alternative, the County would bring the property into compliance with current land use and zoning designations. As shown on **Figure 2-2** in Chapter 2, the eastern portion of the County property (a 35-acre section of APN 052-021-33 including a portion of the existing landfill and the northeast corner of the County's property) is designated/zoned for Commercial Agriculture. An Agricultural Viability Study prepared for the Proposed Project determined this area unsuitable for farming or grazing operations (**Appendix B**). To achieve consistency with existing use and in recognition of the area's unsuitability for agriculture, Alternative 2 includes amending the County General Plan/LCP and Zoning maps to Public Facilities and amending the Agricultural Resource Map to remove the parcel from Type 3 agricultural resources.

Additionally, these amendments would not conflict with relevant policies. General Plan Policy BE-6.2.1 requires environmental review for all non-exempt rezonings and general plan amendments, which is being conducted as part of this EIR. Policies ARC-1.3.1 and ARC-1.3.2 require conversion of agricultural lands only when the land is determined not viable for agriculture, and an Agricultural Viability Study determined the area unsuitable for agriculture. Similarly, the Proposed Project would be consistent with these policies and most other policies identified in **Table 3.11-2**, Santa Cruz General Plan/LCP Program Policy Consistency Analysis.

In summary, the land use impacts of Alternative 2 would be less than the Proposed Project because there would be no land use changes, such as constructing Transfer Station A on the undeveloped site in the northeast corner, although there would still be the transition from an active to closed landfill and the regulatory amendments. The impact would be **Less than Significant,** with no mitigation required, which is the same as the Proposed Project.

Mineral Resources

The mineral resource impacts of Alternative 2 would be less than the Proposed Project, which are addressed in Section 3.12, Mineral Resources. The overall impact determination would be No Impact, unlike the Proposed Project, which would be Less than Significant.

Availability of Known Mineral Resource. As identified in Section 3.12 (**Figure 3.12-1**), a portion of the Buena Vista Landfill is designated by the County as a Mineral Resource Area. Under Alternative 2, landfill closure and revegetation activities would occur in this area. However, there would be no impact because no imported aggregate or construction concrete would be required to construct the transfer stations and other project components. Although the Proposed Project would require imported aggregate and construction concrete, as well as include additional activities in this area (e.g., optional scale house and recycling center upgrades), the impact was determined less than significant because the available resource was primarily exhausted before the construction of the landfill, and the project area has been used as a regional landfill since the 1960s.

Loss of Availability. Like the Proposed Project, Alternative 2 is comprised of County-owned parcels zoned Public Facilities-Airport Influence Area (PF-AIA) and Commercial Agriculture-Airport Influence Area (CA-AIA), which are not considered to be Extractive Use Zones (M-3) for mineral resources nor does it have a land use designation with a Quarry Designation Overlay (Q) (County of Santa Cruz 1994). Therefore, there would be no impact for Alternative 2 nor the Proposed Project.

In summary, the mineral resources impacts of Alternative 2 would be **No Impact**, unlike the Proposed Project, which would be Less than Significant with no mitigation required.

Noise

The noise impacts of the No Project Alternative (Alternative 2) would be much less than those identified for the Proposed Project, which are addressed in Section 3.13, Noise. The overall impact determination would be Less than Significant, unlike the Proposed Project, which would be Less than Significant with Mitigation.

Construction Noise and Vibration. Under the No Project Alternative, landfill redevelopment would not occur, and there would be no construction noise or vibration associated with constructing Transfer Stations A and B, ODF Option 1 or 2, nor the optional improvements (internal access road improvements, scale house and recycling center upgrades, equipment parking and storage area). However, similar to the Proposed Project, there would be construction-related noise and vibration from the Landfill Closure Plan and Post-closure Maintenance Plan, which would still occur under the No Project scenario. Landfill closure involves installing the final cover system, monitoring systems, and final grading as described in Section 2.4. The noise and vibration levels would be similar to those identified for construction under the Proposed Project. As such, the impact screening levels of 200 feet for noise impacts and 50 feet for vibration identified for the Proposed Project would also apply to the No Project Alternative. There are no sensitive receptors located within the threshold screening distances for noise (200 feet) and vibration (50 feet) of the landfill closure construction area. Therefore, this impact would be less than significant and less than the Proposed Project.

Operational Noise. There would be no new sources of operational noise in the project area from landfill operation under the No Project Alternative. The noise from ongoing activities under the No Project scenario (e.g., recycling center, household hazardous waste collection, organics diversion, landfill maintenance) would be less than existing conditions because there would be no solid waste (refuse) disposal activities on the landfill. There could be a very minor increase in ambient noise in the region from an increase in regional vehicle trips, because the landfill would not provide a central local site to consolidate waste for transfer into fewer trips, and individuals and businesses would self-select to haul their loads to either the Ben Lomond Transfer Station in north county or to ReGen Monterey in Marina each week. However, trips would be spread out throughout the region and would be unlikely to combine to significantly increase ambient noise levels on any roadway. However, it is possible that sensitive receptors (residences) along narrow roadways leading to the Ben Lomond Transfer Station (e.g., Zayante Road, Quail Hollow Road, Glen Arbor Road) would be exposed to additional traffic noise. Additional studies would be required to make this determination.

It is anticipated the impact of operational noise under Alternative 2 would be less than significant and less than the Proposed Project.

Aircraft Noise. Alternative 2 would also be located within the existing landfill boundary, which is not located within the 60 dBA CNEL contour for any airport. Therefore, like the Proposed Project, Alternative 2 would result in a less than significant impact.

In summary, although there could be increased traffic noise along roadways leading to the Ben Lomond Transfer Station and ReGen Monterey, the noise impacts of Alternative 2 would be less than the Proposed Project because less construction would occur in the project area, and no new sources of noise would be developed at the landfill. Therefore, the impact would be **Less than Significant**, with no mitigation required, unlike the Proposed Project, which would be Less than Significant with Mitigation.

Population and Housing

The population and housing impacts of Alternative 2 would be similar to those identified for the Proposed Project, which are addressed in Section 3.14, Population and Housing. The overall impact determination would be No Impact, which is the same as the Proposed Project.

Under the No Project Alternative, landfill closure and maintenance are the only new/different activities that would occur. After landfill closure, the Buena Vista Facility would still accept recycling, organic waste, and household hazardous waste with no substantial changes to the current organics operation or traffic pattern anticipated. However, there would be no new transfer stations, reconfiguration of Harkins Slough Road, nor improvements to the recycling center, organics diversion, or other facilities on site. Like the Proposed Project, the No Project Alternative would not directly or indirectly induce substantial population growth in an area, nor displace existing people or housing, necessitating the construction of replacement housing elsewhere. Therefore, no impact would occur.

In summary, the population and housing impacts of Alternative 2 would be **No Impact**, which is the same as the Proposed Project.

Public Safety and Services

The public safety and services impacts of Alternative 2 would be similar to but less than those identified for the Proposed Project, which are addressed in Section 3.15, Public Safety and Services. The overall impact determination would be No Impact, whereas the Proposed Project would be Less than Significant.

Under the No Project Alternative, landfill closure and maintenance are the only new/different activities that would occur. After landfill closure, it is anticipated the Buena Vista Facility would still accept recycling, household hazardous waste, and organic waste with no substantial changes to the current operation. However, there would be no new transfer stations, reconfiguration of Harkins Slough Road, the possibility of composting onsite (ODF Option 2), nor improvements to the recycling center, organics diversion, or other facilities on site. Therefore, compared to the Proposed Project, the No Project Alternative would result in less potential need for additional emergency response, fire or police protection services, or other public services because there would be no new transfer stations operating.

In summary, the public safety and services impacts of Alternative 2 would be **No Impact**, unlike the Proposed Project, which would be Less than Significant with no mitigation required.

Recreation

The recreation impacts of Alternative 2 would be similar to those identified for the Proposed Project, which are addressed in Section 3.16, Recreation. The overall impact determination would be No Impact, which is the same as the Proposed Project.

Similar to the Proposed Project, the No Project Alternative would not include the development of uses, such as residential dwellings or office employment, that would place demands on or result in the use of nearby parks and recreation facilities. In addition, similar to the Proposed Project, Alternative 2 does not propose the construction of new or expanded recreational facilities, which could result in adverse physical effects to the environment; nor would it create the need for these facilities since the ongoing activities are maintenance of the closed landfill and continued acceptance of recycling, household hazardous waste, and organic waste.

Therefore, the recreation impacts of Alternative 2 would be **No Impact**, which is the same as the Proposed Project.

Transportation

The transportation impacts of Alternative 2 would be similar to but likely more than those identified for the Proposed Project, which are addressed in Section 3.17, Transportation. The overall impact determination would be Less than Significant, which is the same as the Proposed Project.

Under the No Project scenario, the Buena Vista Landfill would not be redeveloped as proposed, and the transfer stations would not be constructed to consolidate and transport solid waste to the regional ReGen Monterey Landfill facility in Marina. The Buena Vista Landfill would no longer accept solid waste (refuse), and the landfill would be closed in accordance with the Landfill Closure Plan when the landfill reaches full capacity. With the landfill closure and no transfer stations, traffic volumes within the vicinity of the Buena Vista Landfill site (e.g., Buena Vista Drive and Harkins Slough Road) would be less than existing conditions, as well as the Proposed Project conditions. However, an increase in traffic volumes along Highway 1 would be expected because self-haulers and commercial haulers would travel to the regional landfill in Monterey or the Ben Lomond Transfer Station in north Santa Cruz County. Trips to the Ben Lomond Transfer Station would also increase trips on local roadways between Highway 1 and the transfer station.

With the closure of the Buena Vista Landfill and no transfer station to accept the solid waste, it is estimated a total of 107 commercial waste hauling trips (franchise hauler and commercial drop boxes) per week would be diverted to ReGen Monterey in Marina, and an estimated 1,372 self-haul waste disposal trips per week would self-select to haul their loads to either the Ben Lomond Transfer Station or ReGen Monterey (**Appendix T**). The additional self-haul waste disposal trips to Ben Lomond would increase waste volume at that location and increase the number of waste hauling transfer truck trips sent from Ben Lomond to ReGen Monterey for landfill disposal. These additional trips to Ben Lomond and ReGen Monterey facilities are likely to result in an increase of regional VMT (**Appendix T**). However, the new vehicle trips are not anticipated to exceed the County-adopted screening criteria thresholds and thus would be less than significant.

In summary, the transportation impacts of Alternative 2 would be more than the Proposed Project but still **Less than Significant**, with no mitigation required, which is the same as the Proposed Project.

Tribal and Cultural Resources

The tribal cultural resources impacts of the No Project Alternative (Alternative 2) would be much less than the Proposed Project, which are addressed in Section 3.18, Tribal Cultural Resources. The overall impact determination would be Less than Significant, unlike the Proposed Project, which would be Less than Significant with Mitigation.

The No Project Alternative would still result in ground disturbance associated with landfill closure, but it would be on the above-grade landfill slopes with minimal risk of discovering tribal resources. There would be no earth movement and subsurface excavation activities associated with the construction of Transfer Stations A and B, ODF Options 1 or 2, culvert replacement/modification (associated with restoration and enhancement features), nor the optional improvements (recycling and scale house upgrades, roadway improvements, equipment parking and storage area). Therefore, there would be substantially less ground disturbance, which would reduce the risk of inadvertently discovering and adversely affecting unknown tribal cultural resources. The impact

would be less than significant with no mitigation required, whereas the Proposed Project would require mitigation to protect the inadvertent discovery of unknown resources below grade.

In summary, the tribal cultural resources impacts of Alternative 2 would be substantially less than the Proposed Project because there would be little to no subsurface excavation. The impact would be **Less than Significant**, with no mitigation required, unlike the Proposed Project, which would be Less than Significant with Mitigation.

Utilities and Service Systems

The utilities and service systems impacts of Alternative 2 would be more for solid waste and less for the other utilities than those identified for the Proposed Project, which are addressed in Section 3.19, Utilities and Service Systems. The overall impact determination would be Significant and Unavoidable, unlike the Proposed Project, which would be Less than Significant.

Under the No Project Alternative, the proposed redevelopment of the Buena Vista Landfill would not occur. Thus, no new facilities would be constructed, including Transfer Stations A and B, ODF Option 1 or 2, and the optional improvements (roadway paving, scale house and recycling center upgrades, and equipment parking and storage area). Existing waste management activities for recycling, household hazardous waste collection, and organics preprocessing would continue similar to existing conditions. There would also be implementation of the landfill closure and ongoing maintenance.

Utility Modifications, Water Supply, Wastewater. Because there would be no new development, there would not be an increase in demand for utilities or a need for new, modified, or infrastructure for water supply, wastewater, stormwater drainage, electricity, natural gas, or telecommunications beyond existing conditions. Landfill closure would occur in accordance with the Landfill Closure Plan, which would not require the expansion or construction of new utility infrastructure, except for the stormwater management systems to control flows on the landfill surface after the final cover has been placed, which would become part of the existing system similar to existing conditions. Therefore, the impacts to utility modifications, water supply, and wastewater would be less than the Proposed Project.

Solid Waste. Alternative 2 would not generate construction-related waste because there would be no construction of new facilities, including Transfer Stations A and B and other improvements, nor the associated demolition to construct Transfer Station B. Ongoing operations under the No Project scenario include landfill closure and ongoing maintenance, which would not generate a substantial amount of solid waste.

However, without the County-operated transfer facility, the County's solid waste would not be consolidated before transfer to the regional facility in Marina, as provided by the Proposed Project (or Alternatives 1 or 3). This creates uncertainty regarding solid waste diversion and disposal for the approximately 2,056 tons of waste managed at the Buena Vista site each week. Once the local Buena Vista Landfill is closed, the County would continue to generate solid waste at the same rate, but without local capacity at County-operated Ben Lomond Transfer Station to manage that waste. State law requires a 50% reduction of solid waste and a 75% reduction of organic materials (food waste, yard waste, compostable materials) from landfill disposal. Without a facility to manage waste at the Buena Vista site, the diversion of recyclable, organic, and other state-designated materials would be significantly compromised.

Without the ability to accept waste and recover materials locally, the County would be unlikely to meet its diversion goals and would be in violation of state laws governing waste management and

climate adaptation.[5] The County would also lose a significant waste management revenue stream if it could no longer charge gate fees to accept waste at the Buena Vista site. Waste disposal gate fees supply most of the revenue needed to manage waste in the County and would significantly undermine the diversion of recyclables, state-mandated stewardship program wastes, and household hazardous waste, programs that are not self-supporting.

Additionally, without a transfer facility at the Buena Vista site, it is anticipated that self-haulers and commercial haulers would travel either to the ReGen Monterey landfill in Marina (north Monterey County) or the Ben Lomond Transfer Station (in north Santa Cruz County), as described above for Transportation. However, if proper waste management becomes more burdensome, it is also anticipated there would be an increase in illegal dumping of solid waste, which could adversely affect the environment.

In summary, the utilities and service systems solid waste impacts of Alternative 2 would be significant and unavoidable because the County would be generating solid waste in excess of local infrastructure capacity; would not be in compliance with state waste diversion laws; and the lack of a local waste management site could lead to increased illegal dumping and potential health, safety, and environmental impacts (e.g., biological resources, water quality). These impacts of Alternative 2 would be greater than the Proposed Project, which would be Less than Significant with no mitigation required.

Wildfire

The utilities and service systems impact of Alternative 2 would be similar to and slightly less than those identified for the Proposed Project, which are addressed in Section 3.20, Wildfire. The overall impact determination would be Less than Significant, which is the same as the Proposed Project.

Under the No Project Alternative, redevelopment of the Buena Vista Landfill would not occur; thus, there would be no new facilities including Transfer Station A and the realignment of Harkins Slough Road, Transfer Station B, ODF Option 1 or 2, and the optional improvements including the equipment parking and storage area. However, implementation of the Landfill Closure Plan and Post-closure Maintenance Plan would still occur, similar to the Project; and the existing recycling center, household hazardous waste collection, and organics diversion would continue to operate with no major modifications.

As described in Section 3.20, the eastern portion of the Buena Vista Landfill is in a Very High Fire Severity Zone, and the western portion in a High Fire Severity Zone. Existing and post-closure conditions would continue to incorporate standard fire prevention and response measures. There would be no new ignition sources associated with project construction or expanded operations, reducing the exposure of people or structures to the risk of wildfire. Additionally, there would not be temporary lane closures associated with construction of Transfer Station A and Harkins Slough Road realignment. Because there would be no temporary lane closures, the impact of Alternative 2 could be considered slightly less than the Proposed Project and Alternatives 1 and 3 with respect to emergency response and evacuation (Impact WILD-1).

[5] The primary state laws governing waste reduction are AB 939 (1989) California Integrated Waste Management Act and SB 1383 (2016) Short-lived climate pollutants: methane emissions: dairy and livestock: organic waste: landfills. However, the state also enforces many other recycling and waste diversion mandates.

In summary, the risks associated with wildfire would be slightly less than the Proposed Project. The wildfire impact of Alternative 2 would be **Less than Significant**, with no mitigation required, which is the same as the Proposed Project.

5.2.3 Alternative 3. Combined Facilities on Adjacent Property

As stated in the Chapter 5 introduction paragraph, CEQA does not require that an EIR present the alternatives analysis in the same level of detail as the assessment of the Proposed Project. However, the County decided to analyze Alternative 3 at a similar level of detail as the Proposed Project. Therefore, the Description below includes more detail, compared to Alternatives 1 and 2. The Impact Analysis below provides a summary of the Alternative 3 impacts in comparison to the Proposed Project for each resource topic, with the detailed analyses for each topic in **Chapter 6, Alternative 3 Environmental Impact Analysis**.

Description

Alternative 3 would include new combined facilities on the adjacent property, which is located immediately north of the Buena Vista Landfill (**Figure 5-12a,** Alternative 3. Existing Conditions on Adjacent Property). The combined facilities would include most of the operations that would continue once the landfill is closed and capped, including transferring solid waste, organics diversion, and recycling (**Figure 5-12b**, Alternative 3. Overview of Combined Facilities on Adjacent Property).

The County would continue household hazardous waste (HHW) collection operations and equipment maintenance, parking, and storage at their current locations on the Buena Vista Landfill property, as well as ongoing maintenance associated with the closed landfill (**Figure 5-12c**, Alternative 3. Overview of Current Landfill Area). This would ensure a County landfill operations presence at the closed landfill site to maintain site security, fully utilize the existing HHW and heavy equipment maintenance facilities, keep hazardous materials away from public facing operations, and reduce facility operations at the new combined facilities on the adjacent property to only those uses necessary to serve the public's waste disposal, recycling, and organics diversion needs.

The landfill would be closed as described for the Proposed Project in Section 2.4 under 3. Landfill Closure and Revegetation, including the Final Landfill Closure and Revegetation and the Environmental Enhancement and Habitat Restoration Features, and analyzed in Chapter 3. Therefore, these activities are not described and analyzed as part of Alternative 3, except for the additional enhancement and restoration features that would occur on the adjacent property (described below).

Terminology

"Alternative 3" and the "Alternative 3 project area" include:

1. New combined facilities – located north of Harkins Slough Road, including 2 acres of County-owned property (APN 052-021-33) and 11 acres on the adjacent property to the north (APN 052-011-11), as shown in **Figure 5-12b**. This 13-acre area is hereinafter referenced as the "Alternative 3 site" and/or the "combined facilities site."
2. Landfill closure – located on the landfill site south of Harkins Slough Road (APN 052-021-33), as shown in **Figure 5-12c**.

3. Environmental enhancement and restoration features described for the Proposed Project and additional features on the adjacent property, as shown in **Figure 5-13** and described in Sections 2.4 and 5.2.3.

Location

The Alternative 3 site (combined facilities site) is located at 1203 Buena Vista Drive (APN 052-011-11), which is immediately north of the Buena Vista Landfill and Harkins Slough Road. The parcel is 26.95 acres, but only 11 acres on the central/eastern portion of the property would be used for the combined facilities. The other 15.95 acres, including undeveloped grassland area in the west portion and oak woodland in the far east portion, would not be part of the combined facilities.

Additionally, an approximately 2-acre portion of the County-owned landfill property to the south (the primarily undeveloped area between the adjacent property line and Harkins Slough Road that is part of APN 052-021-33) would be used for the combined facilities ingress and egress (driveways), continued outdoor storage, and improvements to the Harkins Slough Road Drainage.

The 2-acre County-owned portion (APN 052-021-33) and the entire 26.95-acre adjacent property (APN 052-011-11) are zoned Commercial Agriculture-Airport Influence Area Combining District (CA-AIA) and are located in the Coastal Zone.

ADJACENT PROPERTY

Existing land uses on the 11-acre central/eastern portion of the adjacent property (where the combined facilities would be located) include several unused/vacant structures. The last year the site was used for agricultural production was 2016 when the greenhouses were being used. The existing structures include three large greenhouses, packing shed, boiler house, bathroom/lunchroom, and several other miscellaneous structures associated with previous cattle grazing uses that are no longer occurring (**Figure 5-12a**).

Existing land uses on the other 15.95 acres of the parcel (that would remain undeveloped) include grassland in the western portion of the parcel and oak woodland in the far eastern portion of the parcel. The undeveloped grassland in the western portion, with trees along the western and southern perimeter (predominately eucalyptus trees), was historically used for cattle grazing. The far eastern portion of the property is also mostly undeveloped and includes oak woodland sloping towards Harkins Slough, as well as the paved driveway leading to a small single-family residence currently occupied by a property owner. Implementation of Alternative 3 assumes the entire 26.95-acre property would be purchased by the County, and the occupant of the residence would vacate the property.

Existing internal roadways on the adjacent property include the paved driveway along the northern property line, from Buena Vista Drive on the west to the residence on the east; an unpaved roadway extending from the driveway around the two northern greenhouses; and a paved roadway extending from the driveway to the southern property line, effectively bisecting the property in the middle, with the undeveloped grassland on the west side. There is a gate on the southern property line connecting the paved roadway with the unpaved (compacted gravel) roadway on County property that connects to Harkins Slough Road.

No new waste operation facilities are proposed in the undeveloped western and far eastern areas of the property, but some biological restoration and interpretive/passive recreational areas may be developed in the future if appropriate to improve resource conservation at the site.

COUNTY PROPERTY

Existing land uses on the 2 acres of County-owned land (APN 052-021-33), located between the adjacent property to the north (APN 052-011-11) and Harkins Slough Road, include two unpaved (compacted gravel) driveways extending from Harkins Slough Road – one leading to an outdoor storage area for landfill bins and equipment, and one leading to the gate to the adjacent property to the north. The area in between the unpaved driveways is undeveloped land with vegetation (weedy grasses, shrubs, trees).

SURROUNDING LAND USES

Land uses surrounding the Alternative 3 site include agricultural uses (nursery, row crops, horse stables, fallow lands) to the north and west; Harkins Slough and the USFWS Wildlife Refuge to the east and southeast; and the Buena Vista Landfill to the south.

Alternative 3 Components

Alternative 3 includes the following primary components on the Alternative 3 site (combined facilities site): Transfer Station, Organics Diversion Facility, Recycling Center, and Scale House (**Figure 5-12b** and **Figure 5-12d**, Site Plan for Combined Facilities on Adjacent Property). The main difference compared to the Proposed Project is that these ongoing operations would occur on the adjacent property to the north, which would be acquired by the County, rather than within the current Buena Vista Landfill property. The County plans to continue HHW collection operations and equipment maintenance, parking, and storage at their current locations on the Buena Vista Landfill property and ongoing maintenance associated with the closed landfill (**Figure 5-12c**).

The combined facilities would be located on the east side of the existing paved north-south driveway that bisects the property, as shown in **Figure 5-12e** (Circulation Pattern for Combined Facilities on Adjacent Property), and would be approximately 155 feet above mean sea level. The existing vacant greenhouses, packing shed, boiler house, and other miscellaneous structures (totaling approximately 178,000 SF) would be demolished. There would be no other demolition required for Alternative 3.

The combined facilities would be accessed from Harkins Slough Road, as shown in **Figures 5-12b and 5-12e.** The existing paved roadway that bisects the property would be used by transfer trucks leaving the property, and new driveways/roadways would be constructed for all other facility traffic. The main traffic flow from Harkins Slough Road is designed to promote counterclockwise traffic control, which is safer for all types of vehicles using the facility. Refer to the discussion of Vehicular Circulation/Traffic Flow under Additional Information below. The existing driveway from Buena Vista Drive would be retained as an emergency access road, but it would not be used for daily operations.

TRANSFER STATION

The approximately 71,500-SF transfer station would serve self-haulers (residents and businesses), franchise haulers, and larger commercial vehicles. As shown in **Figure 5-12c**, the vehicles would enter the transfer station on the north side and exit on the south side. All vehicles transporting solid

waste are required to enclose or cover the solid waste in accordance with California Vehicle Code Sections 23114 and 23115.[6]

The solid waste would be unloaded in the Transfer Station, and transfer trucks would collect and transport it to the regional waste disposal facility. Contact water from within the transfer station would be collected and held in a storage tank for pump and haul removal.

The Transfer Station would use a full-depth "transfer truck tunnel" that extends the length of the building for transfer trailer loading. Because the tunnel would be at grade, excavation up to 5 feet below grade would be required for the building foundation.

The exterior building height would be approximately 40 feet tall. The Transfer Station would be located in the center of the property, on the east side of the existing driveway bisecting the site, where site elevation is lowest. This enables the sorting area and mixed-load drop-off to occur on the east side of the Transfer Station, where site elevation is higher. This location minimizes the required excavation and height of the building above mean sea level.

An office of up to 4,800 SF would be connected to the north side of the Transfer Station, and there would be approximately 25 parking spaces for employees and visitors. The office would include a conference/break room, storage/utility room, restrooms, and a viewing area for observing transfer station operation.

ORGANICS DIVERSION FACILITY

The County would continue to divert and process organic materials (e.g., vegetation/yard waste, food waste) at the combined facility, instead of the current operation on the active landfill, in compliance with state organics diversion requirements. The Organics Diversion Facility (ODF) would be located east of the transfer station. Incoming organic materials would be segregated into appropriate stockpiles (food waste, yard waste, wood waste, wallboard, mixed organics, etc.). The organics diversion operation would preprocess organic materials for off-site composting at the Monterey Bay Regional Waste Management District (ReGen Monterey) and other sites located in the Monterey Bay region. Preprocessing may include de-packaging food waste, removing trash and contaminants, chipping/grinding wood waste, stockpiling green waste, and other organic feedstock preprocessing tasks. This operation would be similar to the current organics diversion operation at the Buena Vista Landfill site.

The ODF area would be paved, and ODF activities would occur in an enclosed structure to avoid stormwater contact, control runoff from the facility, and prevent materials from dispersing offsite. The structure would be approximately 30,500 SF, and the height of the tallest roof structure would not exceed 40 feet. The ODF structure may be adjoined with the Recycling Center structure described below.

RECYCLING CENTER

The current recycling center on the Buena Vista Landfill site is located near the main landfill entrance and would be relocated to the new combined facility. Compared to the current recycling center, the new Recycling Center would accommodate recovery of more materials at a single location, increase transportation efficiency, and include a marketing and storage area for materials

[6] Under California Vehicle Code Sections 23114 and 23115, it is against the law to operate a vehicle on the highway which is improperly covered, constructed or loaded. Contents must be covered so that no part spills, drops, leaks, blows, sifts or in any other way escapes from the vehicle. This law applies to residents in personal vehicles; and businesses, haulers and collectors.

diversion and reuse. The Recycling Center would include loading docks where source-separated materials can be loaded for transportation to recycling markets and end users.

The Recycling Center area would be paved, and recycling activities would occur in an enclosed structure to avoid stormwater contact, control runoff from the facility, and prevent materials from dispersing offsite. The structure would be approximately 41,200 SF, and the height of the tallest roof structure would not exceed 40 feet. The Recycling Center structure may be adjoined with the ODF structure described above.

SCALE HOUSE

The Scale House and scales would be located on the south side of the facility near the Harkins Slough Road entrance. All public access to the combined facilities (Transfer Station, ODF, and Recycling Center) would come through the Harkins Slough Road entrance and pass through the Scale House. Like current practices at the Landfill, County Recycling & Solid Waste cashiers would operate the scales, inspect loads, and charge fees based on load composition and size or weight for all materials received at the site according to the published fee schedule. The fee schedule is available on the County's website and is updated annually to cover the costs needed to provide disposal services to customers.

GENERAL PLAN/LOCAL COASTAL PROGRAM LAND USE DESIGNATION AND ZONING MAP AMENDMENTS

Similar to the Proposed Project, Alternative 3 requires and thus includes the following updates to support the components listed above:

a. Amend the Agricultural Resource Map to remove parcels APN 052-011-11 and APN 052-021-33 from Type 3 agricultural resource land type designation (AG-3);

b. Amend the County General Plan/Local Coastal Program Land Use Designation maps to redesignate parcels APN 052-011-11 and APN 052-021-33 from Agriculture (AG) to Public Facility/Institutional (P); and

c. Amend the County Zone district Map for parcels APN 052-011-11 and APN 052-021-33 from Commercial Agriculture-Airport Influence Area Combining District (CA-AIA) on these parcels to Public Facilities-Airport Influence Area Combining District (PF-AIA).

For additional information, refer to the description in Section 2.4 under 5. General Plan/Local Coastal Program Land Use Designation and Zoning Map Amendments.

Additional Design Information

VEHICULAR CIRCULATION/TRAFFIC FLOW

Vehicular circulation and traffic flow are shown in **Figure 5-12c**. All the roadways and operation surfaces would be paved, as shown on **Figures 5-12b and 5-12d.**

General Traffic. Transfer Station traffic (self-haulers, franchise haulers, larger commercial vehicles), as well as ODF and Recycling Center traffic, would enter the facility from Harkins Slough Road on a new entrance/exit driveway, travel north and east to the Scale House, continue in a counter-clockwise direction around the combined facilities to access the needed services, and return through the Scale House to exit the facility at the same location on Harkins Slough Road (i.e., same new entrance/exit driveway). Refer to red, green, and blue arrows on **Figure 5-12c**.

Transfer Trailer Traffic. Transfer trailer traffic would also enter the facility from Harkins Slough Road on the new entrance/exit driveway, but they would stay on the outer perimeter lane to and through the Transfer Station, and then exit on the existing driveway without comingling with the other traffic in smaller vehicles. Refer to the yellow arrows on **Figure 5-12c**. Like the Proposed Project, transfer trailers are commercial semi-trucks hauling 40- to 55-foot enclosed trailers and would be used to consolidate large solid waste loads for transfer to a regional landfill. The ReGen Monterey Landfill is located 19 miles south in the City of Marina and is used for planning and analysis purposes based on capacity and relative proximity. Transfer trucks would be used instead of smaller trucks to reduce the number of trips needed to convey waste to other locations, and to focus the use of specialized waste collection trucks on neighborhood and commercial waste collection.

Employee Access. Access to the Alternative 3 site would be similar to existing conditions for County staff arriving/departing from work, the majority of whom currently access the Buena Vista Landfill site at 150 Rountree Lane via Harkins Slough Road from Buena Vista Drive. Instead of staff following Harkins Slough Road to its intersection with Rountree Lane, staff would follow Harkins Slough Road a shorter distance to the Combined Facilities site driveway. Thus, traffic on the remainder of Harkins Slough Road would decrease as fewer staff would need to access the 150 Rountree Lane location.

STORMWATER MANAGEMENT

The combined facilities would include stormwater management to meet state regulatory compliance requirements. The stormwater management plan is shown on the site plan (**Figure 5-12d)**.

Stormwater surface runoff would be directed through grading, inlets, pipelines, and culverts to new stormwater basins/wetlands (hereinafter generally called stormwater basins) located at the site's low point, south of the transfer station and west of the scale house. The stormwater would first enter a forebay (upper basin) to enable sediment to settle and then flow to a larger pond (lower basin) with an outlet to a culvert under the roadway to the existing Harkins Slough Road Drainage. Also refer to the description of Reorientation and Expansion of Existing Wetland Ditch under Environmental Enhancement and Habitat Restoration Features.

The stormwater basins would have a clay lining to minimize infiltration and protect against liquefaction. The outlet would be sized to control the outflow, so the basins are emptied within four days, consistent with statewide guidance for mosquito/vector control (MVC/CDPH, July 2012).

Filtration measures would be installed in the collection system and basins to prevent unwanted solid waste or contaminated stormwater from entering the stormwater system. A number of options could be used such as, but not limited to, filter socks or bags, stormceptor units, drop inlets and oil/water separators.

Additionally, best management practices such as paved surface sweeping and drain inlet filter monitoring and maintenance would be employed.

EXISTING OUTDOOR STORAGE AREA

The existing outdoor storage area, located on the County-owned land on the north side of Harkins Slough Road curve, would continue to be used for outdoor storage. However, it would be accessed from within the combined facilities on the north side, rather than from Harkins Slough Road and the existing unpaved (compacted gravel) driveway on the south side, as shown in **Figures 5-12b and 5-12d**. The existing chain on the unpaved (compacted gravel) driveway near Harkins Slough Road would be retained to discourage public vehicles from accessing the area. The outdoor storage area would be within the combined facilities perimeter fencing described below and paved (22,500 SF) with drainage

facilities to direct stormwater flow to the stormwater management ponds. The existing trees and shrubs (oak woodland) would remain in place and would be outside the perimeter fencing.

FENCING

The new combined facilities would be enclosed with fencing around the perimeter for security (perimeter fencing), as shown in **Figure 5-12d. The perimeter** fencing is anticipated to be 6-foot-tall chain link fencing with a 3-wire extension on top for additional security. All the facilities described above would be within the perimeter fencing, except the stormwater basins ponds which would have wildlife-friendly fencing to allow wildlife movement in and out of the basins, while discouraging human/vehicular movement.

ENVIRONMENTAL ENHANCEMENT AND HABITAT RESTORATION FEATURES

Construction of the combined facilities requires removal of existing on-site shrubs, grasses, and trees and disturbance to an existing drainage. The combined facilities have been designed to minimize tree removal and avoid oak woodland, a sensitive habitat. Alternative 3 would require the removal of 39 trees, including 18 solitary trees to construct the combined facilities and stormwater basin/wetlands and 21 trees to restore Harkins Slough Road Drainage, including 12 significant trees (willow scrub).

The trees and associated understory vegetation, located east of the planned driveway on the north side of the Harkins Slough Road curve, are oak woodland and would not be removed. There could be selective trimming of trees and vegetation in coordination with a qualified biologist or arborist, if required to ensure sight visibility for vehicles entering and exiting the driveway, as part of the driveway installation process.

As stated above, the Environmental Enhancement and Habitat Restoration Features described in Section 2.4 under Landfill Closure and Revegetation would be implemented if Alternative 3 is selected. These features include:

- Restoration of Harkins Slough Road Drainage
- Culvert Modification with Small Wildlife Crossing at Main Entrance
- Culvert Replacement under Internal Roadway to Old Landfill
- Wildlife Movement Corridor between Gallighan Slough and Harkins Slough
- Wildlife Directional Features at Key Locations

Additionally, Alternative 3 includes the following features, which are shown on **Figure 5-13**.

Re-establishment of Open Drainage along North-South Roadway. Alternative 3 includes re-establishing an open drainage along the west side of the existing north-south roadway and removing the buried pipe. This feature would capture runoff from areas to the north and west, and the west bank would be planted with suitable native vegetation to shade the drainage and provide cover for wildlife. Because the ravine that previously contained the drainage was filled and the existing elevation is 10–30 feet higher than the historical ravine, the proposed drainage is not intended to re-create historical conditions. Rather, the drainage would enhance the existing modified landscape through the provision of an aboveground aquatic feature and associated native vegetation.

Reorientation and Expansion of Existing Irrigation Ditch Wetland. Alternative 3 includes reorienting and expanding the existing irrigation ditch wetland to establish new stormwater basins

and wetlands (refer to Stormwater Management above). The irrigation ditch runs along the east side of the low-lying terrace, and a wetland has established in a portion of the ditch due to a nutrient-rich substrate and an elevation profile that limits flows through the downstream culvert to larger storm events. While designed to receive additional runoff from new impervious surfaces (a similar purpose as the existing ditch), the basins/wetlands would provide enhanced ecosystem services through their larger capacity and connectivity to the proposed Wildlife Movement Corridor (see below). The basins/wetlands would be positioned outside of the southwest corner of the new facilities such that they would be accessible to wildlife moving along the perimeter. These basins would be maintained initially during project construction; and shortly afterwards, portions of the features would be planted with native wetland vegetation and other suitable native plant species (i.e., on the upland embankments). The basins/wetlands would be designed to flow into the Harkins Slough Road Drainage through drop structures and/or outlet structures.

Wildlife Movement Corridor between USFWS Refuge and Undeveloped Open Space to the West. Alternative 3 includes the preservation and enhancement of a wildlife movement corridor along the southern perimeter of the combined facilities, to provide connectivity between the USFWS Refuge to the east and undeveloped land and habitat patches to the west. The corridor includes 100 feet along the frontage of Harkins Slough Road, including existing coast live oak woodland. Other suitable native vegetation would be planted to provide cover and refuge along the corridor. The USFWS Refuge is positioned immediately east of the combined facilities (Alternative 3 site) and extends to Harkins Slough. An elevated terrace of native and non-native grassland, eucalyptus forest, with pockets of mixed evergreen and wetland habitats along Buena Vista Drive are located immediately west of the combined facilities. Harkins Slough Road Drainage runs along the frontage of the roadway immediately west of and connecting to the corridor, and would also be restored and enhanced (see above). Although Buena Vista Drive is a semi-permeable barrier to movement, the corridor would also enable wildlife to reach habitat patches further west (such as eucalyptus groves and remnant riparian habitat), as well as the riparian corridor associated with Buena Vista Drive Tributary.

Culvert and Fencing Designed for Wildlife Movement. As part of the Stormwater Management plan described above, several stormwater culverts would be installed. The culvert under the new driveway from Harkins Slough Road would be flat bottom to facilitate amphibian movement. Additionally, the stormwater basins/wetlands would be located outside the facility fence; and wildlife-friendly fencing would be installed around the ponds to allow wildlife movement, while discouraging humans and vehicles from entering the basins.

LIGHTING AND STRUCTURE EXTERIOR

Exterior site lighting would be kept to a minimum to what is required for safety and operational needs during normal operating hours from 7:00 a.m. to 5:00 p.m. All lighting would be affixed to structures or on standards not exceeding the structure height, and the lighting would be directed downward and away from adjacent land. Lighting may include motion sensor site lighting, which would be limited to areas where needed for security (e.g., office and scale house area) and would be avoided in other areas. Additionally, the large structures in the combined facilities would be earth tones to minimize reflectivity and glare, and the use of reflective materials would be minimized. The County is considering artistic murals on the structures.

UTILITIES

In general, the combined facilities would connect to existing utility systems.

- **Water service lines** for domestic and fire suppression would be provided from an on-site water well. The office in the transfer station would require water for the break room and restrooms. The scale house, transfer station, ODF, recycling center, and office would include fire detection and suppression systems.
- **Wastewater** from operations would be collected in an underground holding tank adjacent to the office and transfer station and pumped out and hauled as needed to a wastewater treatment facility. Wastewater from operations would include any contact water internal to the transfer station, including the tipping floor where there may be contact water from waste on the floor, or water from periodically washing the building interior with a pressure washer at the transfer station, ODF, and recycling center. An oil/water separator would be installed to separate any unwanted liquids from wastewater. For the restrooms in the office, wastewater would either be collected in a separate holding tank that would be pumped regularly as needed and hauled for wastewater treatment, or disposed through an on-site leach field designed to support all on-site domestic water use.
- **Electricity** would be provided to the site by connecting to the existing electrical lines. Additionally, there would be a backup diesel generator and/or solar panels at the site. An electrical heating, ventilation, and air conditioning (HVAC) unit would be provided on the roof above the office.

GAS MONITORING

The enclosed structures at the combined facilities (transfer station with office, ODF, recycling center, scale house) would have gas monitoring sensors installed, similar to the gas monitoring devices currently used at the existing Buena Vista maintenance facility and at the Ben Lomond Transfer Station. The purpose is to monitor subsurface gas that could potentially migrate from the landfill to beneath the combined facilities structures to ensure the levels do not exceed 5 percent, in compliance with California Department of Resources Recycling and Recovery (CalRecycle) regulations.

Landfill gas controls are installed at the landfill and include the landfill gas well controls and the landfill gas collection and conveyance system. These landfill gas controls work to collect and flare the gas on site to ensure landfill gas does not migrate away from the landfill boundary to cause a hazard in the surrounding area or structures (such as the new combined facilities).

Operations

STAFFING

There are currently 40–45 staff working at the Buena Vista site, and it is anticipated there would be similar staffing levels with implementation of Alternative 3.

HOURS

The hours of operation for the combined facilities would be Monday through Saturday, from 7:00 a.m. to 5:00 p.m., with the facility open to the public from 7:30 a.m. to 3:30 p.m. Monday through Saturday (except 7:30 a.m. to 2:30 p.m. on Wednesdays), which are the same as the current hours of operation and hours for the Proposed Project.

ACCEPTED WASTE

Consistent with current operations, the new combined facility would accept the following waste:

- Household and/or commercial garbage, upholstered furniture, painted wood, treated wood waste, large non-recyclable metal items, rancid waste, and waste that requires special handling as determined by landfill staff.
- Recyclable materials (source separated for recycling) including metals, glass bottles and jars, presorted plastic containers, bagged stretchy (film) plastic, books/paper, and cardboard.
- Organic waste (source separated for composting) including clean sorted wood and yard waste (no dirt, treated or painted lumber, poison oak, pampas grass, yucca, palm, root balls); food waste (no raw meat, grease, or liquids); sheetrock/gypsum board; and pallets.
- Construction and demolition debris (source separated), including clean concrete, clean asphalt, base rock, brick, tile, and porcelain.
- Large recyclables, including appliances, mattresses, box springs, clean carpet and foam padding (6' wide or less, rolled separately), electronic waste (TVs, computers, printers, small appliances), tires, 1- to 5-gallon empty propane tanks, and agricultural plastics.

As described above, the County would continue to accept Household Hazardous Waste (HHW) at the current location on the Buena Vista Landfill property, near the Main Entrance. The County accepts HHW for recycling and offsite disposal (e.g., cleaning products, automotive products, batteries), but it does not and would not accept waste that is defined as hazardous by RCRA and/or CCR Title 22. Hazardous waste, asbestos (friable and non-friable), radioactive waste, and untreated medical waste (biohazardous or infectious waste) are not currently allowed and would not be allowed for disposal. Additionally, although current operations accept soil that meets screening requirements and dead animals, the new combined facilities would not accept dead animals or soil of any kind (Santa Cruz County 2024b).

ALTERNATIVE 3 OPERATIONS INFORMATION

The **Transfer Station** at the new combined facilities would operate differently than the existing Solid Waste Landfill operation and would replace the existing Medium Volume Transfer operation (**Table 5-2**). If Alternative 3 is selected, the Solid Waste Landfill and Medium Volume Transfer operations, both of which happen in the open air, would close and be replaced by a fully enclosed transfer station operation. Landfilling operations would cease when the landfill reaches full capacity. The Medium Volume Transfer operation would cease when the new transfer station is constructed, and the Large Volume Transfer/Processing Facility is fully permitted.

The Large Volume Transfer/Processing Facility permit would fulfill the County's current and projected waste disposal volume needs and replace the existing Medium Volume Transfer operation, which limits the transfer of municipal solid waste to less than 100 tons/day.

The **Organics Diversion Facility** (Green Material Composting Operation) at the new combined facilities would continue similar to current operations, but operations would no longer happen in the open air. If Alternative 3 is selected, the operation would be conducted within a building with a finished floor, roof, and walls. Self-hauled and franchise-hauled organic materials would be accepted and preprocessed inside the Organics Diversion Facility (ODF) before transfer to a regional organics conversion facility (e.g., compost, mulch, biofuel, etc.). Food waste would be transferred the same day it is received or stored in closed containers pending transfer. Clean yard waste, wood

waste, and select construction materials could be processed and stockpiled on site within the ODF facility in compliance with the facility's Green Material Composting Operation permit.

Table 5-2. Alternative 3 Operation Information

	Existing Permitted Activities			Planned Activities
	Disposal	**Composting**	**Transfer/Processing**	**Transfer/Processing**
Activity	Solid Waste Landfill [to close when Buena Vista Landfill reaches full capacity]	Green Material Composting Operation [to continue]	Medium Volume Transfer/Processing Facility [to cease when Large Volume Transfer permit issued]	Large Volume Transfer/Processing Facility [to replace Medium Transfer/Processing permit]
Hours of Operation*	Mon–Sat 7:00 a.m.–5:00 p.m.	Mon–Sat 7:00 a.m.–5:00 p.m.	Mon–Sat 7:00 a.m.–5:00 p.m.	Mon–Sat 7:00 a.m.–5:00 p.m.
Maximum Allowed Daily Tonnage	1,196 tons per day permitted disposal	12,500 cubic yards	Less than 100 tons per day	1,295 tons per day in 2028 based on 2% annual increase.
Maximum Allowed Traffic Flow	1,547 trips per day weekdays 2,428 trips per day weekends	(refer to permitted disposal)	(refer to permitted disposal)	(refer to permitted disposal)
Total Permitted Acreage	126.00 Total acres (61.00 Disposal acres)	126.00 Total acres (0.00 Disposal acres)	126.00 Total acres (0.00 Disposal acres)	126.00 Total acres (0.00 Disposal acres)
Types and Quantities of Waste Allowed	Wood Waste, Tires, Sludge, Mixed Municipal, Metals, Inert, Industrial, Green Materials, Dead Animals, Contaminated Non-Hazardous Soil, C&D, Agricultural	Wood Waste, Green Materials NOTE: Should we add Food Wastes to the permit?	Mixed Municipal	Wood Waste, Tires, Sludge, Mixed Municipal, Metals, Inert, Industrial, Green Materials, Dead Animals, C&D, Agricultural

Note:

*Public access hours are Monday through Saturday, from 7:30 a.m. to 3:30 p.m. (except 7:30 a.m. to 2:30 p.m. on Wednesdays).

CPI = Consumer Price Index

Construction

SCHEDULE, DURATION, HOURS

The County's planned construction schedule for the combined facilities is fall 2028 to winter 2030. Construction could begin later than the Proposed Project (2027) because there would be no need to realign Harkins Slough Road, and the Combined Facilities could be constructed all at once, rather than phased to manage ongoing landfill operations.

Construction would occur between the hours of 8:00 a.m. and 5:00 p.m., Monday through Friday. Additionally, construction could also occur between the hours of 9:00 a.m. and 5:00 p.m. on Saturdays, Sundays, or national holidays with advance written approval from the County's Building Official.

METHODOLOGY

In general, the construction methodology would include installation of erosion and sediment controls, demolition of existing structures, clearing and grubbing, utility location and relocation, excavation, filling, grading, placement of concrete foundations, installation of metal structures, and placement of crushed aggregate base and paved surface.

EQUIPMENT AND STAGING

Expected construction equipment includes excavators, dump trucks, loaders, bulldozers, concrete trucks, concrete pump trucks, cranes, and smooth or sheepsfoot compactors. No pile driving is anticipated.

Staging of material and equipment would take place in the disturbed work areas. If additional space is needed, the Old Landfill top deck would be used for earthwork stockpiles or to store equipment. Staging of material and equipment would be at least 25 feet from any drainages.

CONSTRUCTION VEHICLE ACCESS

Construction vehicles would access the site from State Highway 1 to Buena Vista Drive and Harkins Slough Road. The existing Harkins Slough Road would remain in use during any roadway widening activities. Although there could be temporary lane closures during construction, there would be no planned road closures. Emergency access and general access to the adjacent property, landfill property, County's Rountree Medium (Jail) Facility, farmworker housing, affordable housing, and other facilities would be retained throughout construction with traffic controls as needed.

STRUCTURES

All proposed structures would be designed and constructed in conformance with the most recently adopted California Building Code design parameters, which are specifically tailored to minimize the risk of structure failure due to seismic hazards, and recommendations identified in the geotechnical reports prepared for the Project.

EARTH MOVEMENT

Construction estimates for Alternative 3 are summarized in **Table 5-3** at the end of this section. Construction of the combined facilities is estimated to involve approximately 14 acres, excavate approximately 51,600 cubic yards of soil, export 13,000 cubic yards of waste, and import 19,100 cubic yards of aggregate/asphalt/concrete.

WATER QUALITY PROTECTION AND BEST MANAGEMENT PRACTICES

Like the Proposed Project, Alternative 3 would disturb more than one acre. Therefore, the County would be subject to NPDES Construction General Permit (Order No. 2012-0006-DWQ) adopted by the State Water Resources Control Board and required to prepare and implement a Storm Water Pollution Prevention Plan (SWPPP) for Alternative 3 if selected. The SWPPP would include erosion and sediment controls, runoff water quality monitoring, means of waste disposal, implementation of approved local plans (e.g., County General Plan/LCP Policy 6.3.4, Erosion Control Plan Approval Required for Development), control of construction sediment and erosion control measures, and maintenance responsibilities. Additionally, the construction site would be inspected before and after storms to identify stormwater discharge from the construction activity and to identify and implement erosion controls, where necessary.

Additionally, similar to the Proposed Project, the following construction best management practices (BMPs) will be included in the final design plans and construction specifications:

1. Limit vehicle speeds on unpaved roads to a maximum of 25 miles per hour.
2. Limit fugitive dust by watering exposed dirt surfaces in construction areas twice daily, keeping all trenches dry to protect their integrity.
3. Apply soil stabilizers on inactive construction areas (disturbed lands unused for four consecutive days) and cover inactive storage piles.
4. Apply native hydro-seed or non-toxic binders to exposed areas after cut/fill operations.
5. Install perimeter protection (e.g., silt fence, fiber rolls) on downslope areas and near drainages and open space to prevent contaminated construction runoff from leaving the construction site.
6. Minimize removal or disturbance of existing vegetation outside the footprint of project construction activities.
7. Limit site access and parking, equipment storage, and stationary construction activities to the designated staging areas to the maximum extent feasible.
8. Store, maintain, and refuel all equipment and materials in designated portions of the staging areas in accordance with permit requirements. As such, no staging will occur in areas with sensitive biological resources. Staging of material and equipment will be at least 100 feet from any drainages or include secondary containment for fueling and maintenance of equipment[7]. Spill kits will be present on site at all times and will include absorbent materials, booms, disposable bags, and Personal Protective Equipment (gloves, goggles, coveralls).
9. Prior to staging equipment on site, clean all equipment caked with mud, soils, or debris from off-site sources to avoid introducing or spreading invasive exotic plant species.
10. Position all stationary equipment, such as motors, pumps, generators, and/or compressors, over drip pans.
11. Erosion and sediment control measures shall be maintained continuously, repaired when and as necessary, and shall be inspected within 24 hours of each rainfall event. Seeded areas shall be checked regularly and shall be watered, fertilized, reseeded, and mulched as necessary to obtain a dense stand of grass.
12. All drain inlets shall be protected from siltation (e.g., inlet filters, fiber rolls, gravel bags). Ineffective protection devices shall be immediately replaced and the inlet cleaned. Flushing is not an acceptable method of cleaning.
13. When the crushed stone construction entrance has been covered with soil or has been pushed into the soil by construction traffic, it shall be replaced with a depth of stone equal to that of the original application.
14. All materials used for fill or back-fill shall be free of wood, roots, rocks, boulders, or any other non-compactable soil type material. Unsatisfactory materials also include man-made fills and refuse debris derived from any source. All material shall be inspected and approved by the County's construction manager and/or other qualified personnel.

[7] Examples of secondary containment include drip pans, spill trays, absorbent mats, and polyethylene or polypropylene sheeting. Secondary containment should have the capacity to hold the contents of portable fuel tanks, as well as the fuel and fluid tanks, systems, and reservoirs of all equipment.

15. Materials used to construct embankments for any purpose, back-fill around drainage structures or in utility trenches or any other depression requiring fill or back-fill shall be compacted to the percentage determined by the County's construction manager and/or other qualified personnel following ASTM Standard D-1557.
16. Certifications for materials including, but not limited to, stone, concrete, pipes, precast units, handrails, stabilization mats, traffic signal items, must be provided to and approved by the County's construction manager and/or other qualified personnel prior to installation.
17. Embankment fill and trench back-fill shall be placed in lifts at a maximum uncompacted depth of 8 inches and 6 inches, respectively. Density test types and frequencies will be per the design engineer's recommendations.
18. Any discrepancies found between the drawings and specifications and site conditions or any inconsistencies or ambiguities in drawings or specifications shall be immediately reported to the County's construction manager and the design engineer, in writing, who shall promptly address such inconsistencies or ambiguities. Work done by the contractor after his discovery of such discrepancies, inconsistencies, or ambiguities shall be done at the contractor's risk.

Table 5-3. Alternative 3 Construction (Earth Movement) Estimates

Construction Information	Development of Combined Facilities on Adjacent Property
Construction Duration Construction Timeframe	12 months (Between fall 2028 & winter 2030)
Construction Area[1]	14
Estimated Total Disturbance[1]	14
Earthwork Quantities[2]	
Excavation Volume	51,600 cubic yards[3]
Excavation Depth	Up to 10 feet for foundation/footers[4]
Embankment Construction/Fill/Landfill Cover	38,600 cubic yards
Roadway Aggregate	11,500 cubic yards
Asphalt	5,000 cubic yards
Portland Concrete	2,600 cubic yards
Estimated Export/Waste	13,000 cubic yards
Estimated Demolition Materials[5]	8,000 cubic yards
Estimated Import Soil	0 cubic yards
Estimated Pavement	
Roadways/Parking Lots Outdoor Storage Area	289,500 SF 22,500 SF
Impervious Surface[6]	
Existing Impervious Area Additional/New Impervious Area Total Impervious Area	233,000 SF 230,000 SF 462,000 SF
Estimated Tree Removal	39[7]

Notes:

[1] The construction area and estimated total disturbance is 14 acres, although the project site is described as 13 acres (11 acres on APN 052-011-11 + 2 acres on APN 052-021-33) in the Description above, to provide a buffer and conservative estimate for analysis. This does not include landfill closure which would disturb 51 acres and would occur regardless if the Proposed Project or alternatives are selected. For comparison, the Proposed Project would have a construction area and disturb 19 acres within and around the landfill (**Table 2-2**).

[2] Excess soil from excavation activities (e.g., transfer station, stormwater basins) that is stockpiled on site can be used in lieu of supplemental import soils.

[3] For comparison, the Proposed Project would have an excavation volume of ~28,000 cubic yards (**Table 2-2**). Alternative 3 requires more earth movement because the recycling and organics diversion processes would be relocated from the existing landfill to the new combined facilities to improve operations.

[4] For comparison, the Proposed Project would have an excavation depth of 25 feet for Transfer Station A and 20 feet for Transfer Station B for the full-depth tunnel (**Table 2-2**). Alternative 3 requires less excavation because the site design locates the one transfer station in the low portion of the site, taking advantage of the topography to minimize excavation depth.

[5] This is a conservative estimate of the building demolition materials that would be disposed.

[6] An "impervious surface" prevents or substantially limits water from infiltrating into the soil, causing rainfall or irrigation water to run off instead. Common examples include asphalt, concrete, paved roads and parking lots, roofs, and other hard surfaces. Existing impervious surfaces at the Alternative 3 site include the paved roadways, greenhouses, and other existing structures.

[7] Alternative 3 would remove 39 trees, including 18 to construct the combined facilities and stormwater basin/wetlands and 21, including 12 significant trees (willow scrub) to restore Harkins Slough Road Drainage. For comparison, the Proposed Project would remove 138 trees, including 115 significant trees (154 trees including the optional equipment parking and storage area) (**Table 2-2**).

Impact Analysis

The detailed impact analysis of Alternative 3 (Combined Facilities) is included in **Chapter 6**. This section includes a summary of the impacts and comparison to the Proposed Project.

Aesthetics

The aesthetic impacts of Alternative 3, which are discussed in Section 6.1, Aesthetics, are summarized below. The impacts would be similar to the impacts of the Proposed Project, which are discussed in Section 3.1, Aesthetics. The overall impact determination would be Less than Significant, which is the same as the Proposed Project.

Visual Character and Public Views. Similar to the Proposed Project, Alternative 3 would change public views from Harkins Slough Road.

Existing foreground views adjacent to Harkins Slough Road include undeveloped land comprised of vegetation (weedy grasses, shrubs, and trees), two unpaved (compacted gravel) driveways, and a heavily disturbed area in the northeastern portion used by the County landfill for outdoor storage. With Alternative 3, the foreground view in the eastern portion would change very little because the area would continue to be used for storage, and the cluster of trees and vegetation in the central portion near Harkins Slough Road would remain in place. The foreground view in the western portion would change to paved driveways and entrance signage. In comparison, with the Proposed Project, foreground views would be dominated by Transfer Station A and associated transfer station traffic, and the existing trees and vegetation in the central portion near Harkins Slough Road would be removed.

Existing background views include flat undeveloped land comprised of weedy grasses and solitary trees by existing structures, and developed land comprised of three large greenhouses, packing shed, boiler house, and several other miscellaneous structures. Distant views include rolling hills with vegetation and agricultural uses. With Alternative 3, the background views would change to the combined facilities and associated traffic, although the remaining trees and vegetation near Harkins Slough Road would block some views. In comparison, with the Proposed Project, background views in general would be blocked by Transfer Station A.

Although Alternative 3 would create noticeable visual changes which could be considered moderate to major from some public viewpoints along Harkins Slough Road, there would not be an adverse effect on scenic resources or vistas, nor would the changes substantially degrade the visual character or quality of public views. There are no pedestrian or bicycle facilities (e.g., sidewalks, bike lanes), pullouts, or rest areas along the roadway that offer views of scenic resources or a scenic vista, nor is the Alternative 3 site visible from distant scenic vistas.

The existing viewers are motorists driving on a public roadway. Thus, it is reasonable to assume that viewers would be focused on driving and may be less aware of visual changes, particularly in the background; and that views are fleeting, particularly since the roadway curves away from the Alternative 3 site at this location. The changes to more noticeable foreground views would be minor to moderate, because a new driveway would be added to the open space comprised of weedy grasses and shrubs, but the dense cluster of trees (oak woodland) would be retained, providing a visual buffer. Therefore, the impact would be less than significant.

Scenic Resources within a State Scenic Highway. Similar to the Proposed Project, the Alternative 3 site is located approximately one mile south of SR-1 (an eligible state scenic highway), and would not be visible due to intervening topography, including hills and vegetation, which block any direct line of

sight between SR-1 and the site. Although landfill closure activities may be visible from Buena Vista Drive (designated as a scenic roadway by the County), the Alternative 3 site is not visible from Buena Vista Drive due to intervening trees and topography. The impact would be less than significant.

Light and Glare. Similar to the Proposed Project, construction of Alternative 3 would add limited new nighttime lighting to this area. The exterior site lighting would be kept to a minimum to what is required for safety and operational needs during normal operating hours from 7:00 a.m. to 5:00 p.m. Lighting may include motion sensor site lighting, but all lighting would be affixed to structures or on standards not exceeding the structure height, and would be directed downward and away from adjacent land to the south and east, so it would not create substantial light that could adversely affect nighttime views in the area. The impact would be less than significant.

In summary, the aesthetics impacts of Alternative 3 would be **Less than Significant**, with no mitigation required, which is the same as the Proposed Project.

Agricultural Resources

The potential impacts to agricultural resources from Alternative 3, which are discussed in Section 6.2, Agricultural Resources, are summarized below. The impacts would be greater than the impacts of the Proposed Project, which are discussed in Section 3.2, Agricultural Resources. The overall impact determination would be Less than Significant with Mitigation, unlike those of the Proposed Project, which are Less than Significant with no mitigation required.

Important Farmland, Williamson Act Contract, Forest Land/Timberland. Similar to the Proposed Project, the Alternative 3 site is not designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance; and there is no existing Williamson Act contract. The site is within the Coastal Zone, where timberland production is not a permitted use on parcels zoned Commercial Agriculture (CA); and the site does not meet the definition of forest land, timberland, or timberland production and is not zoned Timber Production (TP). Therefore, no impact would occur.

Agricultural Zoning. The existing zoning of the Alternative 3 site is Commercial Agriculture (CA). Therefore, like the Proposed Project, Alternative 3 includes rezoning to a designation which allows public facility uses. The parcels would be rezoned from CA to Public and Community Facilities (PF), which allows disposal and transfer facility uses, and no impact would occur.

Similar to portions of the Proposed Project, the Alternative 3 site is currently zoned Commercial Agriculture and Airport Combining Zone (CA-AIA). Like the Proposed Project, Alternative 3 would require amendments to parcel APN 052-021-33 (Agricultural Resource Map, General Plan/LCP Map, Zoning Map) to support the historical use of the property as a landfill, landfill closure, and the proposed redevelopment of the northeast corner. The northeast corner would be redeveloped with Transfer Station A for the Proposed Project and with the driveways to the combined facilities for Alternative 3. The legal requirements to maintain landfill cap integrity make the closed landfill unsuitable for agricultural use. Further, the Agricultural Viability Study prepared for the Proposed Project (**Appendix B**) concluded that the 35-acre area is not suitable for agricultural use due to poor and highly variable soil quality, native vegetation, proximity to the wildlife refuge, and topography.

Additionally, Alternative 3 requires amendments (Agricultural Resource Map, General Plan/LCP Map, Zoning Map) to the adjacent parcel to the north, APN 052-011-11, to support the use of the property for the new combined facilities (transfer station, ODF, recycling center). The Agricultural Viability Study prepared for Alternative 3 (**Appendix N**) evaluated the site's historic agricultural use, soil characteristics (including review of the Natural Resources Conservation Service [NRCS] Soil Survey, Irrigated Capability Classification, and California Revised Storie Index), and the potential effects of

Alternative 3 on adjacent agricultural resources. The study concluded that the Alternative 3 site has limited potential for viable commercial agricultural use, which is reflected in the lack of commercial agricultural use over the past decade. The site's overall soil capability, productivity limitations, erosion potential, and hydric conditions indicate that it does not exhibit the characteristics associated with Type 3 Agricultural Resource Lands identified in General Plan Policy ARC-1.1.2.

In addition to evaluation of the on-site agricultural resources, the Viability Study also included an evaluation of the combined facilities' potential impacts to off-site resources, pursuant to the third criterion of General Plan Policy ARC-1.3.1. The study identified that the combined facilities could potentially limit future suitability for production of leafy greens or other food crops at the property immediately north of the site (APN 052-011-09), which in its present use as a commercial ornamental plant nursery is not expected to be impacted. County staff consulted with the Leafy Greens Marketing Association (LGMA), seeking expertise and technical information related to pathogen transport studies, airborne particulate dispersal, and potential mitigations to protect food safety. LGMA acknowledged that the fully enclosed design of the Alternative 3 combined facilities would be a net positive improvement compared to the existing conditions at the adjacent Buena Vista Landfill site, which utilizes open-air operations. Additionally, LGMA indicated that the use of fencing and vegetative buffers, such as required under Santa Cruz County Code Section 16.50.095, are recognized mitigation measures. Therefore, where Alternative 3 includes development of areas with intensive human use within 200 feet of the adjacent property to the north (APN 052-011-09), solid fencing at least six feet in height and a vegetative barrier will be installed and permanently maintained (Mitigation Measure AG-2).

Farmland Conversion. Neither Alternative 3 nor the Proposed Project would involve other changes in the existing environment, which could result in the conversion of farmland to non-agricultural use, and the impact would be less than significant.

In summary, the agricultural resources impacts of Alternative 3 would be **Less than Significant with Mitigation**, unlike the Proposed Project, which would be Less than Significant with no mitigation required.

Required mitigation includes the following measure, described in full in Section 6.2.4:

- AG-2: Agricultural Buffer (Solid Board Fencing and Evergreen Vegetation) along Northern Property Line

Air Quality

The air quality impacts of Alternative 3, which are discussed in Section 6.3, Air Quality, are summarized below. The impacts would be similar to but slightly greater than the impacts of the Proposed Project, which are discussed in Section 3.3, Air Quality. The overall impact determination would be Less than Significant, which is the same as the Proposed Project.

Conflict with Adopted Air Quality Management Plan. Alternative 3 would be consistent with AQMP growth assumptions and emissions reduction goals. Therefore, like the Proposed Project, Alternative 3 would not conflict with or obstruct implementation of the adopted MBARD AQMP. The impact would be less than significant.

Net Increase in Criteria Pollutants. Construction of Alternative 3 would result in a less than significant impact related to maximum daily criteria air pollutant emissions during construction, including during simultaneous construction with landfill closure. Total operational emissions from Alternative 3 operation, including the transfer station, ODF, and recycling center, would not result in a significant increase in criteria air pollutant emissions. Thus, like the Proposed Project, Alternative 3

would not result in a cumulatively considerable net increase of any criteria air pollutant for which the region is designated non-attainment. The impact would be less than significant.

Sensitive Receptors. The nearest sensitive receptor to the Alternative 3 site is the residence located approximately 115 feet north of the site. In comparison, the nearest sensitive receptors to the Proposed Project area are the residence at the north end of Tierra Alta Drive, located approximately 200 feet from the optional equipment parking and storage area, and those residing at the Rountree Medium (Jail) Facility, located approximately 130 feet from Transfer Station B.

Operation of Alternative 3 would not include any new stationary sources of toxic air contaminants. Alternative 3, including all components, would not result in a significant increase in truck trips. It would not contribute to any potential CO hotspot. Therefore, similar to the Proposed Project, Alternative 3 would not expose sensitive receptors to substantial pollutant concentrations, although the localized emissions would be slightly greater due to the closer proximity of facility traffic to a residence. The impact would be less than significant.

Odor. The Alternative 3 components would be developed outside the existing landfill boundary. However, the proposed activities would be similar to existing activities, which include movement and handling of solid waste and preprocessing organics. The solid waste would be directed to the transfer station (for off-site disposal), the ODF, and/or the recycling center. All three facilities would be enclosed structures, reducing the potential for noticeable odors. Alternative 3 (Combined Facilities on Adjacent Property), including the associated General Plan/LCP land use designation and zoning map amendments and environmental enhancement/restoration features, would not create objectionable odors affecting a substantial number of people. The impact would be less than significant.

In summary, the air quality impacts of Alternative 3 would be **Less than Significant**, with no mitigation required, which is the same as the Proposed Project.

Biological Resources

Impacts to biological resources associated with Alternative 3 would be substantially less than those identified for the Proposed Project, which are addressed in Section 3.4, Biological Resources. The overall impact determination would be Less than Significant with Mitigation, unlike the Proposed Project, which would be Significant and Unavoidable.

Sensitive Plant and Wildlife Species. Under Alternative **3**, no impacts to sensitive plants are anticipated. Therefore, impacts to sensitive plant species would be the same as the Proposed Project and would be less than significant.

Like the Proposed Project, Alternative 3 may affect sensitive wildlife species with potential to occur in the Study Area, including Crotch's bumble bee, California red-legged frog, northwestern pond turtle, avian species, roosting bats, and San Francisco dusky-footed woodrat.

Crotch's Bumble Bee (*Bombus crotchii*). Similar to the Proposed Project, Alternative 3 may have an adverse impact on individual Crotch's bumble bees and active nests, if present, and on potential habitat, from clearing, grubbing, and grading the areas proposed for the combined facilities and from capping and closing the Landfill. Under Alternative 3, potential impacts to Crotch's bumble bee would be less than those of the Proposed Project because Alternative 3 would avoid the 0.17-acre grassland area in the northeastern corner of the County-owned property (where Transfer Station A would be located) that provides the most suitable habitat for this species, as well as avoiding the non-native grassland southeast of the landfill (where the optional equipment parking and storage area would be located). Therefore, impacts to Crotch's bumble bee under Alternative 3 would be

reduced compared to the Proposed Project but would remain less than significant with mitigation. For both the Proposed Project and Alternative 3, impacts to this species are unlikely due to its rarity.

Western Monarch Butterfly (*Danaus plexippus*). Similar to the Proposed Project, although individual western monarch butterflies were observed during field surveys, no autumnal or winter roosting monarchs were observed within the Study Area; and only marginal potential roost habitat is present. The combined facilities would be located near but would not impact a eucalyptus stand located in the southwest corner of the Study Area. This stand of eucalyptus trees provides marginal roosting habitat as it is located 2.0 miles from the ocean (greater than the typical distance of within 1.5 miles). Therefore, the potential impact is less than significant, and no further discussion of monarch butterfly is necessary.

California Red-Legged Frog (*Rana draytonii*). Similar to the Proposed Project, Alternative **3** may result in adverse impacts to the California Red-Legged Frog (CRLF) through construction and operation-related harassment, injury, mortality, or temporary habitat destruction. Locating the combined facilities on the properties north of the landfill would slightly reduce potential impacts to CRLF because of the greater distance from suitable aquatic features. Potential impacts associated with Landfill capping and closure would be the same for Alternative 3 as the Proposed Project. Therefore, impacts under Alternative **3** would be similar to but slightly less than those of the Proposed Project. With implementation of CRLF protective measures, impacts would be less than significant with mitigation.

Northwestern Pond Turtle (*Actinemys marmorata*). Similar to the Proposed Project, Alternative 3 may result in adverse impacts to northwestern pond turtle (NWPT), although unlikely. Construction of the combined facilities would be located further from suitable aquatic habitat for this species than improvements (and operation) associated with the Proposed Project. Additionally, operation of Alternative 3 would result in increased traffic further from suitable aquatic features than the Proposed Project. Potential impacts associated with Landfill capping and closure would be the same for Alternative 3 as the Proposed Project. Therefore, impacts under Alternative 3 would be similar to but slightly less than those of the Proposed Project. With implementation of protective measures, impacts to NWPT would be less than significant with mitigation.

Avian Species. Like the Proposed Project, construction and operation of Alternative **3** may result in adverse impacts to avian species, their habitats, and nesting activities. However, under Alternative 3, potential impacts to avian species would be notably less than those of the Proposed Project, because there would be no impact to the coast live oak woodland habitat located along Harkins Slough Road. The combined facilities would result in the removal of 39 trees, including 18 solitary trees; and it would result in impacts to non-native grassland, buildings, and other infrastructure that provide substrate for nesting birds. However, Alternative 3 would avoid impacting 0.54 acres of coast live oak woodland, a habitat type known to support high avian species diversity. Alternative 3 would still reduce foraging, roosting, and nesting habitat for birds in the vicinity, but to a lesser degree. Overall, impacts under Alternative 3 would be less than those of the Proposed Project, and implementation of protective measures would reduce potential impacts to less than significant with mitigation.

Roosting Bats. Like the Proposed Project, construction and operation of Alternative **3** may result in adverse impacts to bat species, their habitats, and roosting activities. However, under Alternative **3**, potential impacts to roosting bats would be less than those of the Proposed Project, because there would be no impacts to coast live oak woodland habitat. Alternative 3 does include the demolition of greenhouses and other structures, which may support roosting bats. Locating the combined facilities on the property north of the landfill would avoid impacting 0.54 acres of coast live oak woodland, including 0.17 acres within or adjacent to mature trees that contain suitable bat roost

features. Alternative **3** would still result in the displacement of 39 trees, and any demolition of buildings or other structures may also impact roosting bats. Overall, the impacts of Alternative **3** would be less than those of the Proposed Project, and implementation of protective measures would reduce potential impacts to less than significant.

San Francisco Dusky-footed Woodrat (Neotoma fuscipes annectens). Like the Proposed Project, construction of Alternative **3** may result in adverse impacts to San Francisco dusky-footed woodrat houses, individuals, or young from tree and vegetation removal. However, the potential impacts would be notably less than the Proposed Project because coast live oak woodland would be avoided. Implementation of protective measures would reduce potential impacts to less than significant.

Overall, impacts to sensitive wildlife species would be substantially less compared to the Proposed Project, but would remain less than significant with mitigation.

Sensitive Habitats and Wetlands/Other Waters. Alternative **3** would result in minimal impacts to sensitive habitats/ESHA. An existing irrigation ditch wetland would be reoriented and expanded, ultimately improving the feature. Alternative 3 would avoid impacts to 0.54 acres of coast live oak woodland, which is a sensitive habitat and ESHA. Therefore, Alternative 3 is notably less impactful to sensitive habitats overall, but slightly more impactful to wetlands than the Proposed Project.

Restoration and enhancement activities would be similar to the Proposed Project and would temporarily impact sensitive habitats, including mixed broadleaf riparian, mixed willow riparian, wetland, and riverine habitats. Alternative 3 includes additional environmental enhancement and habitat restoration features in aquatic habitats, which would contribute to overall ecological heterogeneity.

Overall, impacts to sensitive habitats from Alternative 3 would be notably less than those of the Proposed Project with slightly more impacts to wetlands. Impacts to sensitive habitats would be reduced to less than significant with mitigation, whereas the Proposed Project would result in significant and unavoidable impacts.

Wildlife Movement. Like the Proposed Project, construction of Alternative **3** may result in impacts to wildlife movement. However, the potential impacts to wildlife movement from Alternative 3 would be substantially less than the Proposed Project, because impacts to coast live oak woodland (a wildlife movement corridor) would be avoided, and passage for wildlife along Harkins Slough Road between the Wildlife Refuge and naturalized habitats to the west would be protected and enhanced.

Restoration and enhancement activities would temporarily impact sensitive habitats that provide wildlife movement features, including mixed broadleaf riparian, mixed willow riparian, wetland, and riverine habitats. These impacts from Alternative 3 would be similar to those of the Proposed Project. Both Alternative 3 and the Proposed Project would improve wildlife movement through implementation of a wildlife corridor across the southern end of the landfill (once capped and closed) that connects Harkins Slough and Channelized Gallighan Slough, and through installation of a replacement culvert at the main landfill entrance that would allow for passage of small wildlife species.

Overall, impacts to wildlife movement from Alternative 3 would be notably less than impacts from the Proposed Project, but would remain less than significant with mitigation.

Local Policies and Ordinances. Like the Proposed Project, Alternative 3 conflicts with several local County ordinances including the Sensitive Habitat Protection Ordinance (Chapter 16.32), Riparian Corridor and Wetlands Protection Ordinance (Chapter 16.30), and Significant Tree Protection Ordinance (Chapter 16.34). In the Coastal Zone, a project is required to be consistent with the relevant text in Chapter 5 of the 2024 General Plan/Local Coastal Program and to conform to the specific

requirements in the Coastal Act. Exceptions to these ordinances would be required; however, overall impacts to sensitive habitats and ESHA are significantly less than the Proposed Project.

Alternative 3 would result in fewer impacts to sensitive habitats/ESHA overall than the Proposed Project, because impacts to coast live oak woodland would not occur. In addition, only 12 significant trees would be removed for Alternative 3, limited to arroyo willow scrub, which will reach a similar stature and structure within 2 years; compared to 114 significant trees, including many coast live oak trees, for the Proposed Project. Therefore, conflicts with local ordinances would be notably less; and impacts associated with Significant Tree Removal would be considered less than significant with mitigation, unlike the Proposed Project, which would be significant and unavoidable.

Habitat Conservation Plans. Like the Proposed Project, Alternative **3** would not conflict with the provisions of any adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. Therefore, no impact would occur.

In summary, the biological resources impacts of Alternative 3 would be substantially less than the Proposed Project. The impacts would be **Less than Significant with Mitigation**, unlike the Proposed Project, which would be Significant and Unavoidable.

Required mitigation measures include the following and are described in full in Section 6.4.4:

- BIO-1a: Conduct Environmental Training Prior to Construction
- BIO-1b: Schedule Construction to Avoid Impacts to Sensitive Biological Resources
- BIO-1c: Conduct Pre-construction Surveys and Implement Buffers for Crotch's Bumble Bee
- BIO-1d: Restore and Promote Crotch's Bumble Bee Habitat
- BIO-3: Implement Protective Measures and Biological Monitoring for California Red-Legged Frog and Northwestern Pond Turtle
- BIO-5a: Avoid Vegetation Removal during Breeding Bird Season or Conduct Nesting Bird Surveys
- BIO-5b: Conduct Surveys for Wintering Sensitive Bird Species
- BIO-6: Schedule Tree Removal to Avoid Bat Maternity Roosts and Winter Hibernacula and/or Conduct Pre-construction Surveys and Implement Protective Measures for Bat Roosts
- BIO-7: Conduct Pre-construction Surveys and Flag Woodrat Nests
- BIO-8a: Implement Measures to Protect Sensitive and Native Habitats during Construction
- BIO-8b: Implement Best Management Practices during Construction
- BIO-8c: Stabilize and Restore Temporary Impact Areas
- BIO-8e: Prepare and Implement a Habitat Mitigation Plan for Permanent Impacts to Sensitive Habitats, including Aquatic Features, for Alternative 3
- BIO-9a: Replace, Restore, and/or Enhance with In-Kind Riparian Vegetation Onsite
- BIO-9b: Transplant Willows to Restore Riparian Areas
- BIO-13: Install Protective Fencing and Conduct Wildlife Relocation if Necessary
- BIO-14: Implement Tree Replacement Planting and Habitat Enhancement

Cultural Resources

The cultural resource impacts of Alternative 3, which are discussed in Section 6.5, Cultural Resources, are summarized below. The impacts would be similar to the impacts of the Proposed Project, which are discussed in Section 3.5, Cultural Resources. The overall impact determination would be Less than Significant with Mitigation, which is the same as the Proposed Project.

Historical Resources. Alternative 3 requires building demolition of the existing vacant greenhouses, packing shed, boiler house, and other miscellaneous structures (totaling approximately 178,000 SF) to construct the combined facilities. The structures to be demolished are over 50 years old and were evaluated for historical significance in the Historic Resource Evaluation for 1203 Buena Vista Drive, Santa Cruz County, California (Albion 2026b). None of the buildings to be demolished meet the criteria for eligibility for the California Register of Historical Resources (CRHR) because the buildings were not constructed in important artistic or architectural styles, do not meet any of the criteria for local listing for associated with an important person, event, or contain the potential to provide information important to history. This is the same determination that was made for the buildings to be demolished for the Proposed Project. Therefore, the impact to historic resources would be less than significant.

Archaeological Resources and Human Remains. Potential impacts of Alternative 3 on archaeological resources and human remains were evaluated in the Cultural Resources Desktop Review for the Buena Vista Landfill Redevelopment Project, Alternative 3, Santa Cruz County, California (Albion 2026a). Alternative 3 would result in earthmoving activities that could inadvertently disturb previously unknown subsurface archaeological resources or human remains. The excavation volume for Alternative 3 is estimated to be 51,600 cubic yards, whereas the Proposed Project is 28,000 cubic yards (**Table 5-3**). The volume would be more because the recycling center and organics diversion area would be relocated from the existing landfill to the new combined facilities to improve operations. However, the excavation depth of Alternative 3 is estimated to be up to 10 feet, whereas the Proposed Project is up to 25 feet. The depth is less because the transfer station would be located on the lower portion of the site, taking advantage of the site topography to reduce required excavation. Thus, the overall potential for inadvertent discovery would be similar to the Proposed Project. The same mitigation measures would be required to reduce the impact to a less-than-significant level. Therefore, the impact would be less than significant with mitigation.

In summary, the cultural resources impacts of Alternative 3 would be **Less than Significant with Mitigation**, which is the same as the Proposed Project.

Required mitigation measures include the following and are described in full in Section 3.5.4:

- CR-2a: Stop Work if Inadvertent Encounter of Undiscovered Archaeological Resources during Ground-Disturbing Activities
- CR-2b: Archeologist and Native American Monitoring during Initial Ground-Disturbing Activities in Specific Areas

Energy

The energy impacts of Alternative 3, which are discussed in Section 6.6, Energy, are summarized below. The impacts would be similar to the impacts of the Proposed Project, which are discussed in Section 3.6, Energy. The overall impact determination would be Less than Significant, which is the same as the Proposed Project.

Energy Consumption. All Alternative 3 components would require typical construction practices and would not include any components that would result in wasteful or inefficient use of energy during construction. Alternative 3 could not be implemented without the use of standard construction equipment and vehicle use; therefore, energy use would not be unnecessary. Once in operation, energy use from the transfer stations, ODF, and recycling center would not be wasteful, and energy use would be efficient and necessary to serve waste disposal needs. Therefore, Alternative 3 would not result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during construction or operation. The impact would be Less than Significant.

Energy Efficiency Plans. Alternative 3 does not include any components that would interfere with a transition to an alternatively fueled vehicle and equipment fleet. Additionally, the transfer station, ODF, and recycling center equipment would meet current energy efficiency requirements and improve energy efficiency compared to existing equipment used for organics diversion and recycling. Alternative 3 would not impact the potential future use of landfill gas for energy generation. Additionally, all new buildings at the combined facilities would comply with, at a minimum, applicable California Building Energy Efficiency Standards (24 CCR, Part 6) and California Air Resources Board vehicle and fleet emissions standards. As such, Alternative 3 would implement CAAP strategies related to landfill energy use. Therefore, Alternative 3 would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. The impact would be Less than Significant**.**

In summary, the energy impacts of Alternative 3 would be **Less than Significant**, with no mitigation required, which is the same as the Proposed Project.

Geology and Soils

The geology and soils impacts of Alternative 3, which are discussed in Section 6.7, Geology and Soils, are summarized below. The impacts would be similar to but slightly less than the impacts of the Proposed Project, which are discussed in Section 3.7, Geology and Soils. The overall impact determination would be Less than Significant with Mitigation, which is the same as the Proposed Project.

Seismicity. Alternative 3 would include the construction of new combined facilities. Similar to the Proposed Project, all the structures at the combined facilities would be designed and constructed in conformance with the most recently adopted CBC design parameters, which are specifically tailored to minimize the risk of structure failure due to seismic hazards. Conformance with the CBC would ensure that impacts relating to ground shaking would be less than significant.

Soil Stability. Alternative 3 would include the construction of new combined facilities. The near-surface soils encountered at the Alternative 3 site are not considered susceptible to liquefaction due to such factors as depth to the groundwater table, soil density, and grain-size distribution. Therefore, Alternative 3 would not be subject to liquefaction and would not require a site stability evaluation, whereas this would be required for the Proposed Project if Organics Diversion Facility Option 2 is selected (Mitigation Measure GEO-2).

However, similar to the Proposed Project, Alternative 3 would locate structures on a site that is underlain by expansive soils. Thus, like the Proposed Project, construction of Alternative 3 could exacerbate the existing risk to life or property resulting from expansive soils. Therefore, the impact would be less than significant with mitigation to include appropriate design measures for expansive soils for structures (Mitigation Measure GEO-4). There would be use of septic tanks or alternative wastewater disposal tanks requiring supporting soils.

Soil Erosion and Loss of Topsoil. The impact associated with soil erosion and loss of topsoil from Alternative 3 would be similar to the Proposed Project. Like the Proposed Project, Alternative 3 would implement BMPs during construction to reduce the risk of soil erosion. Post-construction, most of the disturbed area would be impervious because it would be developed with the combined facilities and associated paved areas and roadways, thus limiting the potential soil erosion and loss of topsoil. In addition, similar to the Proposed Project, Alternative 3 would include stormwater management to meet state regulatory compliance requirements. Therefore, the impacts related to erosion and loss of topsoil would be less than significant for Alternative 3, which is the same as the Proposed Project.

Paleontological Resources. Similar to the Proposed Project, Alternative 3 is not located in an area of known paleontological resources within Santa Cruz County (Santa Cruz County 2024). In addition, no unique paleontological resources or sites or unique geologic features are known to occur in the vicinity of the Project. Therefore, the potential for discovering resources would be low. The impact would be less than significant.

In summary, the geology and soils impacts of Alternative 3 would be slightly less than the Proposed Project because the Alternative 3 site is not considered susceptible to liquefaction and no associated mitigation would be required; whereas the Proposed Project would require mitigation if ODF Option 2 is selected. However, like the Proposed Project, Alternative 3 would require design measures for structures on expansive soils. Therefore, the impact would be **Less than Significant with Mitigation**, which is the same as the Proposed Project.

Required mitigation measures include the following, which is described in full in Section 3.7.4:

- GEO-4: Expansive Soils Design Measures for Specific Structures

Greenhouse Gas Emissions

The GHG impacts of Alternative 3, which are discussed in Section 6.8, Greenhouse Gas Emissions, are summarized below. The impacts would be similar to but less than the impacts of the Proposed Project, which are discussed in Section 3.8, Greenhouse Gas Emissions. The overall impact determination would be Less than Significant, which is the same as the Proposed Project.

Generate GHG Emissions/GHG Reduction Plan Consistency: Alternative 3 would be consistent with applicable Scoping Plan strategies. Alternative 3 would also be consistent with all applicable CAAP strategies. Therefore, impacts related to GHG emissions and plan consistency would be **Less than Significant**, with no mitigation required, which is reduced compared to the Proposed Project**.**

Flood Risk from Sea Level Rise and Storms: Harkins Slough is located east and southeast of the Alternative 3 site and is a potential risk area for sea level rise and coastal flooding. However, the Alternative 3 site is located outside the hazard area. The California Coastal Commission's Our Coast Our Future hazard viewer also identifies Harkins Slough as a potential flood area, but the projected flood area does not extend into the Alternative 3 site under the worst-case flood condition of 500 centimeters of sea level rise and a 100-year storm event. The Alternative 3 site could experience intermittent flooding, but people or structures would not be exposed to potential substantial adverse effects. Alternative 3 does not propose new critical infrastructure in a projected hazard area. Therefore, like the Proposed Project, impacts related to sea level rise and storm flooding would be less than significant.

In summary, the GHG impacts of Alternative 3 would be **Less than Significant**, with no mitigation required, which is the same as the Proposed Project.

Hazards and Hazardous Materials

The hazards and hazardous materials impacts of Alternative 3, which are discussed in Section 6.9, Hazards and Hazardous Materials, are summarized below. The impacts would be similar to the impacts of the Proposed Project, which are discussed in Section 3.9, Hazards and Hazardous Materials. The overall impact determination would be Less than Significant, which is the same as the Proposed Project.

Use and Exposure to Hazardous Materials. Similar to the Proposed Project, Alternative 3 would include construction activities that would require the operation of heavy equipment, which could involve the use of hazardous materials. Compliance with all applicable federal, state, and local requirements related to the routine transport, use, or disposal of hazardous materials would maximize containment through safe handling and storage practices and provide for prompt and effective cleanup if an accidental release occurs.

Similar to the Proposed Project and existing conditions, Alternative 3 operation activities would accept household hazardous waste but would not accept hazardous waste, asbestos (friable and non-friable), radioactive waste, and untreated medical waste (biohazardous or infectious waste) for disposal. In addition, all common hazardous materials for cleaning and maintenance would be contained, stored, and used on site in accordance with manufacturers' instructions, applicable standards and federal, state, and local regulations.

Similar to the Proposed Project, all enclosed structures for Alternative 3 (transfer station with office, ODF, recycling center, scale house) would include gas monitoring sensors to ensure gas levels do not exceed CalRecycle's standard of 5%.

Therefore, impacts related to the routine transport, use, disposal, or release of hazardous materials would be less than significant.

Proximity to Schools. Similar to the Proposed Project, there are no schools located within 0.25 mile, and Alternative 3 would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school. Therefore, no impact would occur.

Listed Hazardous Materials Sites. Similar to the Proposed Project, there are no sites listed on the Cortese List of hazardous materials sites (pursuant to Government Code Section 65962.5) within 100 feet of the Alternative 3 site. Therefore, no impact would occur.

Proximity to Airports. Like the Proposed Project, Alternative 3 is located within the designated Airport Influence Area (AIA) for the Watsonville Municipal Airport, which is located approximately 1 mile northeast of the Buena Vista Landfill. However, Alternative 3 is partially located in Safety Compatibility Zone 6 or the Traffic Pattern Zone, as well as Safety Compatibility Zone, or the Inner Turning Zone. The Alternative 3 site is also located in the Overflight Zone. A portion of the site is located within the 60 dBA CNEL contour. This noise level is normally compatible standard for sensitive receptors. Therefore, Alternative 3 would not result in any new receptors within an area with the potential to be exposed to airport noise in excess of the normally compatible standard for sensitive receptors. Similar to the Proposed Project, the elevation for the various Alternative 3 components and associated structures would be below the 200-foot limit. The impact would be less than significant.

Emergency Response or Evacuation Plan. Under Alternative 3, the combined facilities would be accessed from Harkins Slough Road and would not substantially increase hazards due to a geometric design feature or incompatible use, nor result in inadequate emergency access, as discussed in

Section 6.17, Transportation (Impacts T-3 and T-4). Therefore, Alternative 3 would not interfere with emergency access in and out of this area, nor with an Emergency Response Plan or Emergency Evacuation Plan. During construction, there could be temporary lane closures on Harkins Slough Road, but there would be no planned road closures. Emergency access and general access to adjacent facilities would be retained throughout construction with traffic controls. All other construction-related activities would occur within the Alternative 3 site and would not interfere with emergency response or access. Therefore, impacts would be less than significant.

Exposure to Wildfire Risk. Alternative 3 would include development of combined waste management facilities on the adjacent property immediately north of the Buena Vista Landfill. Similar to the Proposed Project, Alternative 3 would introduce new operational structures that could require fire protection measures during a fire event. The facilities would include fire detection and fire suppression systems in accordance with the California Fire Code (CFC) and other onsite controls (extinguishing equipment, gas monitoring) that would reduce wildfire risks and would not expose people or structures to a significant risk of loss, injury, or death involving wildland fires. Also refer to Section 6.20. The impact would be less than significant.

In summary, the hazards and hazardous materials impacts of Alternative 3 would be **Less than Significant**, with no mitigation required, which is the same as the Proposed Project.

Hydrology and Water Quality

The hydrology and water quality impacts of Alternative 3, which are discussed in Section 6.10, Hydrology and Water Quality, are summarized below. The impacts would be similar to the impacts of the Proposed Project, which are discussed in Section 3.10, Hydrology and Water Quality. The overall impact determination would be Less than Significant, which is the same as the Proposed Project.

Water Quality Standards. During construction, similar to the Proposed Project, there is potential for water quality degradation from soil erosion, loss of topsoil, and the accidental release of hazardous materials such as diesel fuel, gasoline, lubricant oils, hydraulic fluid, antifreeze, transmission fluid, cement slurry, and other fluids required for the operation of construction vehicles or equipment. Similar to the Proposed Project, implementation of the BMPs to be included in the construction specifications and compliance with the NPDES-required SWPPP and County's grading regulations would reduce the risk of onsite/offsite water degradation from soil erosion and other pollutants related to construction activities.

Once constructed, similar to the Proposed Project, Alternative 3 would result in increased impervious surface. Alternative 3 stormwater surface runoff would be directed through grading, inlets, pipelines, and culverts to new stormwater management basins located at the site's low point, south of the transfer station near the entrance/exit from Harkins Slough Road and west of the scale house. Filtration measures would be installed in the collection system and basins to prevent unwanted solid waste or contaminated stormwater from entering the stormwater system. A number of options could be used such as, but not limited to, filter socks or bags, stormceptor units, drop inlets and oil/water separators.

Therefore, the impacts related to water quality standards would be less than significant for Alternative 3, which is the same as the Proposed Project.

Groundwater Supplies and Recharge. Similar to the Proposed Project, Alternative 3 would not use additional groundwater and therefore would not deplete groundwater resources compared to existing conditions. Alternative 3 would introduce approximately 437,500 SF of new roadways and parking lots and 250,000 SF of new impervious surfaces. Alternative 3 includes a stormwater

management plan, which would protect groundwater quality. The potential impact to groundwater recharge would be less than significant because the amount of new impervious surface would be relatively small compared to the total surface area of the groundwater basin. Further, Alternative 3 is concentrating development and new impervious surface on 11 acres in the most disturbed area (with existing structures) of the 26.95-acre parcel (APN 052-011-11) and keeping the remainder of the parcel undeveloped and pervious. The impact related to groundwater supplies and recharge would be less than significant for Alternative 3, which is the same as the Proposed Project.

Drainage Patterns. Under Alternative 3, most of the disturbed area would be impervious because it would be developed with the combined facilities and associated paved areas and roadways. The combined facilities would include stormwater management to meet state regulatory compliance requirements. Stormwater surface runoff would be directed through grading, inlets, pipelines, and culverts to new stormwater management basins located at the site's low point, south of the transfer station near the entrance/exit at Harkins Slough Road. The stormwater would first enter a forebay (upper basin) to enable sediment to settle and then flow to a larger basin (lower basin), from which the stormwater would flow to a culvert to the existing drainage along the southern boundary, feeding into the Harkins Slough Road Drainage. In addition, similar to the Proposed Project, Alternative 3 would include the Environmental Enhancement and Habitat Restoration Features, as described in Section 5.2.3, which would improve the function and value of the existing drainage system on site and downstream. Therefore, Alternative 3 would not substantially alter drainage patterns at the Alternative 3 site, and the impact would be less than significant, like the Proposed Project.

Release of Pollutants due to Flood Hazard. Similar to the Proposed Project, Alternative 3 is not located in any FEMA-designated Special Flood Hazard Areas, seiche zone, or tsunami inundation zone. Therefore, there would be no impact related to release of pollutants from flood hazards, like the Proposed Project.

In summary, the hydrology and water quality impacts of Alternative 3 would be **Less than Significant**, with no mitigation required, which is the same as the Proposed Project.

Land Use and Planning

The land use impacts of Alternative 3, which are discussed in Section 6.11, Land Use and Planning, are summarized below. The impacts would be similar to the impacts of the Proposed Project, which are discussed in Section 3.11, Land Use. The overall impact determination would be Less than Significant, which is the same as the Proposed Project.

Physically Divide Established Community. Alternative 3 would include new combined facilities (Transfer Station, Organics Diversion Facility, Recycling Center, Scale House) on the adjacent property, which is located immediately north of the Buena Vista Landfill and Harkins Slough Road. Compared to the Proposed Project, Alternative 3 would not require the realignment of Harkins Slough Road. Harkins Slough Road would continue to provide access to the Buena Vista Migrant Center (farmworker housing and childcare facility) and the Housing Authority's affordable housing complex known as Tierra Alta, southeast of the landfill, and the Rountree Medium (Jail) Facility south of the landfill. The impact would be less than significant.

Conflict with Land Use Plan, Policy, or Regulation. Similar to the Proposed Project, Alternative 3 includes a General Plan/LCP Amendment to redesignate the entirety of parcel APN 052-011-11 and APN 052-021-33 to Public Facility/Institutional (P); and amend the County Zone district Map to Public Facilities-Airport Influence Area Combining District (PF-AIA). Similar to the Proposed Project, Alternative 3 would be consistent with most applicable policies in the County General Plan/LCP.

However, Alternative 3 would be consistent with more policies related to biological resources and less related to agricultural resources compared to the Proposed Project. The impact would be less than significant.

In summary, Alternative 3 would not physically divide an established community and would be consistent with most policies adopted for the purpose of avoiding or mitigating an environmental effect. Therefore, the land use impacts would be **Less than Significant**, with no mitigation, which is the same as the Proposed Project.

Mineral Resources

The mineral resources impacts of Alternative 3, which are discussed in Section 6.12, Mineral Resources, are summarized below. The impacts would be similar to the impacts of the Proposed Project, which are discussed in Section 3.12, Mineral Resources. The overall impact determination would be Less than Significant, which is the same as the Proposed Project.

Availability of Known Mineral Resource. Unlike the Proposed Project area, the Alternative 3 site does not include land designated by the County as a Mineral Resource Area. Similar to the Proposed Project, Alternative 3 would require imported aggregate and construction concrete, and the impact was determined less than significant because supplies for Alternative 3 are expected to come from local sources in the Watsonville area in south Santa Cruz County. Thus, the demand created by Alternative 3 would not represent a significant impact on that supply.

Loss of Availability. Similar to the Proposed Project, Alternative 3 is currently zoned Commercial Agriculture-Airport Influence Area Combining District (CA-AIA), which is not considered to be Extractive Use Zones (M-3) for mineral resources nor does it have a land use designation with a Quarry Designation Overlay (Q) (County of Santa Cruz 1994). Therefore, there would be no impact for Alternative 3 nor the Proposed Project.

In summary, the mineral resources impacts of Alternative 3 would be **Less than Significant**, with no mitigation, which is the same as the Proposed Project.

Noise

The noise impacts of Alternative 3, which are discussed in Section 6.13, Noise, are summarized below. The impacts would be similar to but slightly greater than the impacts of the Proposed Project, which are discussed in Section 3.13, Noise. The overall impact determination would be Less than Significant with Mitigation, which is the same as the Proposed Project.

Construction Noise and Vibration. One residence is located within the 200-foot screening distance for construction. Implementing noise-reducing measures during construction (Mitigation Measure N-1) would reduce noise at nearby sensitive receptors to below the County Noise Ordinance and General Plan Noise Element standards. Therefore, the construction impact of Alternative 3 would be less than significant with mitigation. This mitigation measure is also required for Alternative 1, where Transfer Station A south of Rountree Lane would be located near residences, as well as the Proposed Project if the optional equipment parking and storage area is constructed south of Rountree Lane.

No existing sensitive receptors would be located within the 50-foot vibration screening distance of any Alternative 3 construction area. Therefore, the potential vibration impact during construction would be less than significant, which is the same as Alternative 1 and the Proposed Project.

Operational Noise. Alternative 3 traffic would not result in a significant change to vehicle noise levels compared to noise levels without Alternative 3. Daily operation would have the potential to

exceed the County General Plan Noise Element daytime noise compatibility standard at nearby residences. Implementation of noise-reducing design features at the transfer station, organics diversion facility, and recycling center (Mitigation Measure N-2d) would reduce noise at nearby sensitive receptors to below the County General Plan Noise Element standards. Therefore, this impact would be less than significant with mitigation**.** Noise shielding design features are also required mitigation for Alternative 1, where Transfer Station A would be located south of Rountree Lane near residences, as well as the Proposed Project because Transfer Station B and ODF Option 2 would be near those residing at the Rountree Medium (Jail) Facility.

Aircraft Noise. Alternative 3 would not result in any new receptors within an area with the potential to be exposed to airport noise in excess of the normally compatible standard for sensitive receptors. Additionally, Alternative 3 is not a sensitive receptor and does not include any components that would have the potential to change air traffic patterns or introduce new sources of aircraft noise. Therefore, the impact would be less than significant. This is the same for Alternative 1 and the Proposed Project.

In summary, the noise impacts of Alternative 3 would be **Less than Significant with Mitigation**, which is the same as the Proposed Project.

Required mitigation measures include the following and are described in full in Section 6.13.4:

- N-1: Implement Noise-Reducing Measures for Construction Equipment Used within 200 Feet of Occupied Residences
- N-2d: Implement Noise-Reducing Design Features at Alternative 3 Combined Facilities

Population and Housing

The population and housing impacts of Alternative 3 would be similar to those identified for the Proposed Project, which are addressed in Section 6.14, Population and Housing. The overall impact determination would be No Impact, which is the same as the Proposed Project.

Population Growth. Alternative 3 would include the construction of new combined facilities and would not involve extension of roads or other infrastructure. Like the Proposed Project, it is anticipated there would be similar staffing levels compared to the existing Buena Vista Landfill facility. Therefore, Alternative 3 would not cause population growth directly or indirectly, and there would be no impact.

Housing. Similar to the Proposed Project, there is no housing at the Alternative 3 site. The residence to the east is on the same parcel (APN 052-011-11) as the Alternative 3 site, but it is in the far eastern portion of the parcel and outside the Alternative 3 site to be developed with the combined facilities. The residence is occupied by the current property owner, who would vacate the residence if and when the property is sold to the County. However, the County has no plans to demolish or use the residential structure at this time. Therefore, like the Proposed Project, Alternative 3 would not displace existing people or housing, necessitating the construction of replacement housing elsewhere. Therefore, impacts would be less than significant.

In summary, the population and housing impacts of Alternative 3 would result in **No Impact**, which is the same as the Proposed Project.

Public Safety and Services

The public safety and services impacts of Alternative 3, which are discussed in Section 6.15, Public Safety and Services, are summarized below. The impacts would be similar to the impacts of the Proposed Project, which are discussed in Section 3.15, Public Safety and Services. The overall impact determination would be Less than Significant, which is the same as the Proposed Project.

Similar to the Proposed Project, Alternative 3 would not introduce new residents or a substantial number of new employees, which could result in the need for additional public services or facilities (fire, police, schools, parks), the construction of which could cause environmental impacts.

Additionally, given the controlled environment of the combined facilities and the current and planned safety measures in place including proposed security (perimeter) fencing and onsite controls (extinguishing equipment, gas monitoring), Alternative 3 would not require new or expanded fire or police protection facilities to maintain existing response times, service ratios, or performance standards.

In addition, Alternative 3 would not result in adverse impacts to the adjacent USFWS National Wildlife Refuge to the east nor the CDFW Ecological Preserve to the south, because protective measures would be implemented during construction and with design, such as ensuring there would be no contaminated stormwater runoff entering the sloughs. Once operational, the perimeter fencing around the new combined facilities would prevent trespassing onto these lands. Additionally, as described under Environmental Enhancement and Habitat Restoration Features, the project has been designed to enable wildlife movement on the perimeter of the combined facilities.

Therefore, the public safety and services impacts of Alternative 3 would be Less than Significant, with no mitigation required, which is the same as the Proposed Project.

Recreation

The recreation impacts of Alternative 3, which are discussed in Section 6.16, Recreation, are summarized below. The impacts would be similar to the impacts of the Proposed Project, which are discussed in Section 3.16, Recreation. The overall impact determination would be Less than Significant, which is the same as the Proposed Project.

Similar to the Proposed Project, Alternative 3 does not include the development of uses, such as residential dwellings or office employment, that would place demands on or result in the use of nearby parks and recreation facilities. In addition, Alternative 3 does not propose the construction of new or expanded recreational facilities, which could result in adverse physical effects to the environment and would not result in the need for the construction or expansion of recreational facilities.

Therefore, the recreation impacts of Alternative 3 would be No Impact, which is the same as the Proposed Project.

Transportation

The transportation impacts of Alternative 3, which are discussed in Section 6.17, Transportation, are summarized below. The impacts would be similar to the impacts of the Proposed Project, which are discussed in Section 3.17, Transportation. The overall impact determination would be Less than Significant, which is the same as the Proposed Project.

Conflict with Program, Plan, Ordinance, or Policy. Alternative 3 would construct combined facilities (Transfer Station, Organics Diversion Facility, Recycling Center, Scale House) on the adjacent property to the north of the existing Buena Vista Landfill and would be accessed from Harkins

Slough Road, with no major changes to Harkins Slough Road required. In comparison, for the Proposed Project, Transfer Station A would be north of the existing landfill, requiring the realignment of Harkins Slough Road around the north side of the transfer station; and the other facilities and services would be dispersed within the landfill. For Alternative 1, Transfer Station A would be south of the existing landfill and Rountree Lane, requiring the realignment of Rountree Lane around the south side of the transfer station; and the other facilities and services would be dispersed within the landfill like the Proposed Project. Although the onsite circulation patterns would differ, the overall trips and travel patterns for Alternative 3 would be similar to those of the Proposed Project and Alternative 1. Therefore, like the Proposed Project discussed, Alternative 3 would not conflict with a program, plan, ordinance, or policy addressing the circulation system.

Vehicle Miles Traveled. Alternative 3 is expected to generate approximately 78 daily trips related to office space, compared to 86 daily trips with the Proposed Project.[8] Like the Proposed Project, less than 110 trips would be generated, which is the threshold for the County's vehicle miles traveled (VMT) screening criteria for a less than significant VMT impact. Therefore, like the Proposed Project, the VMT impact is less than significant.

Design Hazards. Under Alternative 3, the new combined facilities would be accessed from Harkins Slough Road. The existing paved roadway extending from Harkins Slough Road would be used for transfer trailers exiting the site, and a new main entrance/exit road would be added on the east side of the existing roadway. These driveways for the combined facilities would be designed in accordance with the County's design guidelines. The existing driveway onto the Alternative 3 site from Buena Vista Drive would not be used, but it would remain available for emergency access. Vehicles entering and exiting the combined facilities from Harkins Slough Road would have sufficient intersection sight distance to make a left or right turn onto the road per AASHTO scenario. In addition, similar to the Proposed Project, the trucks transferring the waste from Alternative 3 to ReGen Monterey Landfill facility would use the Caltrans SR-1 ramp intersections with Buena Vista Drive, and no changes in ramp queues at the SR-1 ramp intersections are anticipated. Compared to the Proposed Project, Alternative 3 would not require realignment of Harkins Slough Road, which was determined not to create a hazard due to geometric design. Therefore, similar to the Proposed Project, Alternative 3 would not substantially increase hazards due to a geometric design feature or incompatible use, and the impact would be less than significant.

Emergency Access. Similar to the Proposed Project, during construction of Alternative 3, emergency access along Buena Vista Drive and Harkins Slough Road to surrounding land uses and to the Alternative 3 site would be retained. Once operational, the emergency access to the combined facilities (Alternative 3 site) and surrounding land uses would be similar to existing conditions. This impact would be less than significant.

In summary, the transportation impacts of Alternative 3 would be **Less than Significant**, with no mitigation required, which is the same as the Proposed Project.

Tribal and Cultural Resources

The tribal cultural resource impacts of Alternative 3, which are discussed in Section 6.18, Tribal Cultural Resources, are summarized below. The impacts would be similar to the impacts of the Proposed Project,

[8] The number of estimated daily trips for the Proposed Project is slightly more than Alternative 3, because employee daily trip estimates are based on office square footage per guidance in the Institute of Transportation Engineers (ITE), as described in Sections 3.17 and 6.17. The Proposed Project has more office space (5,300 SF) because there is an office in each transfer station (1,500 SF in Transfer Station A and 3,800 SF in Transfer Station B), and Alternative 3 has one office (4,800 SF) in the transfer station at the combined facilities.

which are discussed in Section 3.18, Cultural Resources. The overall impact determination would be Less than Significant with Mitigation, which is the same as the Proposed Project.

Although no Tribal Cultural Resources (TCRs) have been identified within the Alternative 3 site nor the Proposed Project area, the positive Sacred Lands File results received from the NAHC indicate that Santa Cruz County in general has a high sensitivity to containing Native American habitation sites; and during Tribal consultation, the Tribal representative conveyed the area is generally highly sensitive for cultural resources (Albion 2026a). Ground disturbance during Alternative 3 construction has the potential to encounter unknown TCRs. Therefore, Alternative 3 has the potential to impact TCRs through ground disturbance and subsequent damage that could result in a substantial adverse change in the significance of the resource. As described above for Cultural Resources, Alternative 3 would result in more earthmoving activities than the Proposed Project, increasing the risk for discovery.

This potentially significant impact would be reduced to a less than significant level by complying with SCCC Section 16.40.040, which identifies the necessary actions when Native American cultural sites or human remains are discovered during ground-disturbing activities, and by implementing Mitigation Measure CR-2a (Stop Work if Inadvertent Encounter of Undiscovered Archaeological Resources during Ground-Disturbing Activities) and Mitigation Measure CR-2b (Archaeologist and Native American Monitoring during Initial Ground-Disturbing Activities in Specific Areas).

In summary, the TCR impacts of Alternative 3 would be **Less than Significant with Mitigation**, which is the same as the Proposed Project.

Required mitigation measures include the following and are described in full in Section 3.5.4:

- CR-2a: Stop Work if Inadvertent Encounter of Undiscovered Archaeological Resources during Ground-Disturbing Activities
- CR-2b: Archeologist and Native American Monitoring during Initial Ground-Disturbing Activities in Specific Areas

Utilities and Service Systems

The utilities and service systems impacts of Alternative 3, which are discussed in Section 6.19, Utilities and Service Systems, are summarized below. The impacts would be similar to the impacts of the Proposed Project, which are discussed in Section 3.19, Utilities and Service Systems. The overall impact determination would be Less than Significant, which is the same as the Proposed Project.

Utility Modifications. Similar to the Proposed Project, Alternative 3 would require the extension of existing utilities to serve the facilities. The Proposed Project would extend utilities to Transfer Station A on the north side of Harkins Slough Road and to Transfer Station B within the landfill facility, whereas Alternative 3 would extend utilities to the Alternative 3 site north of Harkins Slough Road to serve the combined facilities (transfer station, ODF, recycling center). For Alternative 3, water service lines for domestic and fire suppression would be provided from an existing on-site water well. Like the Proposed Project, all the structures would include fire detection and suppression systems, and new underground holding tanks for contact water and restroom use would be installed. Similar to the Proposed Project, the potential construction-related impacts of the utility modifications are analyzed by topic throughout this EIR, and impacts would be less than significant.

Water Supply. Similar to the Proposed Project, operation of Alternative 3 would require water for the conference/break rooms and restrooms located in the office attached to the transfer station. Water would also be required for the hose bibs for periodic washing of the transfer station tipping floor, as well as periodic washing of the ODF and recycling center floors as needed, and fire

suppression. Water would be provided from an onsite well, which provides adequate water to support the combined facilities operation and fire suppression (PV Water 2026).

Wastewater. Similar to the Proposed Project, wastewater from operation would be generated from the restrooms located in the office adjacent to the transfer station and from periodic cleaning of the interior transfer station tipping floor and walls where solid waste is collected (called contact water), as well as periodic cleaning of the ODF and recycling center floors as needed (Alternative 3 only). The wastewater volume associated with restroom use is expected to be similar to the existing use at the Buena Vista facility, although redistributed to include the new combined facilities; and there would be a nominal amount of additional wastewater (contact water) from cleaning the new facilities. The contact water for Alternative 3 would be from periodic cleaning of the transfer station, as well as the enclosed ODF and recycling center as needed. The contact water for the Proposed Project would be from periodic cleaning of Transfer Stations A and B, in addition to as-needed hosing at the outdoor recycling center and ODF. Therefore, the amount of contact water generated would be similar. Therefore, like the Proposed Project, wastewater generated by Alternative 3 would be similar to existing landfill conditions, with a nominal increase in contact water; and neither Alternative 3 nor the Proposed Project would generate wastewater in excess of existing treatment capacity. Therefore, the impact would be less than significant.

Solid Waste. Similar to the Proposed Project, Alternative 3 would ensure an orderly landfill closure program that meets state requirements and provides ongoing solid waste handling capabilities to allow the County to meet state-required waste management goals for waste reduction, source separation, materials recycling, household hazardous waste management, and organics diversion. Both Alternative 3 and the Proposed Project would generate construction-related waste, including building demolition. Similar to the Proposed Project, Alternative 3 would not generate solid waste in excess of the capacity of local infrastructure or otherwise impair the attainment of solid waste reduction goals. The impact would be less than significant.

In summary, the utilities and service system impact of Alternative 3 would be Less than Significant, with no mitigation required, which is the same as the Proposed Project.

Wildfire

The wildfire impacts of Alternative 3, which are discussed in Section 6.20, Wildfire, are summarized below. The impacts would be similar to the impacts of the Proposed Project, which are discussed in Section 3.20, Wildfire. The overall impact determination would be Less than Significant, which is the same as the Proposed Project.

As described in Section 6.20, Alternative 3 is not located in the State Responsibility Area. Alternative 3 is located in the Local Responsibility Area, with the eastern portion in a Very High Fire Severity Zone and the western portion in a High Fire Severity Zone.

Evacuation and Emergency Response Plan. Alternative 3 would develop combined waste management facilities on the adjacent property immediately north of the Buena Vista Landfill. Access to the combined facilities would be from Harkins Slough Road through newly constructed internal driveways and circulation areas. Similar to the Proposed Project, the circulation pattern for Alternative 3 is designed to separate facility traffic from other vehicles entering and exiting the site, maintain traffic flow, and support safe vehicle movement through the facility. The existing driveway onto the site from Buena Vista Drive would be retained as an emergency access road, but it would not be used for daily operations by the public nor the employees. Under Alternative 3, emergency access to the site and surrounding properties would remain available through Harkins Slough Road

and the retained emergency access connection to Buena Vista Drive. Therefore, the impact would be less than significant.

Pollutant Concentrations. Alternative 3 is the development of combined waste management facilities on the adjacent property north of the Buena Vista Landfill. Similar to the Proposed Project, Alternative 3 would introduce new operational structures that could require fire protection measures during a fire event. The transfer station and associated operational facilities would include fire detection and fire suppression systems in accordance with the California Fire Code (CFC) and other onsite controls (extinguishing equipment, gas monitoring) that reduce wildfire risks. Similarly, Alternative 3 would not exacerbate wildfire risks or expose project occupants to pollutant concentrations from wildfire or the uncontrolled spread of wildfire. The impact would be less than significant.

Maintenance of Infrastructure. Similar to the Proposed Project, Alternative 3 includes the installation and maintenance of internal roadways, power lines, emergency water sources, operational access improvements, and utilities. Development of the combined facilities includes construction of a new ingress and egress driveway connection to Harkins Slough Road, internal circulation roadways, utility extensions, and associated infrastructure necessary to support operation of the proposed Transfer Station, Recycling Center, Organics Diversion Facility, office building, and related facilities. Similarly, associated infrastructure under Alternative 3 would not exacerbate fire risk. The impact would be less than significant.

In summary, the wildfire impact of Alternative 3 would be Less than Significant, with no mitigation required, which is the same as the Proposed Project.

5.3 Environmentally Superior Alternative

Tables 5-4a and 5-4b, supported by the discussions in Section 5.2, provides a general comparison of the environmental impacts of the Proposed Project, Alternative 1 (Transfer Station A on South Side of Rountree Lane), Alternative 2 (No Project), and Alternative 3 (Combined Facilities on Adjacent Property). Tables 5-4a and 5-4b are presented at the end of Section 5.3.

As stated at the beginning of this chapter, CEQA does not require that an EIR present the alternatives analysis in the same level of detail as the Proposed Project. Therefore, for each potential impact of the Proposed Project identified in Chapter 3, **Tables 5-4a and 5-4b** includes the impact determination for the Proposed Project and qualitatively compares the corresponding impact of the three Project Alternatives, by providing an impact determination and a general comparison (similar, more, less) to the Proposed Project, based on the discussions in Section 5.2. However, additional analysis is provided for Alternative 3 in Chapter 6, because the County decided to analyze Alternative 3 at the same level of detail as the Proposed Project.

5.3.1 Methodology

The CEQA Guidelines (Section 15126.6) do not stipulate how or provide guidance on how to identify an environmentally superior alternative when the potential impacts of the Proposed Project and project alternatives are similar, leaving this to the lead agency's discretion. For the purposes of this analysis, the County conducted a two-step process to identify an environmentally superior alternative: 1) reducing significant and unavoidable impacts, and then 2) minimizing impacts on adjacent residences (sensitive receptors).

1) Reducing Significant and Unavoidable Project Impacts

The Proposed Project would result in significant and unavoidable impacts to biological resources due to the removal of coast live oak woodland, a sensitive habitat and ESHA. Alternatives 1 and 3 would reduce this impact to less than significant with mitigation and would not result in any other significant and unavoidable impacts. Alternative 2 would also reduce the impact to biological resources, but it would have a significant and unavoidable impact on solid waste as described below.

The impacts to other biological resources from Alternatives 1 and 3 would be similar to, but generally less than, the Proposed Project; and both would implement the same environmental enhancement and restoration features included as part of the Proposed Project. Alternative 3 would include additional environmental enhancement and habitat restoration features on the Alternative 3 site, including re-establishment of an open drainage along the existing north-south roadway and reorientation and expansion of an existing wetland ditch. Therefore, Alternatives 1 and 3 are carried forward to step 2 below, and the second measure (minimizing impacts on adjacent residents) is used to identify the environmentally superior alternative.

Alternative 2 would result in a significant and unavoidable impact to public utilities (solid waste) by reducing County waste management facilities and diversion opportunities, thus making locally generated solid waste exceed the capacity of local infrastructure to manage that waste. The Buena Vista site manages approximately 2,056 tons of solid waste generated each week, almost three-quarters of waste generated in the unincorporated County. Reducing local waste management facilities (i.e., closing the landfill and not providing a transfer station) would result in waste materials exceeding the County's infrastructure capacity, would impact the County's ability to comply with state-mandated waste diversion laws, and would likely lead to environmental impacts from increased illegal dumping. These impacts together would be considered a significant and unavoidable impact to public utilities (solid waste). Alternatives 1 and 3, as well as the Proposed Project, would not result in this significant and unavoidable impact to solid waste.

In summary, because Alternatives 1 and 3 both reduce the significant and unavoidable impacts to biological resources (sensitive habitat) and utilities and service systems (solid waste) that would occur from the Proposed Project and Alternative 2, respectively, both Alternatives 1 and 3 are considered environmentally superior to the Proposed Project and Alternative 2. Therefore, the County compared Alternatives 1 and 3 using the second measure (minimizing impacts on adjacent residences).

2) Minimizing Impacts on Adjacent Residences (Sensitive Receptors)

- This measure focuses on potential noise and localized air quality impacts to adjacent residences, which are considered sensitive receptors, comparing the impacts of Alternative 1 (Transfer Station A on South Side of Rountree Lane) and Alternative 3 (Combined Facilities on Adjacent Property).
- Alternative 1 would result in noise impacts to residences along Tierra Alta Drive from construction and operation of Transfer Station A, which would be within 200 feet of the closest residences, compared to Alternative 3. This residential area includes the Tierra Alta Affordable Housing Complex (36 units) and the Buena Vista Migrant Center (104 units), and most of the Tierra Alta Affordable Housing Complex units would be within 200 feet of the Transfer Station A site. The noise impacts would be reduced to less than significant with mitigation. Additionally, these residences would be exposed to slightly greater air quality impacts from localized construction-related and operational (traffic) emissions and potentially to slightly increased light/glare impacts from the removal of existing eucalyptus trees that block existing nighttime lighting at the Jail and Landfill; but these impacts would be less than significant with no mitigation required.

- Alternative 3 would result in noise impacts and localized air quality impacts to the one residence located on the property to the north from construction and operation of the combined facilities, compared to Alternative 1 (and compared to the Proposed Project). Specifically, the ODF and perimeter roadway would be within 200 feet (approximately 115 feet) of the residence. The noise impact would be reduced to less than significant with mitigation, and the air quality impact would be less than significant without mitigation.
- Because Alternative 1 would affect up to 36 residences, and Alternative 3 would affect one (1) residence, Alternative 3 is considered environmentally superior.

Summary

The Proposed Project would result in a significant and unavoidable impact to biological resources. Alternative 2 (No Project) would result in a significant and unavoidable impact to utilities and service systems (solid waste).

Alternative 1 (Transfer Station A on South Side of Rountree Lane) and Alternative 3 (Combined Facilities on Adjacent Property) would not result in these or any other significant and unavoidable impacts. Therefore, the County identifies Alternatives 1 and 3 as environmentally superior to the Proposed Project, as well as Alternative 2, based on measure 1 (reducing significant and unavoidable project impacts). Therefore, the County used measure 2 (minimizing impacts on adjacent residences) to compare Alternatives 1 and 3 to identify an environmentally superior alternative.

Alternatives 1 and 3 would both result in potential localized air quality and noise impacts to adjacent residences (sensitive receptors) from construction and operation of the new facilities. For both Alternatives 1 and 3, the air quality impacts would be less than significant without mitigation, and the noise impacts would be less than significant with mitigation. With Alternative 1, these potential impacts would affect up to 36 residences in the Tierra Alta Affordable Housing Complex. With Alternative 3, these potential impacts would affect one (1) single-family residence north of the site. Therefore, the County identifies Alternative 3 as the environmentally superior alternative.

In summary, **the County has determined Alternative 3 (Combined Facilities on Adjacent Property) to be the environmentally superior alternative** because 1) it would reduce the significant and unavoidable impact to biological resources for the Proposed Project and would avoid significant and unavoidable impacts for the combined facilities, and 2) it would minimize localized air quality and noise impacts on adjacent residences.

Feasibility

As stated at the beginning of this chapter, after identifying the environmentally superior alternative, the next step is to assess the feasibility of the environmentally superior alternative. Feasible means capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors (CEQA Guidelines Section 15364). It is at the lead agency's discretion to evaluate feasibility[9].

The County finds Alternative 3 (Combined Facilities on Adjacent Property) to be feasible. The site is suitable, has adequate infrastructure existing and available, and can be reasonably acquired. Constructing the combined facilities is economically viable; and combining the transfer station, organics diversion, and recycling at one location provides for efficient long-term operations, with minimal environmental impacts.

[9] California Native Plant Society v City of Santa Cruz [2009] 177 Cal App.4th 957, 980-981

The County decision-makers will make a decision on whether to approve the Proposed Project or one of the Alternatives after the EIR process is complete, and the Final EIR is certified. The EIR process includes circulation of the Draft EIR for public review, reviewing and addressing comments received, and making any necessary revisions to the Draft EIR. The Final EIR is comprised of the comments, responses, and revised Draft EIR.

A lead agency may approve an alternative that is environmentally superior to the proposed project or is superior to the project in other respects.[10]

Table 5-4a. Comparison of Impacts for Proposed Project and Project Alternatives

Resource Topics and Impacts	Proposed Project	Alternative 1 (Transfer Station A on South Side of Rountree Ln)	Alternative 2	Alternative 3 (Combined Facilities on Adjacent Property)
NI No Impact LTS Less than Significant LTSM Less than Significant with Mitigation SU Significant and Unavoidable				
The impact determinations are based on the most conservative (worse) impact identified for that topic in Table 5-4b.				
Aesthetics	LTS	LTS	LTS	LTS
Agricultural Resources	LTS	LTS	LTS	LTSM
Air Quality	LTS	LTS	LTS	LTS
Biological Resources	SU	LTSM	LTSM	LTSM
Cultural Resources	LTSM	LTSM	LTS	LTSM
Energy	LTS	LTS	LTS	LTS
Geology and Soils	LTSM	LTSM	LTS	LTSM
Greenhouse Gas Emissions	LTS	LTS	LTS	LTS
Hazards and Hazardous Materials	LTS	LTS	LTS	LTS
Hydrology and Water Quality	LTS	LTS	LTS	LTS
Land Use and Planning	LTS	LTS	LTS	LTS
Mineral Resources	LTS	LTS	NI	LTS
Noise	LTMS	LTMS	LTS	LTMS
Population and Housing	NI	NI	NI	NI
Public Safety and Services	LTS	LTS	NI	LTS
Recreation	NI	NI	NI	NI
Transportation	LTS	LTS	LTS	LTS
Tribal Cultural Resources	LTSM	LTSM	LTS	LTSM
Utilities and Service Systems	LTS	LTS	SU	LTS
Wildfire	LTS	LTS	LTS	LTS

[10] Ocean St Extension Neighborhood Assn v City of Santa Cruz [2021] 73 Cal. App. 5th 985, 1016; and Save the El Dorado Canal v El Dorado Irrigation District [2022] 75 Cal App 5th 239, 251

Table 5-4b. Comparison of Impacts for Proposed Project and Project Alternatives

Resource Topics and Impacts[1]	Proposed Project	Alternative 1 (Transfer Station A on South Side of Rountree Ln)	Alternative 2 (No Project)	Alternative 3 (Combined Facilities on Adjacent Property)
Aesthetics				
AES-1. The Project would not have an adverse effect on scenic resources and vistas or degrade the existing visual character or quality of public views of the site or its surroundings.	LTS	LTS Similar	LTS Similar, less	LTS Similar
AES-2. The Project would not damage scenic resources within a state scenic highway.	NI	NI Similar	NI Similar	LTS Similar
AES-3. The Project would not create a significant source of substantial light and glare that would adversely affect daytime or nighttime views.	LTS	LTS Similar, more	LTS Similar, less	LTS Similar
Overall Impact Determination	***LTS***	***LTS***	***LTS***	***LTS***
Agricultural Resources				
AG-1. The Project would not convert Important Farmland to non-agricultural use.	NI	NI Similar	NI Similar	NI Similar
AG-2. The Project would not conflict with existing zoning for agricultural use or a Williamson Act contract.	LTS	LTS Similar	LTS Similar	LTSM More[2] (MM AG-2)
AG-3. The Project would not conflict with existing zoning for, or cause rezoning of, forest land or timberland, or result in the loss of forest land or conversion of forest land to non-forest use.	NI	NI Similar	NI Similar	NI Similar
AG-4. The Project would not involve other changes in the existing environment which could result in conversion of farmland to non-agricultural use.	LTS	LTS Similar	LTS Similar	LTS Similar
Overall Impact Determination	***LTS***	***LTS***	***LTS***	***LTSM***

Table 5-4b. Comparison of Impacts for Proposed Project and Project Alternatives

Resource Topics and Impacts[1]	Proposed Project	Alternative 1 (Transfer Station A on South Side of Rountree Ln)	Alternative 2 (No Project)	Alternative 3 (Combined Facilities on Adjacent Property)
Air Quality				
AIR-1. The Project would not conflict with or obstruct implementation of the adopted MBARD AQMP.	LTS	LTS Similar	LTS Similar	LTS Similar
AIR-2. The Project would not result in a cumulatively considerable net increase of any criteria pollutant for which the region is designated non-attainment.	LTS	LTS Similar	LTS Similar, more	LTS Similar
AIR-3. The Project would not expose sensitive receptors to substantial pollutant concentrations.	LTS	LTS Similar, more	LTS Similar, less	LTS Similar, more
AIR-4. The Project would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.	LTS	LTS Similar	LTS Similar	LTS Similar
Overall Impact Determination	***LTS***	***LTS***	***LTS***	***LTS***
Biological Resources				
BIO-1. Project construction may result in impacts to Crotch's bumble bee, if present.	LTSM (MM BIO-1a, BIO-1b, BIO-1c, BIO-1d, BIO-8d)	LTSM Similar, less (MM BIO-1a, BIO-1b, BIO-1c, BIO-1d, BIO-8d)	LTSM Similar, less (MM BIO-1a, BIO-1b, BIO-1c, BIO-1d)	LTSM Similar, less (MM BIO-1a, BIO-1b, BIO-1c, BIO-1d, BIO-8e)
BIO-2. Project construction and operation would not result in impacts to roosting western monarch butterflies.	LTS	LTS Similar	LTS Similar	LTS Similar
BIO-3. Project construction and operation may result in impacts to California red-legged frog.	LTSM (MM BIO-1a, BIO-1b, BIO-3, BIO-8d)	LTSM Similar (MM BIO-1a, BIO-1b, BIO-3, BIO-8d)	LTSM Less (MM BIO-1a, BIO-1b, BIO-3)	LTSM Similar, less (MM BIO-1a, BIO-1b, BIO-3, BIO-8e)
BIO-4. Project construction and operation may result in impacts to northwestern pond turtle.	LTSM (MM BIO-1a, BIO-1b, BIO-3, BIO-8d)	LTSM Similar (MM BIO-1a, BIO-1b, BIO-3, BIO-8d)	LTSM Less (MM BIO-1a, BIO-1b, BIO-3)	LTSM Similar, less (MM BIO-1a, BIO-1b, BIO-3, BIO-8e)

Table 5-4b. Comparison of Impacts for Proposed Project and Project Alternatives

Resource Topics and Impacts[1]	Proposed Project	Alternative 1 (Transfer Station A on South Side of Rountree Ln)	Alternative 2 (No Project)	Alternative 3 (Combined Facilities on Adjacent Property)
BIO-5. Project construction and operation may result in impacts to avian species, their habitats, and nesting activities.	LTSM (MM BIO-1a, BIO-1b, BIO-5a, BIO-5b, BIO-8d)	LTSM Less (MM BIO-1a, BIO-1b, BIO-5a, BIO-5b, BIO-8d)	LTSM Less (MM BIO-1a, BIO-1b, BIO-5a, BIO-5b)	LTSM Less (MM BIO-1a, BIO-1b, BIO-5a, BIO-5b, BIO-8e)
BIO-6. Project construction and operation may result in impacts to bat species, their habitats, and roosting activities.	LTSM (MM BIO-1a, BIO-1b, BIO-6, BIO-8d)	LTSM Less (MM BIO-1a, BIO-1b, BIO-6, BIO-8d)	LTSM Less (MM BIO-1a, BIO-1b, BIO-6)	LTSM Less (MM BIO-1a, BIO-1b, BIO-6, BIO-8e)
BIO-7. Project construction may result in impacts to San Francisco dusky-footed woodrat houses, individuals, or young.	LTSM (MM BIO-1a, BIO-1b, BIO-7, BIO-8d)	LTSM Less (MM BIO-1a, BIO-1b, BIO-7, BIO-8d)	LTS Less	LTSM Less (MM BIO-1a, BIO-1b, BIO-7, BIO-8e)
BIO-8. Project construction and operation would result in impacts to coast live oak woodland.	SU (MM BIO-8a, BIO-8b, BIO-8c, BIO-8d)	LTS Less (MM BIO-8a, BIO-8b, BIO-8c, BIO-8d)	NI Less	LTSM Less (MM BIO-8a, BIO-8b, BIO-8c, BIO-8e)
BIO-9. Project construction would result in minimal impacts to riparian forest.	LTSM (MM BIO-8a, BIO-8b, BIO-8c, BIO-8d, BIO-9a, BIO-9b)	LTSM Similar (MM BIO-8a, BIO-8b, BIO-8c, BIO-8d, BIO-9a)	NI Less	LTSM Similar, less (MM BIO-8a, BIO-8b, BIO-8c, BIO-8e, BIO-9a, BIO-9b)
BIO-10. Project construction would result in impacts to other Environmentally Sensitive Habitat Areas.	LTMS (MM BIO-8a, BIO-8b, BIO-8c, BIO-8d, BIO-9a, BIO-9b)	LTSM Less (MM BIO-8a, BIO-8b, BIO-8c, BIO-8d, BIO-9a, BIO-9b)	NI Less	LTSM Less[3] (MM BIO-8a, BIO-8b, BIO-8c, BIO-8e, BIO-9a, BIO-9b)
BIO-11. Project construction would result in minimal impacts to wetlands.	LTSM (MM BIO-8a, BIO-8b, BIO-8c, BIO-8d)	LTSM Less (MM BIO-8a, BIO-8b, BIO-8c, BIO-8d)	NI Less	LTSM Similar, more (MM BIO-8a, BIO-8b, BIO-8c, BIO-8e)

Table 5-4b. Comparison of Impacts for Proposed Project and Project Alternatives

Resource Topics and Impacts[1]	Proposed Project	Alternative 1 (Transfer Station A on South Side of Rountree Ln)	Alternative 2 (No Project)	Alternative 3 (Combined Facilities on Adjacent Property)
BIO-12. Project construction would result in minimal impacts to riverine habitats	LTSM (MM BIO-8a, BIO-8b, BIO-8c, BIO-8d)	LTSM Less (MM BIO-8a, BIO-8b, BIO-8c, BIO-8d)	NI Less	LTSM Similar, less (MM BIO-8a, BIO-8b, BIO-8c, BIO-8e)
BIO-13. Project construction would result in impacts to wildlife movement.	LTSM (MM BIO-1a, BIO-1b, BIO-3, BIO-8d, BIO-13)	LTSM Less (MM BIO-1a, BIO-1b, BIO-3 BIO-8d, BIO-13)	LTS Less	LTSM Less (MM BIO-1a, BIO-1b, BIO-3, BIO-8e, BIO-13)
BIO-14. Project construction would conflict with local policies or ordinances protecting biological resources.	SU (MM BIO-8a, BIO-8b, BIO-8c, BIO-8d, BIO-14)	LTSM Less (MM BIO-8a, BIO-8b, BIO-8c, BIO-8d, BIO-14)	LTS Less	LTSM Less[3] (MM BIO-8a, BIO-8b, BIO-8c, BIO-8e, BIO-14)
Overall Impact Determination	***SU***	***LTSM***	***LTSM***	***LTSM***
Cultural Resources				
CR-1. The Project would not have an adverse effect on historical resources.	LTS	LTS Similar	LTS Similar, less	LTS Similar
CR-2. Ground-disturbing activities during Project construction may unearth or adversely impact subsurface archaeological resources.	LTSM (MM CR-2a, CR-2b)	LTSM Similar (MM CR-2a, CR-2b)	LTS Less	LTSM Similar (MM CR-2a, CR-2b)
CR-3. Ground-disturbing activities during Project construction may disturb human remains.	LTSM (MM CR-2a, CR-2b)	LTSM Similar (MM CR-2a, CR-2b)	LTS Less	LTSM Similar (MM CR-2a, CR-2b)
Overall Impact Determination	***LTSM***	***LTSM***	***LTS***	***LSTM***
Energy				
EN-1. The Project would not result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during Project construction or operation.	LTS	LTS Similar	LTS Similar, more	LTS Similar

Table 5-4b. Comparison of Impacts for Proposed Project and Project Alternatives

Resource Topics and Impacts[1]	Proposed Project	Alternative 1 (Transfer Station A on South Side of Rountree Ln)	Alternative 2 (No Project)	Alternative 3 (Combined Facilities on Adjacent Property)
EN-2. The Project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency.	LTS	LTS Similar	LTS Similar, more	LTS Similar
Overall Impact Determination	***LTS***	***LTS***	***LTS***	***LTS***
Geology and Soils				
GEO-1. The Project would not cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault or strong seismic ground shaking.	LTS	LTS Similar	LTS Similar, less	LTS Similar
GEO-2. ODF Option 2 could exacerbate exposure of the public to liquefaction or landslide hazards and may be located on a geological unit or soil that could become unstable as a result of lateral spreading, landslides, and liquefaction.	LTSM (MM GEO-2)	LTSM Similar (MM GEO-2)	LTS Less	LTS Similar, less
GEO-3. The Project would not result in substantial soil erosion or loss of topsoil.	LTS	LTS Similar, less	LTS Similar, less	LTS Similar
GEO-4. Transfer Station A and Transfer Station B could exacerbate the existing risk to life or property resulting from expansive soils.	LTSM (MM GEO-4)	LTSM Similar (MM GEO-4)	LTS Less	LTSM Similar[4] (MM GEO-4)
GEO-5. The Project would not have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems.	LTS	LTS Similar	LTS Similar	LTS Similar
GEO-6. Ground-disturbing activities during Project construction would not directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.	LTS	LTS Similar	LTS Similar, less	LTS Similar
Overall Impact Determination	***LTSM***	***LTSM***	***LTS***	***LTSM***
Greenhouse Gas Emissions				

Table 5-4b. Comparison of Impacts for Proposed Project and Project Alternatives

Resource Topics and Impacts[1]	Proposed Project	Alternative 1 (Transfer Station A on South Side of Rountree Ln)	Alternative 2 (No Project)	Alternative 3 (Combined Facilities on Adjacent Property)
GHG-1. The Project would not result in GHG emissions that would have a significant impact on the environment.	LTS	LTS Similar	LTS Similar, less construction, more operation	LTS Similar
GHG-2. The Project would result in tree removal that would be consistent with applicable GHG reduction plans.	LTSM	LTSM Similar	LTS Similar, less construction, more operation	LTS Similar, less
GHG-3. The Project would not expose people or structures to substantial risk of loss, injury, or death as a result of flooding from projected sea level rise and storms.	LTS	LTS Similar	LTS Similar	LTS Similar
Overall Impact Determination	***LTS***	***LTS***	***LTS***	***LTS***
Hazards and Hazardous Materials				
HAZ-1. The Project would not create a significant hazard to the public or the environment through the routine transport, use, disposal, or release of hazardous materials.	LTS	LTS Similar	LTS Similar, less	LTS Similar
HAZ-2. The Project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.	NI	NI Similar	NI Similar	LTS Similar
HAZ-3. The Project would not be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, create a significant hazard to the public or the environment.	NI	LTS Similar	LTS Similar	LTS Similar

Table 5-4b. Comparison of Impacts for Proposed Project and Project Alternatives

Resource Topics and Impacts[1]	Proposed Project	Alternative 1 (Transfer Station A on South Side of Rountree Ln)	Alternative 2 (No Project)	Alternative 3 (Combined Facilities on Adjacent Property)
HAZ-4. The Project would not result in a safety hazard or excessive noise for people residing or working in the Project area due to proximity of an airport.	LTS	LTS Similar	LTS Similar	LTS Similar
HAZ-5. The Project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.	LTS	LTS Similar	LTS Similar, less	LTS Similar
HAZ-6. The Project would not expose people or structures to a significant risk of loss, injury, or death involving wildfires.	LTS	LTS Similar	LTS Similar	LTS Similar
Overall Impact Determination	***LTS***	***LTS***	***LTS***	***LTS***
Hydrology and Water Quality				
HYD-1. The Project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality or conflict with a Water Quality Control Plan.	LTS	LTS Similar, less	LTS, Similar, less	LTS Similar
HYD-2. The Project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge.	LTS	LTS Similar	NI Less	LTS Similar
HYD-3. The Project would not substantially alter drainage patterns within the Project area or vicinity.	LTS	LTS Similar	LTS Similar, less	LTS Similar
HYD-4. The Project would not risk release of pollutants due to Project inundation in flood hazard, tsunami, or seiche zones.	NI	NI Similar	NI Similar	LTS Similar
Overall Impact Determination	***LTS***	***LTS***	***LTS***	***LTS***

Table 5-4b. Comparison of Impacts for Proposed Project and Project Alternatives

Resource Topics and Impacts[1]	Proposed Project	Alternative 1 (Transfer Station A on South Side of Rountree Ln)	Alternative 2 (No Project)	Alternative 3 (Combined Facilities on Adjacent Property)
Land Use and Planning				
LUP-1. The Project would not physically divide an established community.	LTS	LTS Similar	LTS Similar, less	LTS Similar
LUP-2. The Project would not conflict with applicable land use plans, policies, or regulations adopted for the purpose of avoiding or mitigating an environmental effect.	LTS	LTS Similar	LTS Similar	LTS Similar
Overall Impact Determination	***LTS***	***LTS***	***LTS***	***LTS***
Mineral Resources				
MIN-1. The Project would not result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state.	LTS	LTS Similar, less	NI Less	LTS Similar
MIN-2. The Project would not result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan.	LTS	LTS Similar	NI Less	LTS Similar
Overall Impact Determination	***LTS***	***LTS***	***NI***	***LTS***
Noise				
N-1. Project construction of optional equipment parking and storage area may result in a substantial temporary increase in noise levels at residential receptors.	LTMS (MM N-1)	LTMS Similar, more[5] (MM N-1)	LTS Less	LTMS Similar, more[6] (MM N-1)
N-2. Project operation of Transfer Station B and Organics Diversion Facility Option 2 may expose persons to or generate excessive noise levels at Rountree Medium (Jail) Facility.	LTSM (MM N-2a, N-2b)	LTMS Similar, more[5] (MM N-2a, N-2b, N-2c)	LTS Less	LTMS Similar, more[6] (MM N-2d)
N-3. Construction would not expose persons to or generate excessive groundborne vibration or groundborne noise levels.	LTS	LTS Similar	LTS Similar, less	LTS Similar

Table 5-4b. Comparison of Impacts for Proposed Project and Project Alternatives

Resource Topics and Impacts[1]	Proposed Project	Alternative 1 (Transfer Station A on South Side of Rountree Ln)	Alternative 2 (No Project)	Alternative 3 (Combined Facilities on Adjacent Property)
N-4. Construction and operation would not expose people residing or working in the Project area to excessive noise from aircraft.	NI	NI Similar	NI Similar	NI Similar
Overall Impact Determination	***LTMS***	***LTMS***	***LTS***	***LTMS***
Population and Housing				
PH-1. The Project would not induce substantial unplanned population growth in an area, either directly or indirectly.	NI	NI Similar	NI Similar	NI Similar
PH-2. The Project would not displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere.	NI	NI Similar	NI Similar	NI Similar
Overall Impact Determination	*NI*	*NI*	*NI*	*NI*
Public Safety and Services				
PUB-1. The Project would not result in the need for new or physically altered fire protection facilities.	LTS	LTS Similar	NI Less	LTS Similar
PUB-2. The Project would not result in the need for new or physically altered police protection or law enforcement facilities.	LTS	LTS Similar	NI Less	LTS Similar
PUB-3. The Project would not result in the need for the construction of new or physically altered school or park facilities.	LTS	LTS Similar	NI Less	LTS Similar
Overall Impact Determination	***LTS***	***LTS***	***NI***	***LTS***
Recreation				
REC-1. The Project would not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.	NI	NI Similar	NI Similar	NI Similar

Table 5-4b. Comparison of Impacts for Proposed Project and Project Alternatives

Resource Topics and Impacts[1]	Proposed Project	Alternative 1 (Transfer Station A on South Side of Rountree Ln)	Alternative 2 (No Project)	Alternative 3 (Combined Facilities on Adjacent Property)
REC-2. The Project would not include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.	NI	NI Similar	NI Similar	NI Similar
Overall Impact Determination	*NI*	*NI*	*NI*	*NI*
Transportation				
T-1. The Project would not conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities.	LTS	LTS Similar	LTS Similar, more	LTS Similar
T-2. The Project would meet the screening criteria set by Santa Cruz County and thus would not conflict or be inconsistent with CEQA Guidelines, Section 15064.3(b).	LTS	LTS Similar	LTS Similar, more	LTS Similar
T-3. Neither construction nor operation of the Project would substantially increase hazards due to a geometric design feature or incompatible use.	LTS	LTS Similar	LTS Similar, less	LTS Similar
T-4. The Project would not result in inadequate emergency access.	LTS	LTS Similar	LTS Similar, less	LTS Similar
Overall Impact Determination	***LTS***	***LTS***	***LTS***	***LTS***
Tribal Cultural Resources				
TCR-1. The Project may cause a substantial adverse change in the significance of a Tribal Cultural Resource.	LTSM (MM CR-2a, CR-2b)	LTSM Similar (MM CR-2a, CR2-b)	LTS Less	LTSM Similar (MM CR-2a, CR2-b)
Overall Impact Determination	***LTSM***	***LTSM***	***LTS***	***LTSM***
Utilities and Service Systems				
UTIL-1. The Project would require the relocation or replacement of water, wastewater, stormwater, and electricity conveyance infrastructure.	LTS	LTS Similar	NI Less	LTS Similar

Table 5-4b. Comparison of Impacts for Proposed Project and Project Alternatives

Resource Topics and Impacts[1]	Proposed Project	Alternative 1 (Transfer Station A on South Side of Rountree Ln)	Alternative 2 (No Project)	Alternative 3 (Combined Facilities on Adjacent Property)
UTIL-2. Sufficient water supplies are available to serve construction and operation of the Project.	LTS	LTS Similar	NI Less	LTS Similar
UTIL-3. The Project would not generate wastewater in excess of existing treatment capacity.	LTS	LTS Similar	LTS Less	LTS Similar
UTIL-4. The Project would not generate solid waste in excess of local landfill capacity and would comply with applicable regulations related to solid waste.	LTS	LTS Similar	SU More[7]	LTS Similar
Overall Impact Determination	***LTS***	***LTS***	***SU***	***LTS***
Wildfire				
WILD-1. The Project would not substantially impair an adopted emergency response plan or emergency evacuation plan.	LTS	LTS Similar	LTS, Similar, less	LTS Similar
WILD-2. The Project would not, due to slope, prevailing winds, and other factors, exacerbate wildfire risks and thereby expose Project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire.	LTS	LTS Similar	LTS, Similar, less	LTS Similar
WILD-3. The Project would not require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment.	LTS	LTS Similar	LTS, Similar, less	LTS Similar

Table 5-4b. Comparison of Impacts for Proposed Project and Project Alternatives

Resource Topics and Impacts[1]	Proposed Project	Alternative 1 (Transfer Station A on South Side of Rountree Ln)	Alternative 2 (No Project)	Alternative 3 (Combined Facilities on Adjacent Property)
WILD-4. The Project would not expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes.	LTS	LTS Similar	LTS, Similar, less	LTS Similar
Overall Impact Determination	***LTS***	***LTS***	***LTS***	***LTS***

Notes:

NI= No Impact, **LTS**=Less than Significant, **LTSM**=Less than Significant with Mitigation, **SU**=Significant and Unavoidable, **MM**=Mitigation Measures

[1] The impact statements are for the Proposed Project as identified in Chapter 3, Environmental Impact Analysis. The "Overall Impact Determination" at the end of each topic is based on the most conservative (worse) impact.

[2] For Alternative 3, there would be no conflict with a Williamson Act contract, but there would be a conflict with existing zoning for agricultural use.

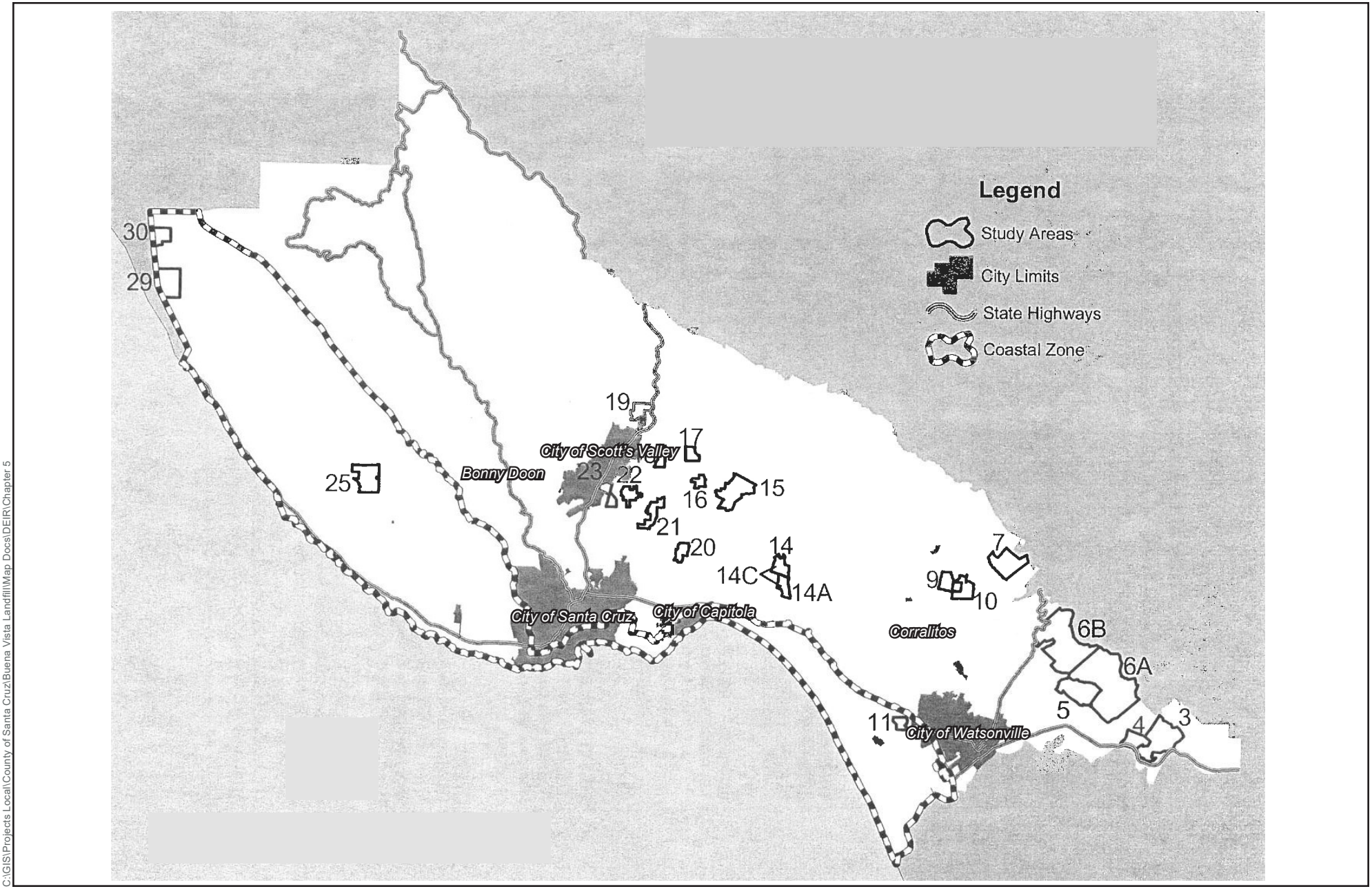
[3] For Alternative 3, the impacts to sensitive habitats/ESHA would be less overall than the Proposed Project, because impacts to coast live oak woodland would not occur. In addition, only 12 significant trees would be removed for Alternative 3, limited to arroyo willow scrub, which will reach a similar stature and structure within 2 years; compared to 114 significant trees, including many coast live oak trees, for the Proposed Project. Therefore, conflicts with local ordinances would be notably less; and impacts associated with Significant Tree Removal would be considered less than significant with mitigation, unlike the Proposed Project which would be significant and unavoidable.

[4] For Alternative 3, the geology and soils impact is from construction of the combined facilities on expansive soils (whereas the impact for the Proposed Project is from construction of Transfer Stations A and B on expansive soils).

[5] For Alternative 1, the noise impact is from construction and operation of Transfer Station A (south of Rountree Lane) on nearby residences, as well as operation of Transfer Station B on Rountree Medium (Jail) Facility.

[6] For Alternative 3, the noise impact is from construction and operation of the combined facilities on the nearby residence to the north, as well as from operation of the combined facilities on non-residential use (e.g., commercial nursery to the north).

[7] For Alternative 2, the solid waste impacts would be significant and unavoidable because the County would be generating solid waste in excess of local infrastructure capacity; would not be in compliance with state waste diversion laws; and the lack of a local waste management site could lead to increased illegal dumping and potential health, safety, and environmental impacts (e.g., biological resources, water quality).



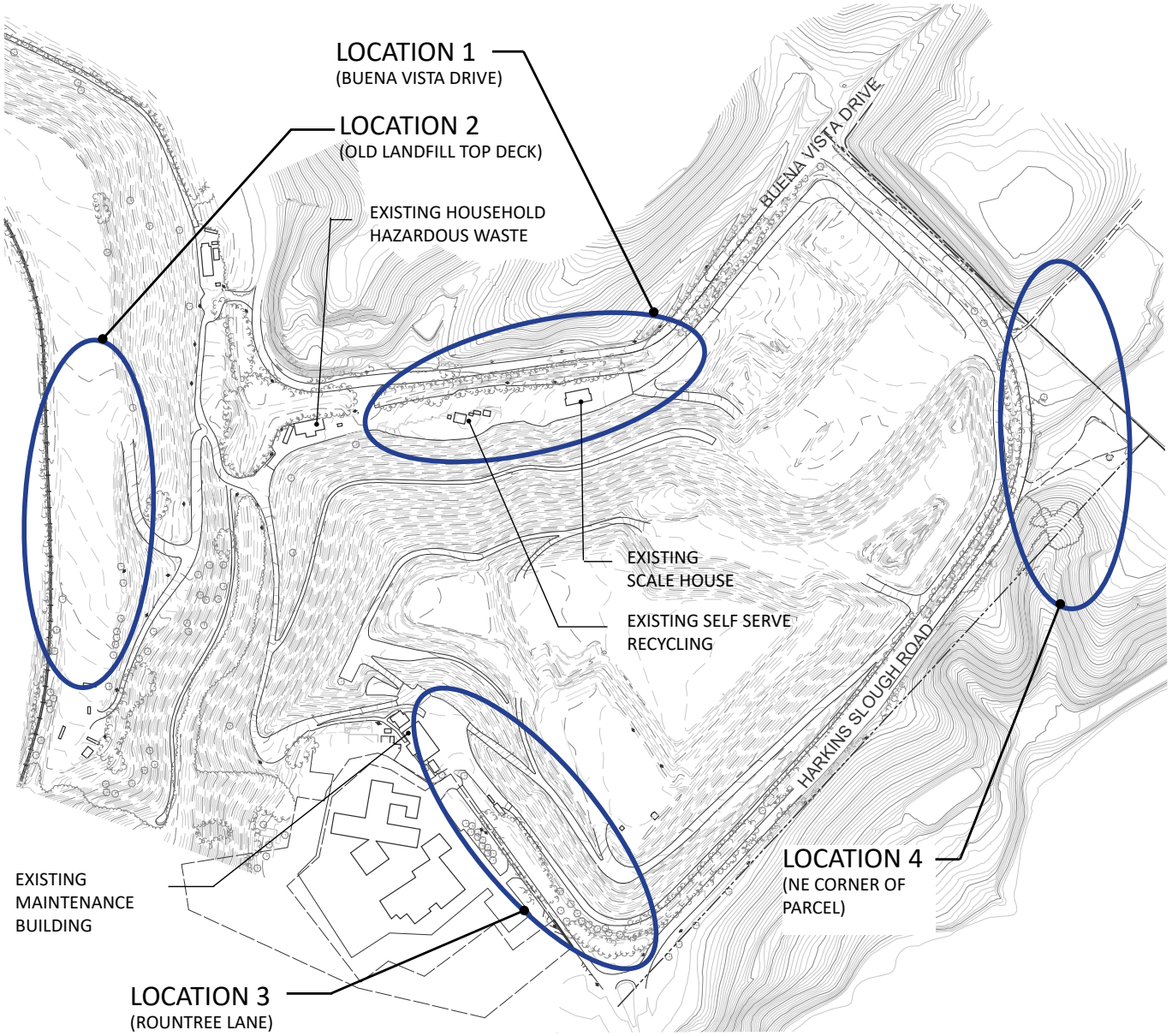
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Source: County of Santa Cruz, 2000.

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Figure 5-1

New Landfill Site (Offsite Alternatives Considered)



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Source: SCS Engineers, 2020.

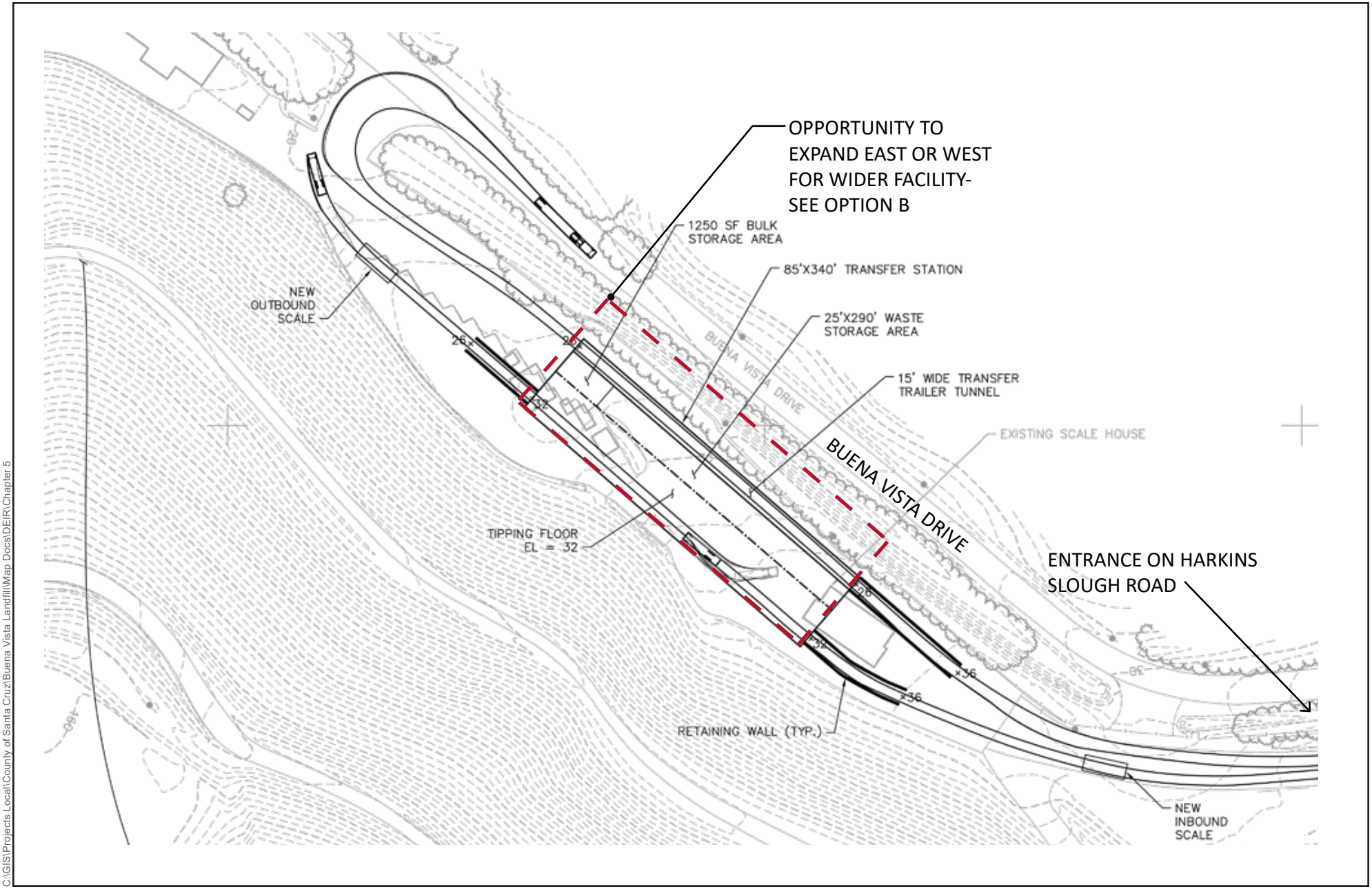
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Figure 5-2

Transfer Station Alternatives

Buena Vista Landfill Redevelopment Project



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Source: SCS Engineers, 2020.

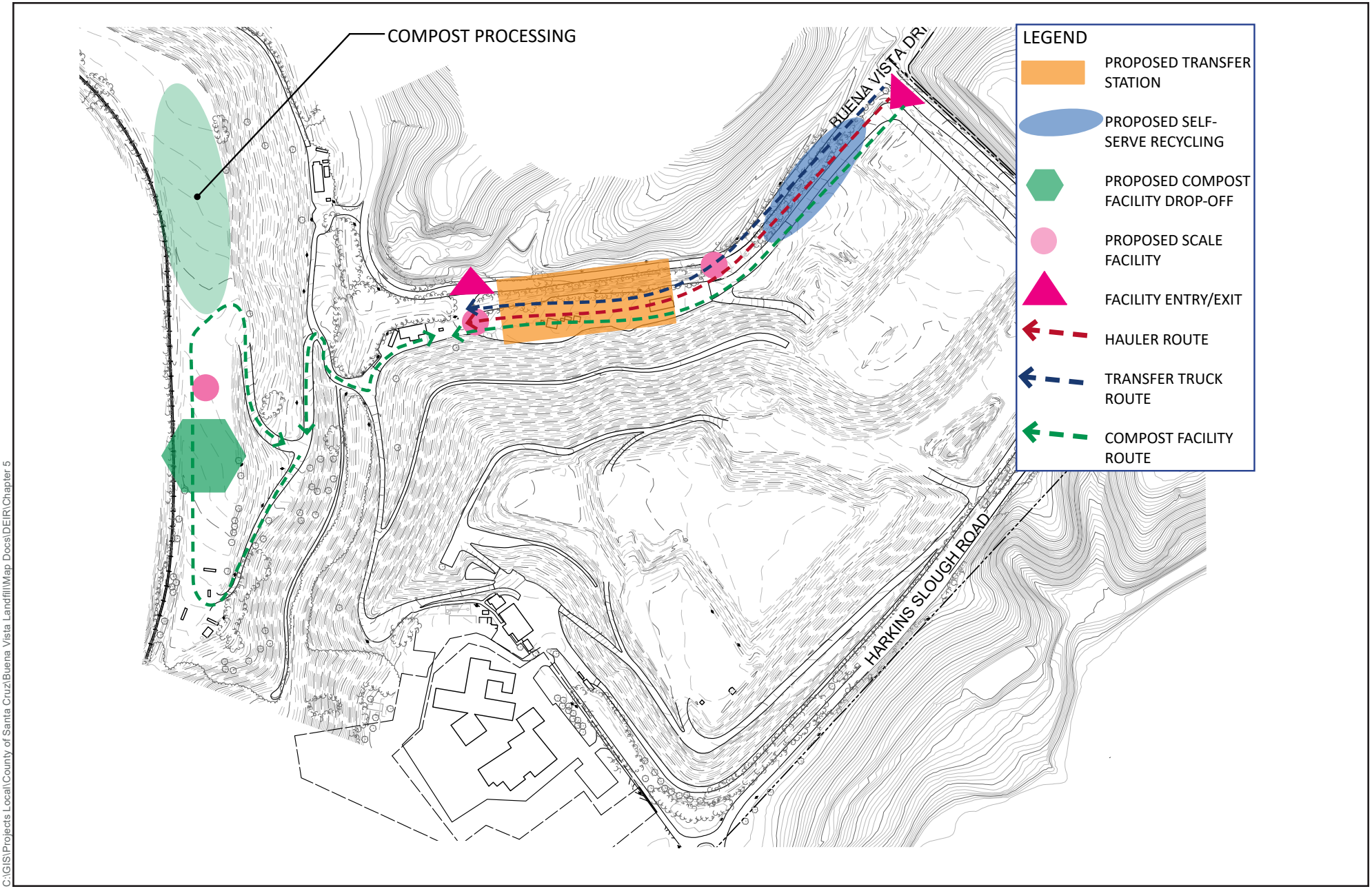
Harris & Associates

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NOT TO SCALE

Figure 5-3

Location 1 - Option A: 28,900 SF Facility Near Buena Vista Drive



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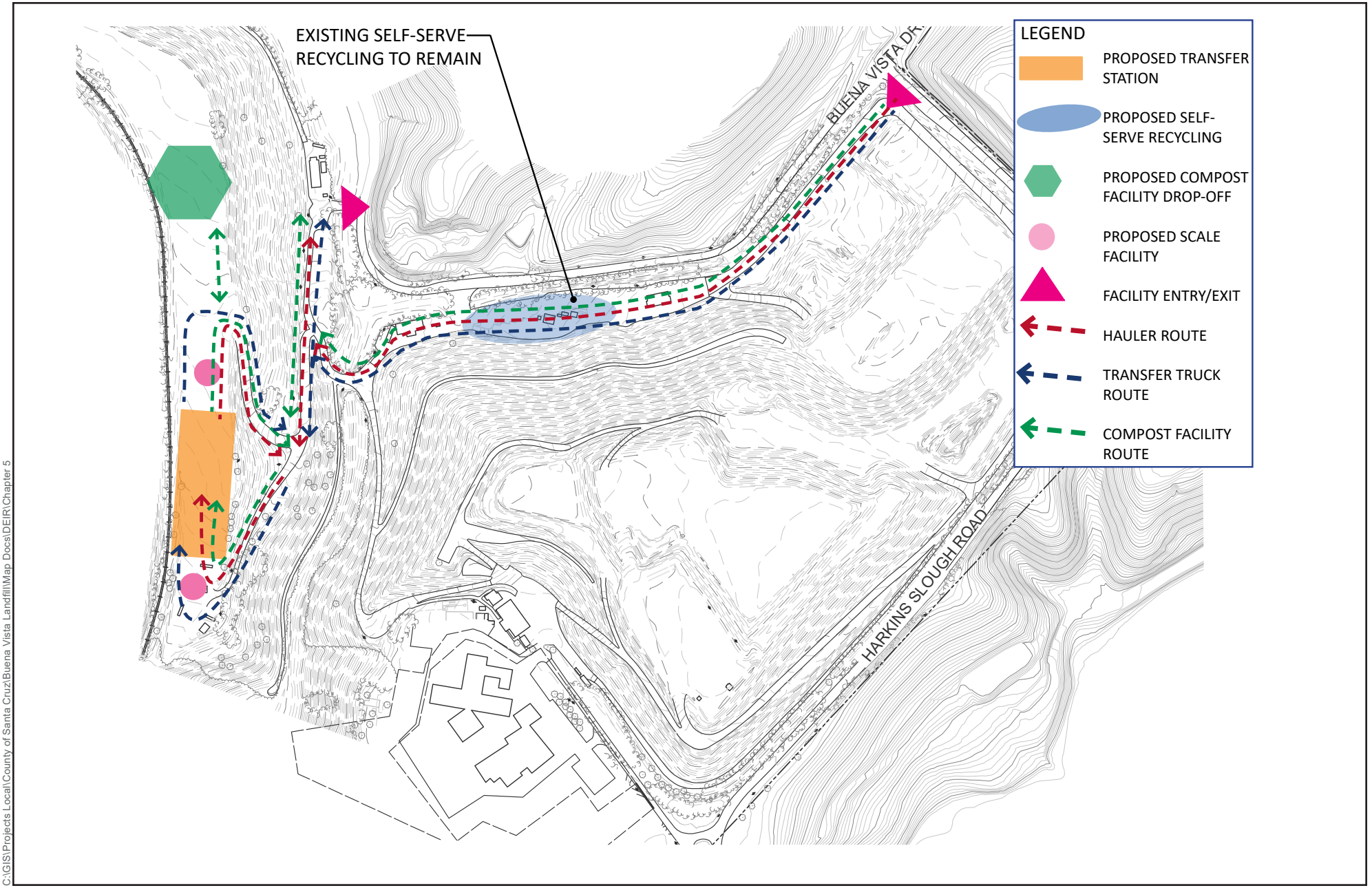
Source: SCS Engineers, 2020.

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Figure 5-4

Location 1 – Option B: 53,400 SF Facility Near Buena Vista Drive



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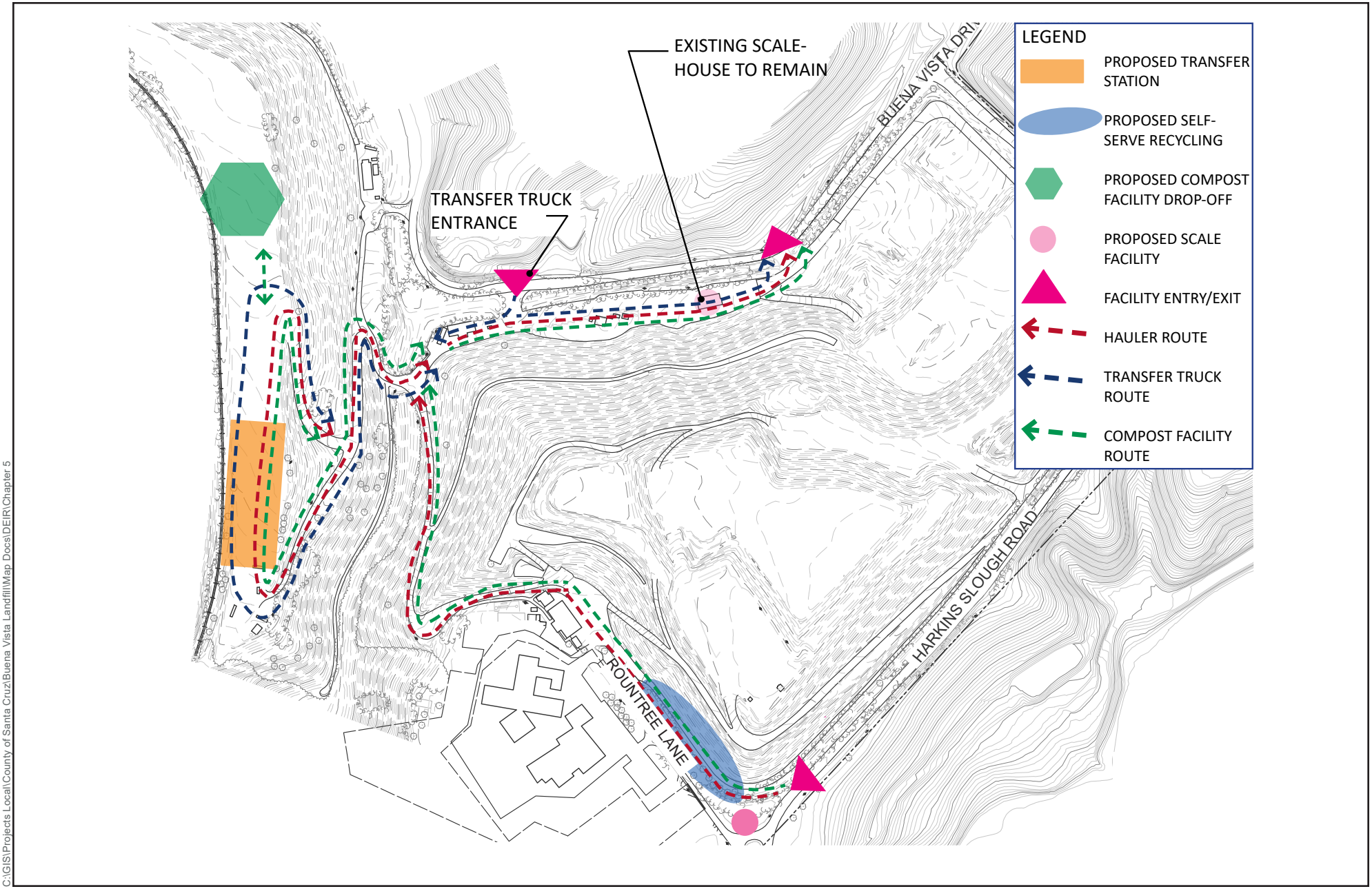
Source: SCS Engineers, 2020.

Harris & Associates

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Figure 5-5

Location 2 – Option A: 53,400 SF on Old Landfill Top Deck with South Buena Vista Drive Exit



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Source: SCS Engineers, 2020.

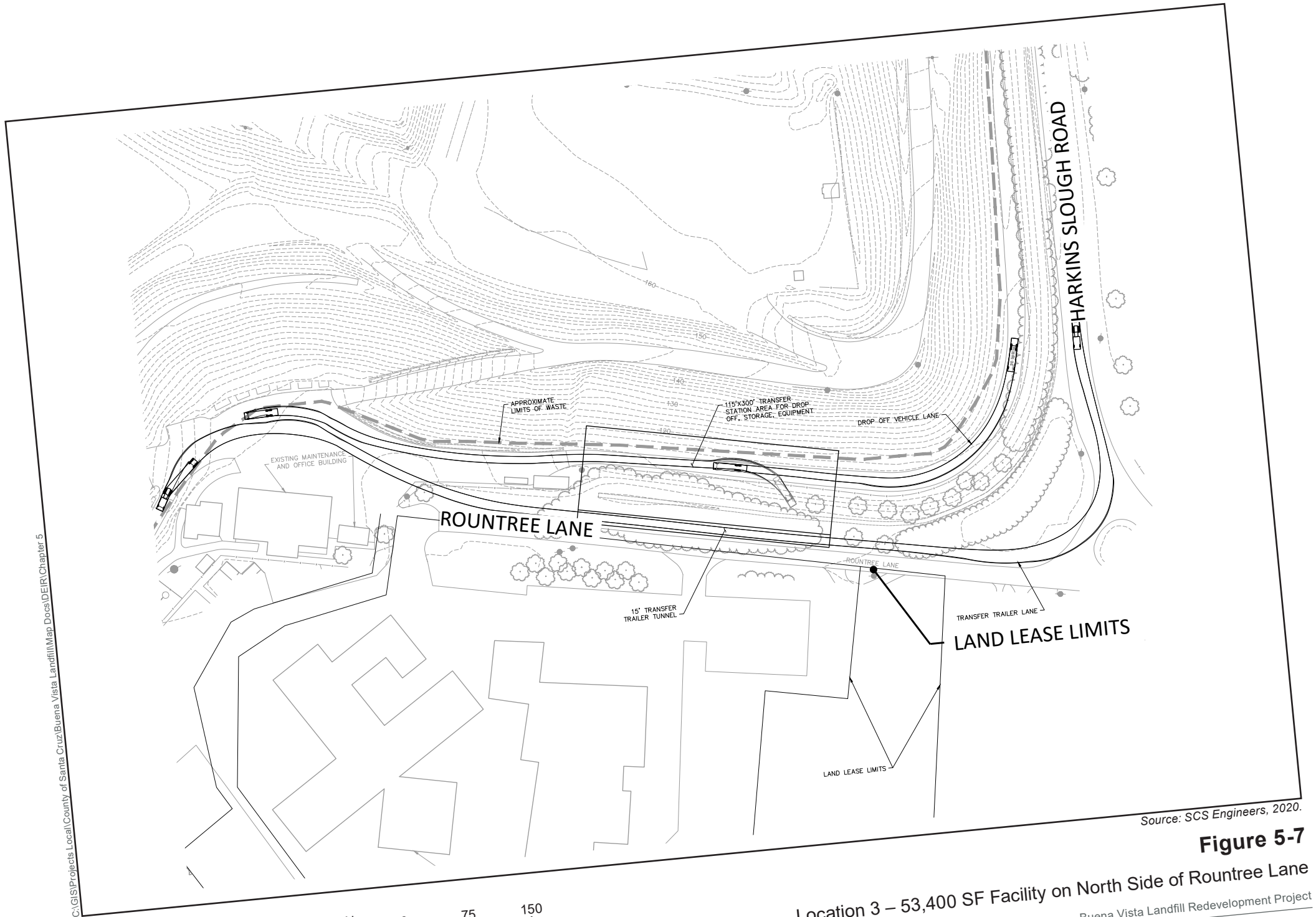
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Figure 5-6

Location 2 – Option B: 53,400 SF on Old Landfill Top Deck with Rountree Entrance



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Source: SCS Engineers, 2020.

Figure 5-7

Location 3 – 53,400 SF Facility on North Side of Rountree Lane

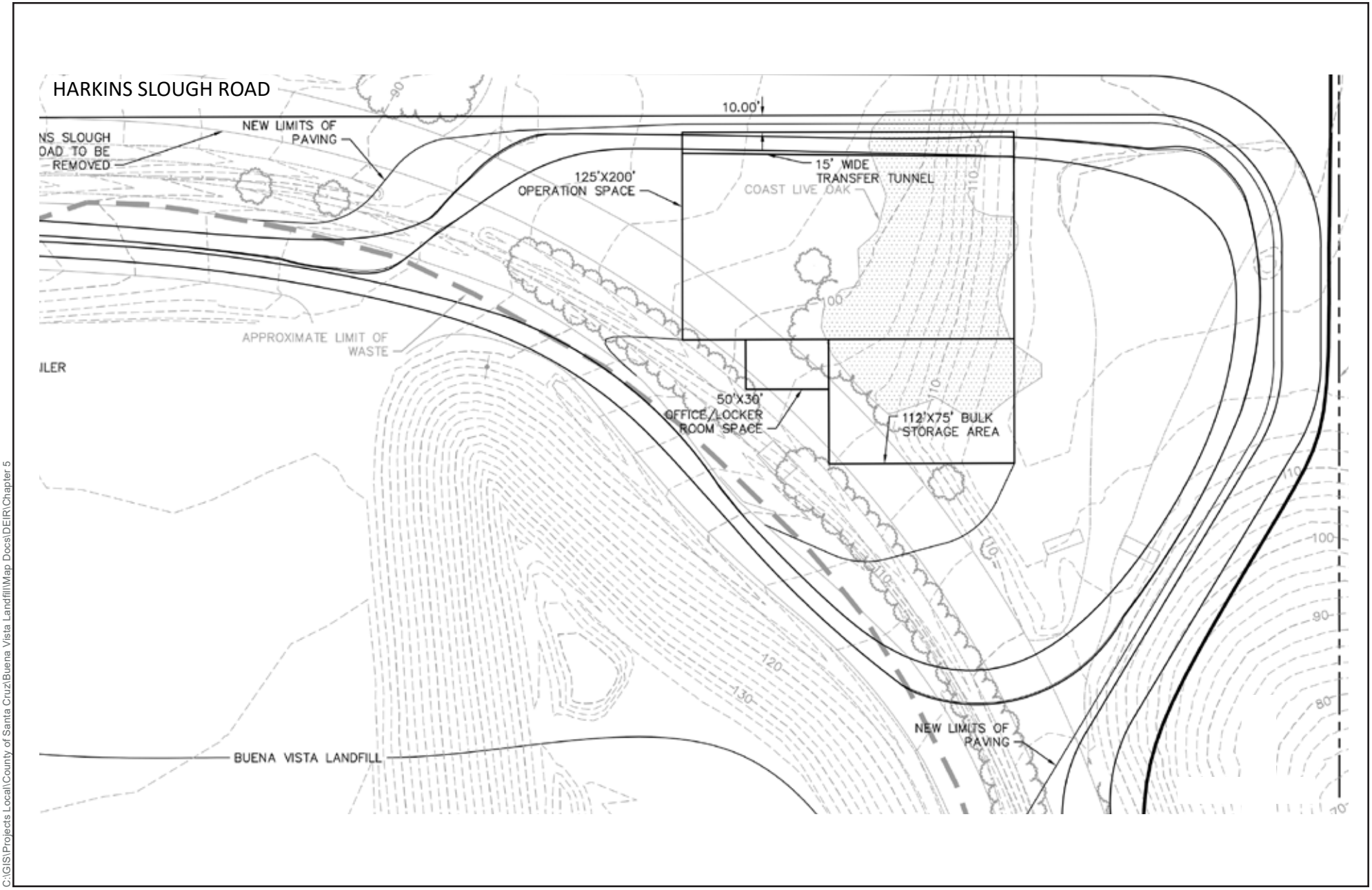
Buena Vista Landfill Redevelopment Project

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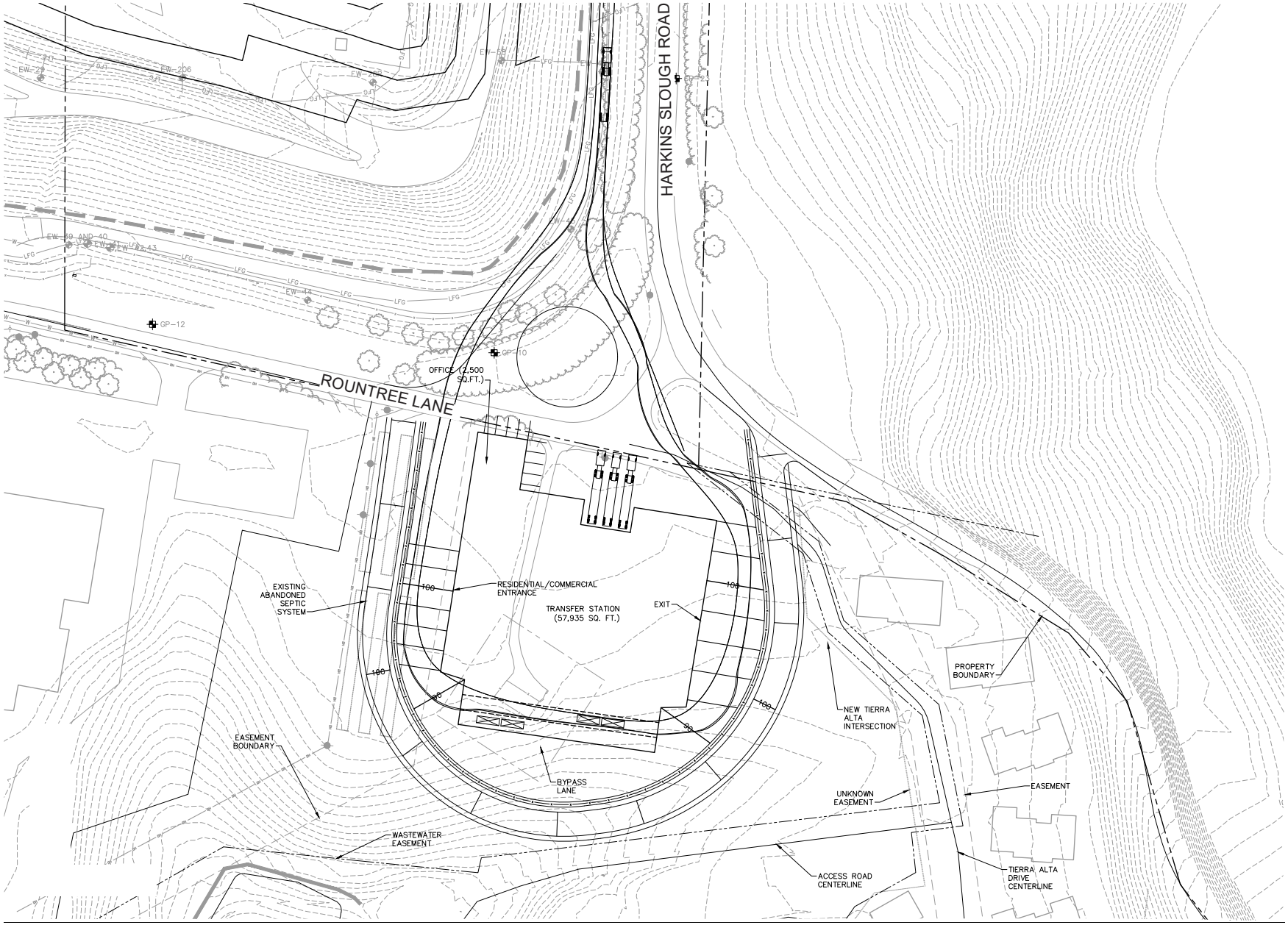
Source: SCS Engineers, 2020.

Harris & Associates

NOT TO SCALE

Figure 5-8

Location 4 – 34,900 SF Facility in Northeast Corner



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Source: SCS Engineers, 2020.

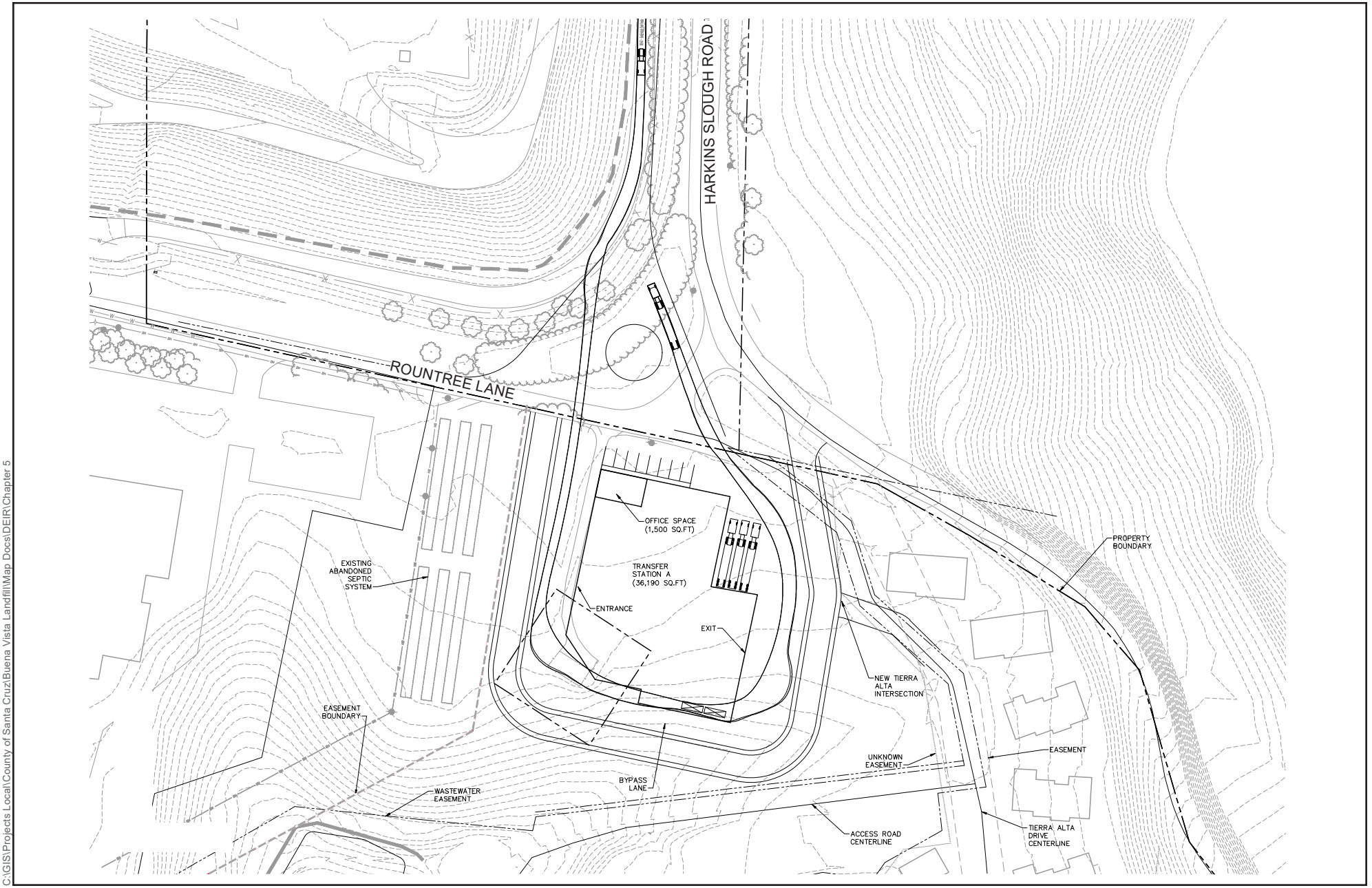
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Figure 5-9

Location 6 – Option A: 57,935 SF Facility on South Side of Rountree Lane



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Source: SCS Engineers, 2020.

Harris & Associates

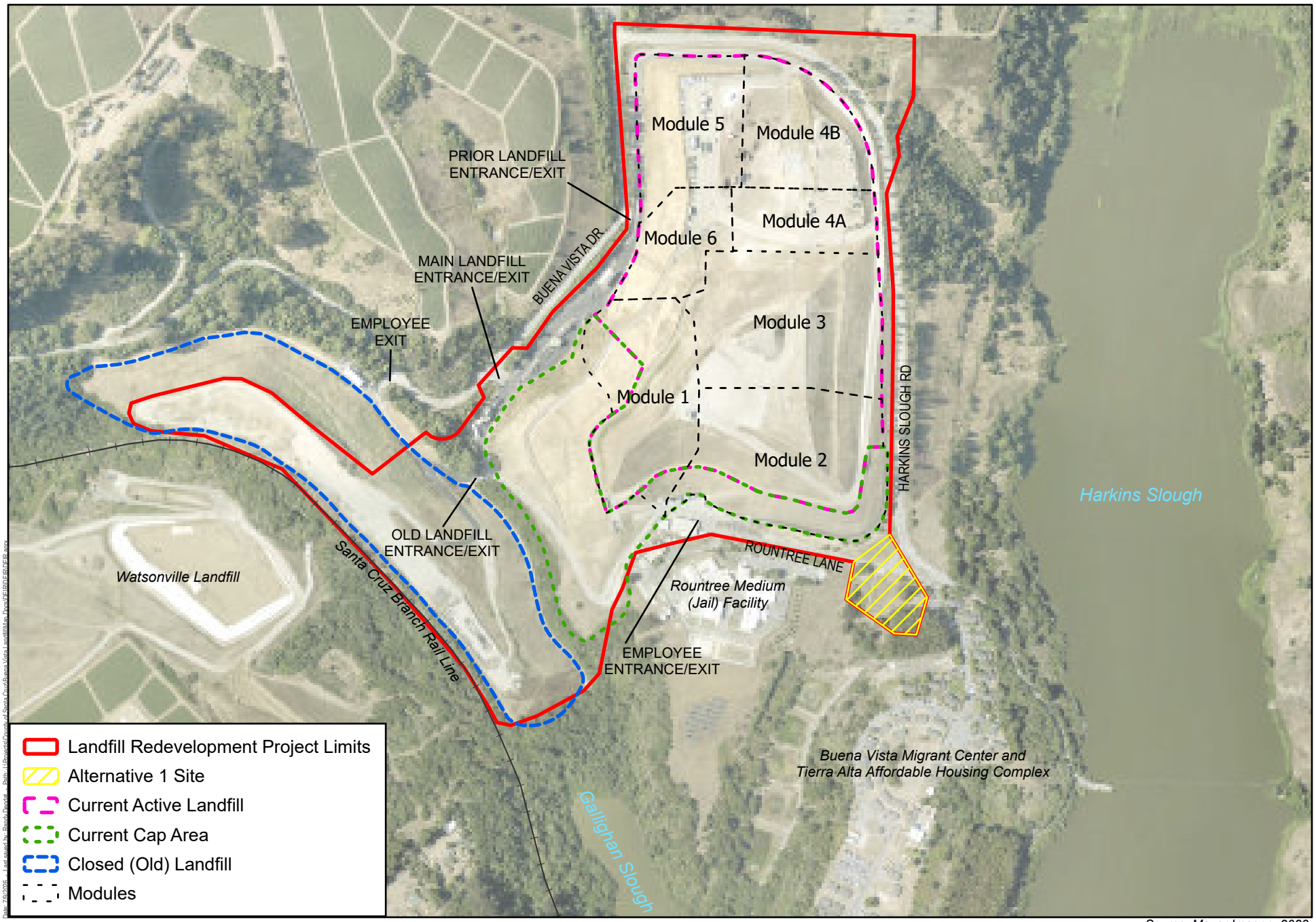
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Figure 5-10

Location 6 – Option B: 36,190 SF Facility on South Side of Rountree Lane



Source: Maxar Imagery 2023.

Harris & Associates

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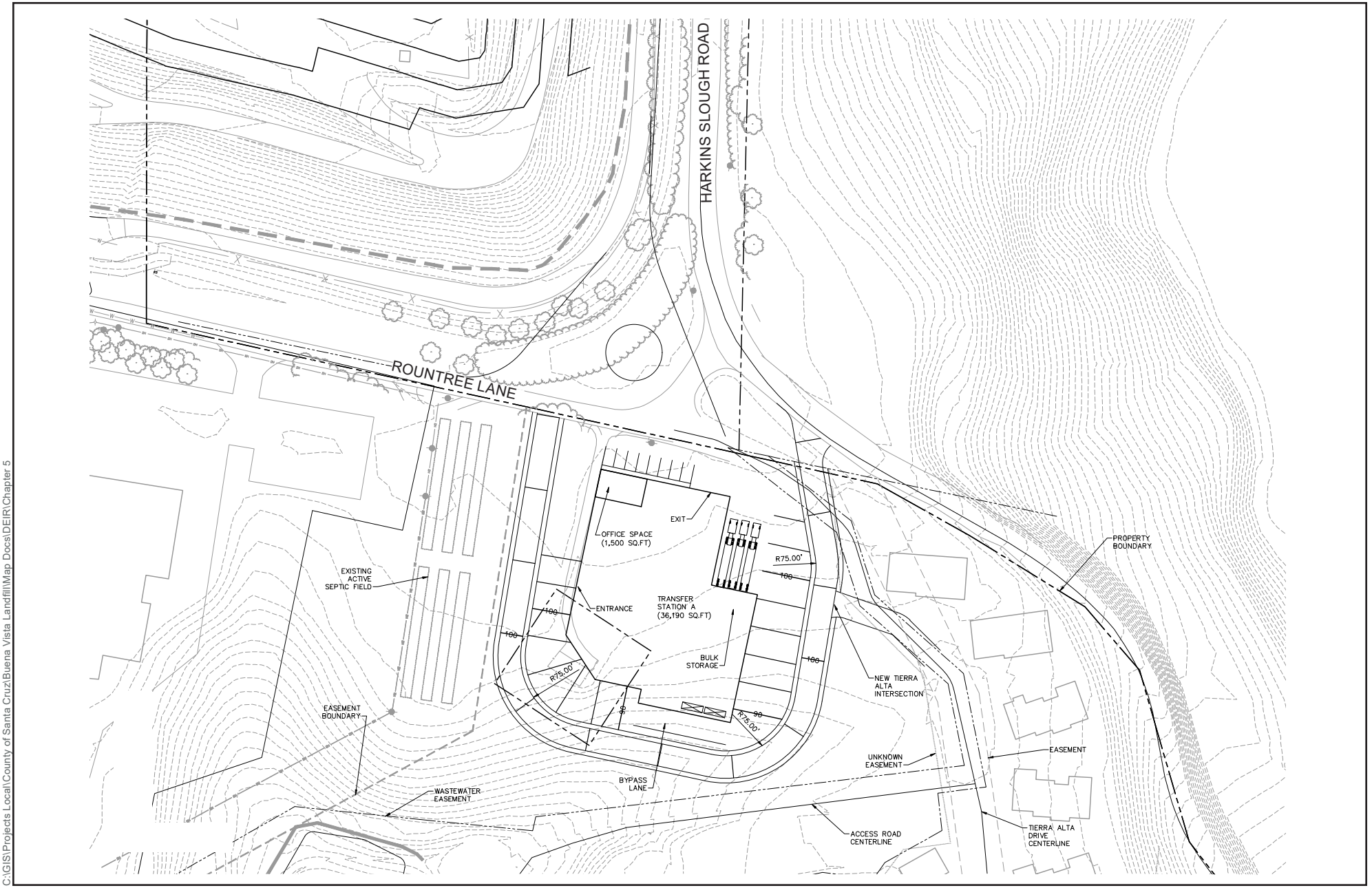
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Figure 5-11a

Alternative 1. Existing Conditions

Buena Vista Landfill Redevelopment Project



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Source: SCS Engineers, 2020.

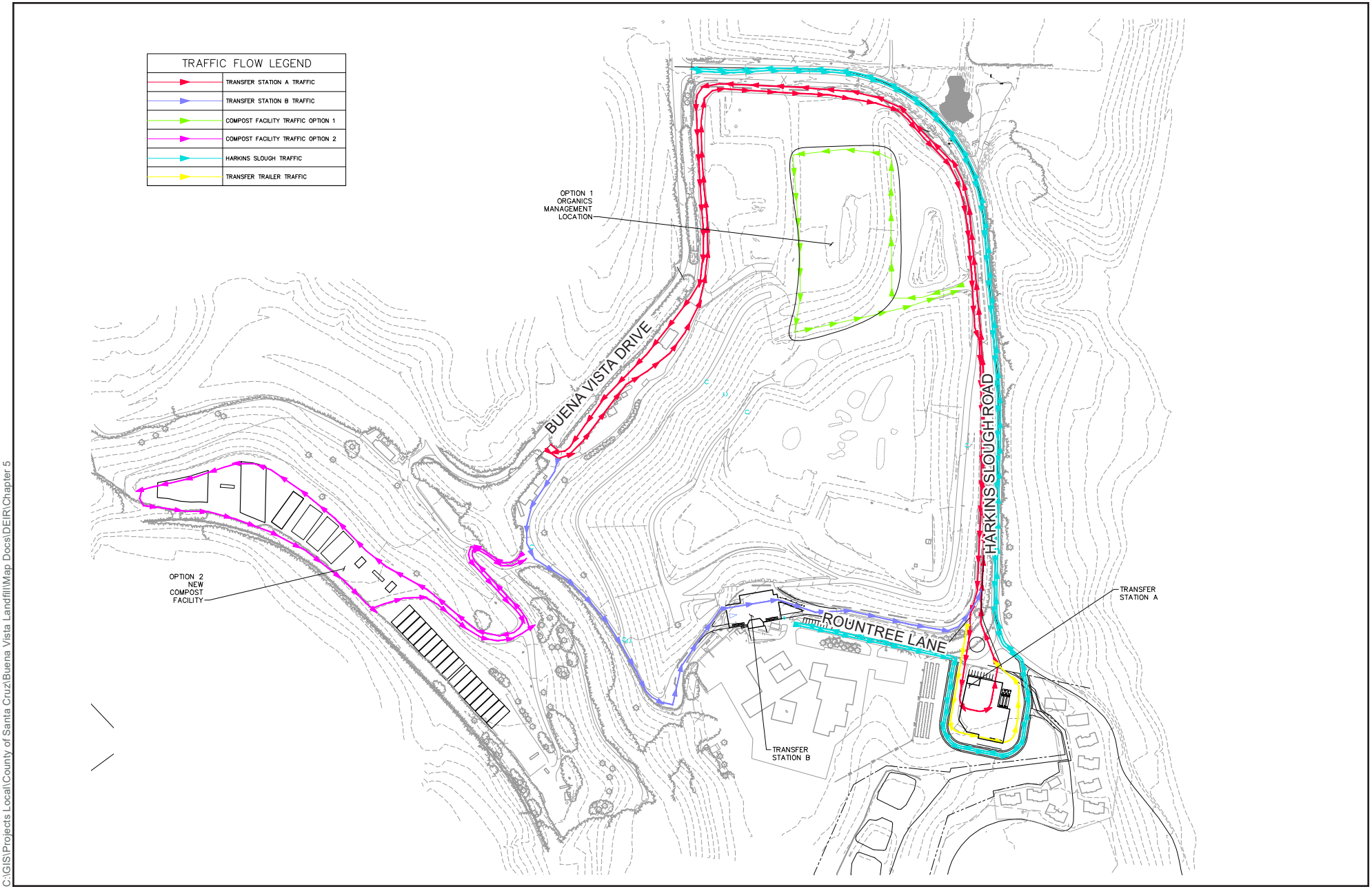
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Figure 5-11b

Alternative 1. Transfer Station A on South Side of Rountree Lane



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Source: SCS Engineers, 2020.

Harris & Associates

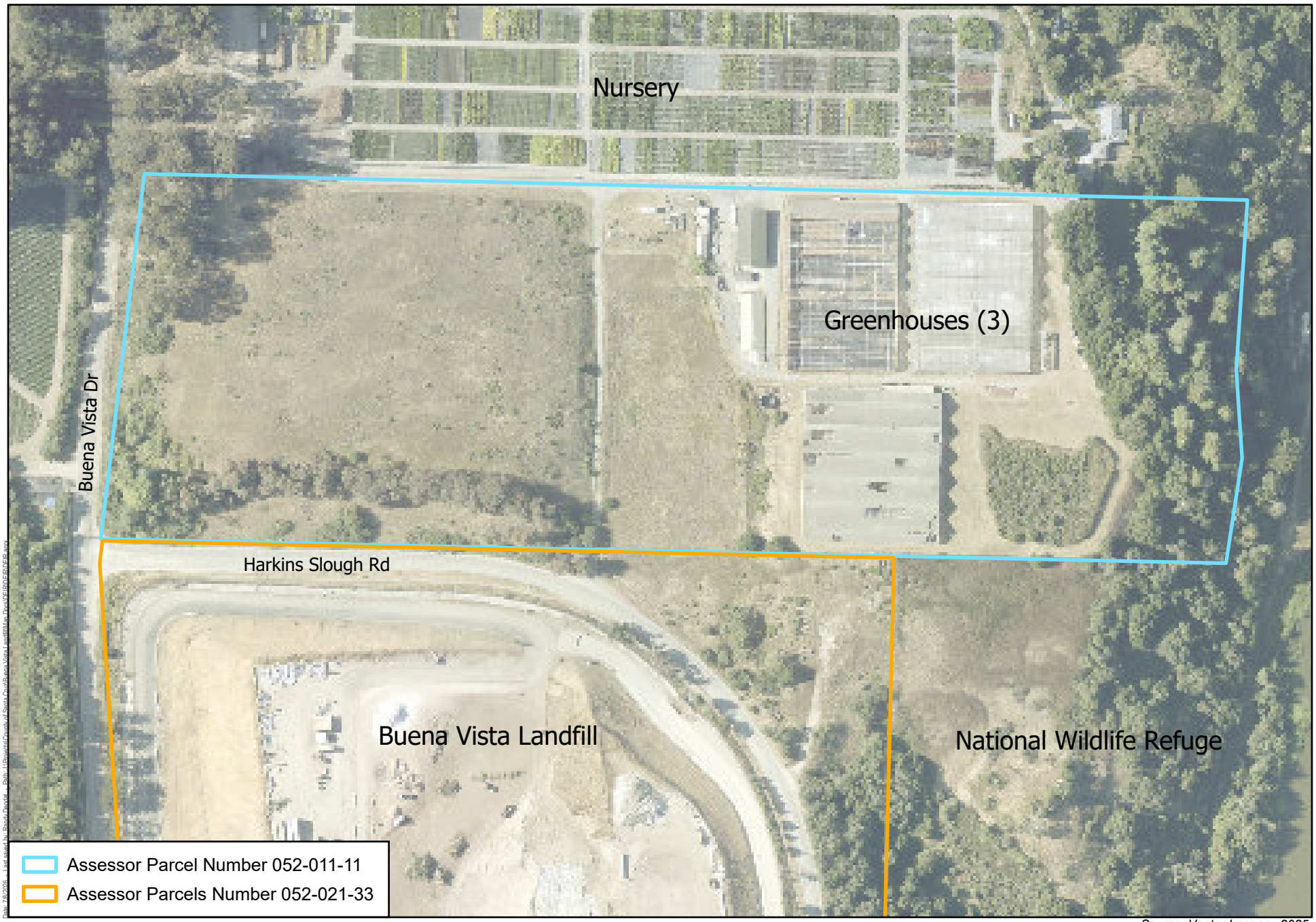
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Figure 5-11c

Alternative 1. Transfer Station A Circulation Pattern

Buena Vista Landfill Redevelopment Project



Source: Vantor Imagery, 2025.

Harris & Associates

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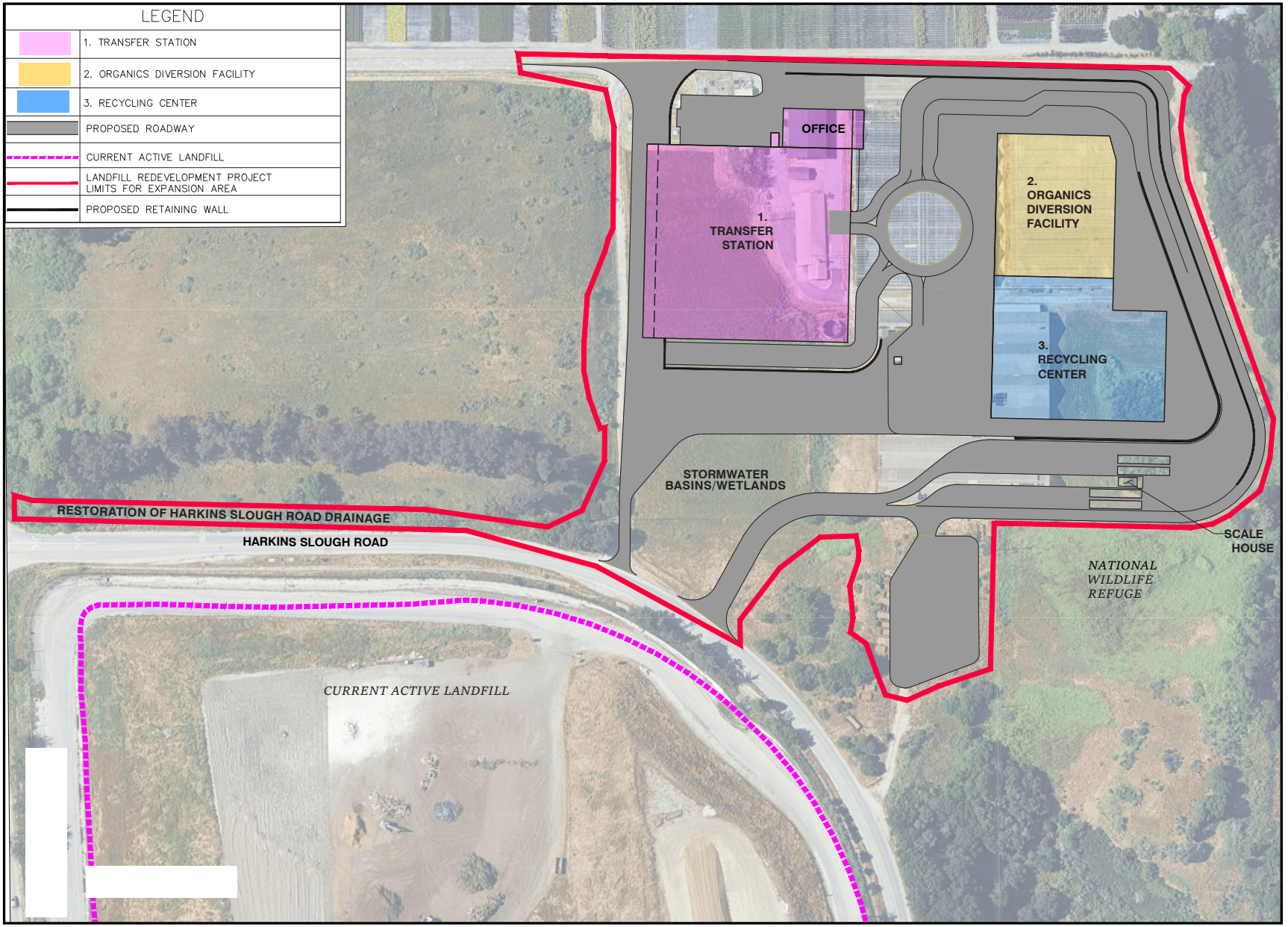
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Figure 5-12a

Alternative 3. Existing Conditions on Adjacent Property

Buena Vista Landfill Redevelopment Project



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Source: SCS Engineers, 2026.

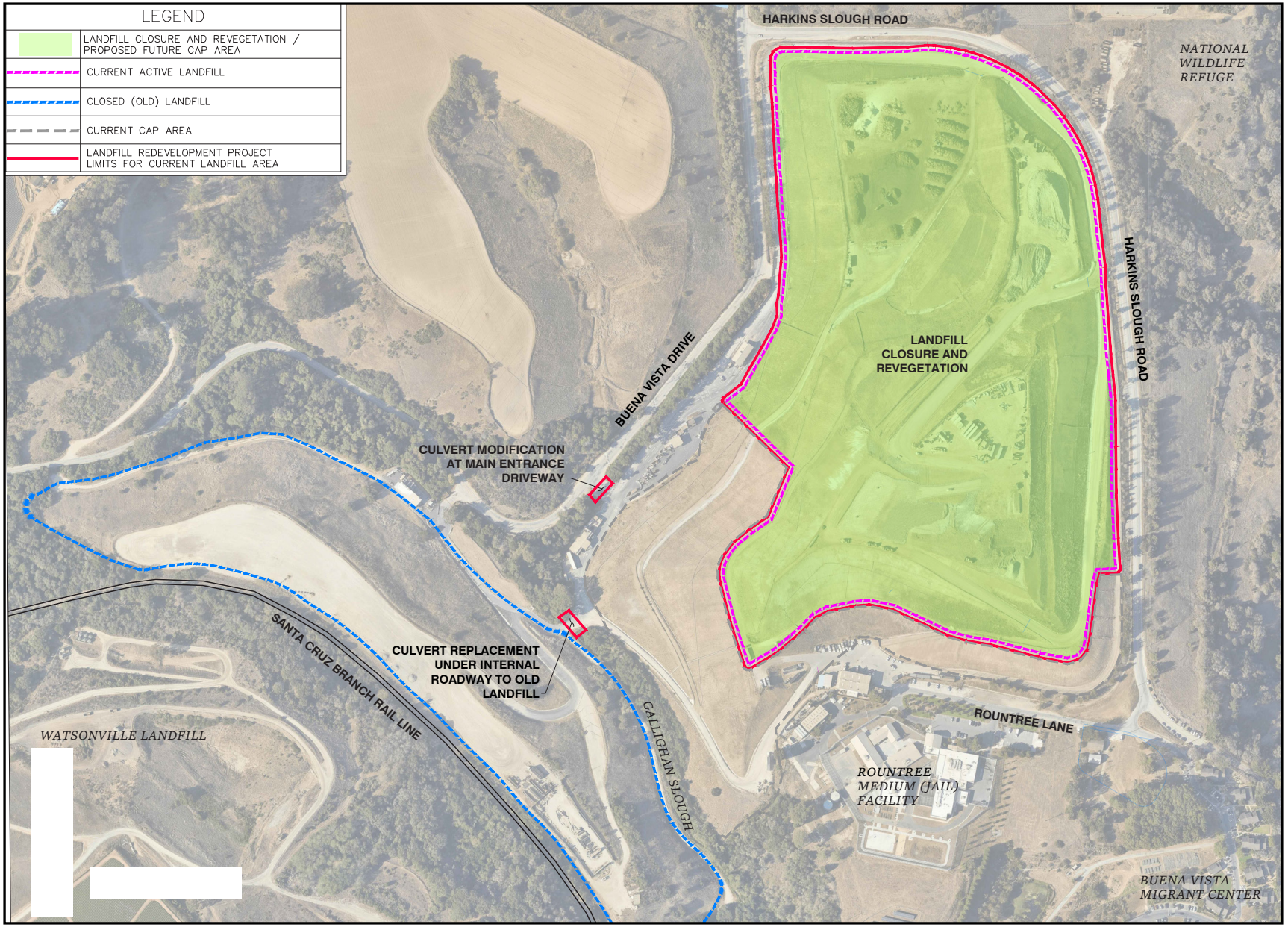
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Figure 5-12b

Alternative 3. Overview of Combined Facilities on Adjacent Property



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Source: SCS Engineers, 2026.

Harris & Associates

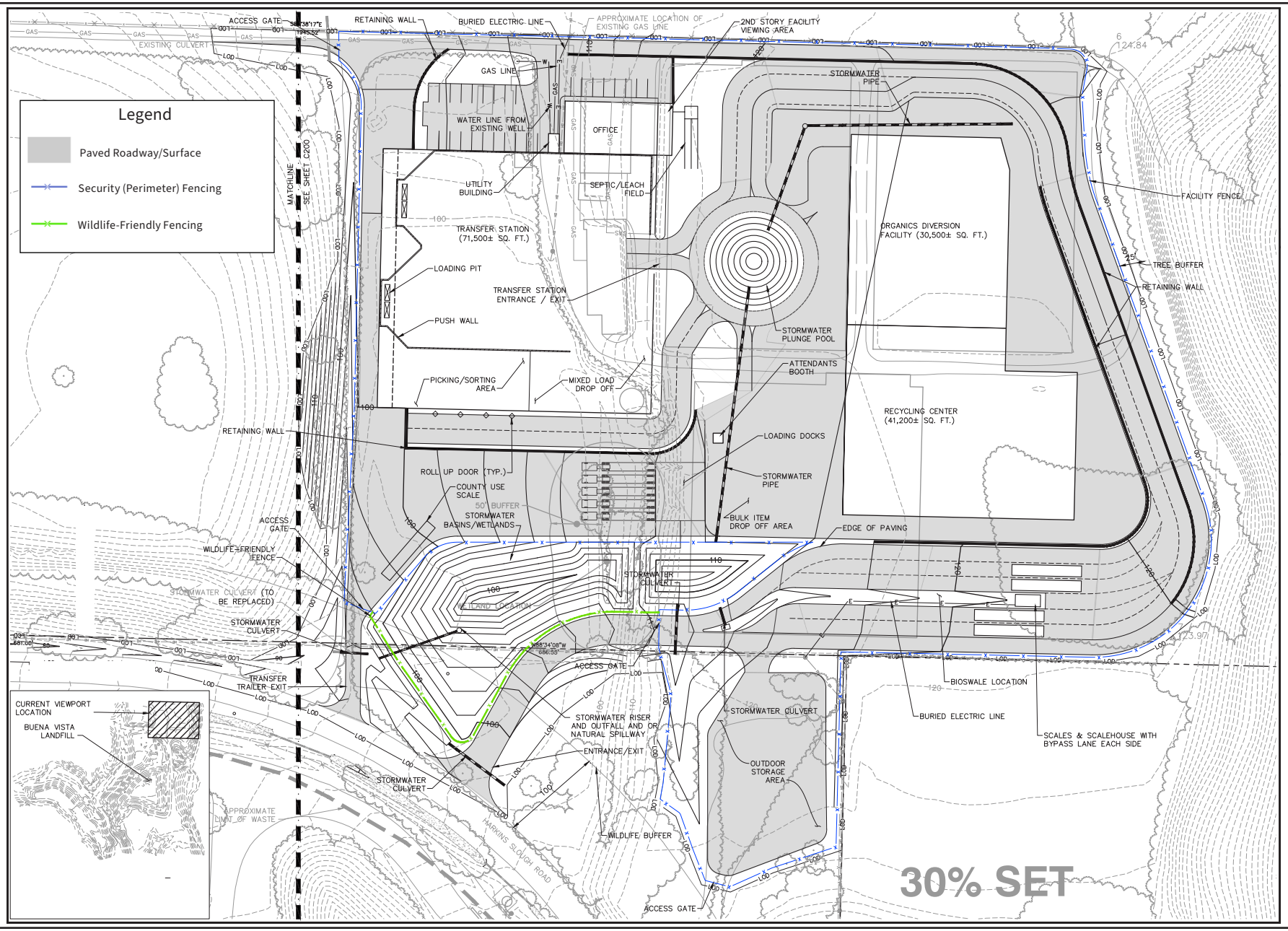
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Figure 5-12c

Alternative 3. Overview of Current Landfill Area



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Source: SCS Engineers, 2026.

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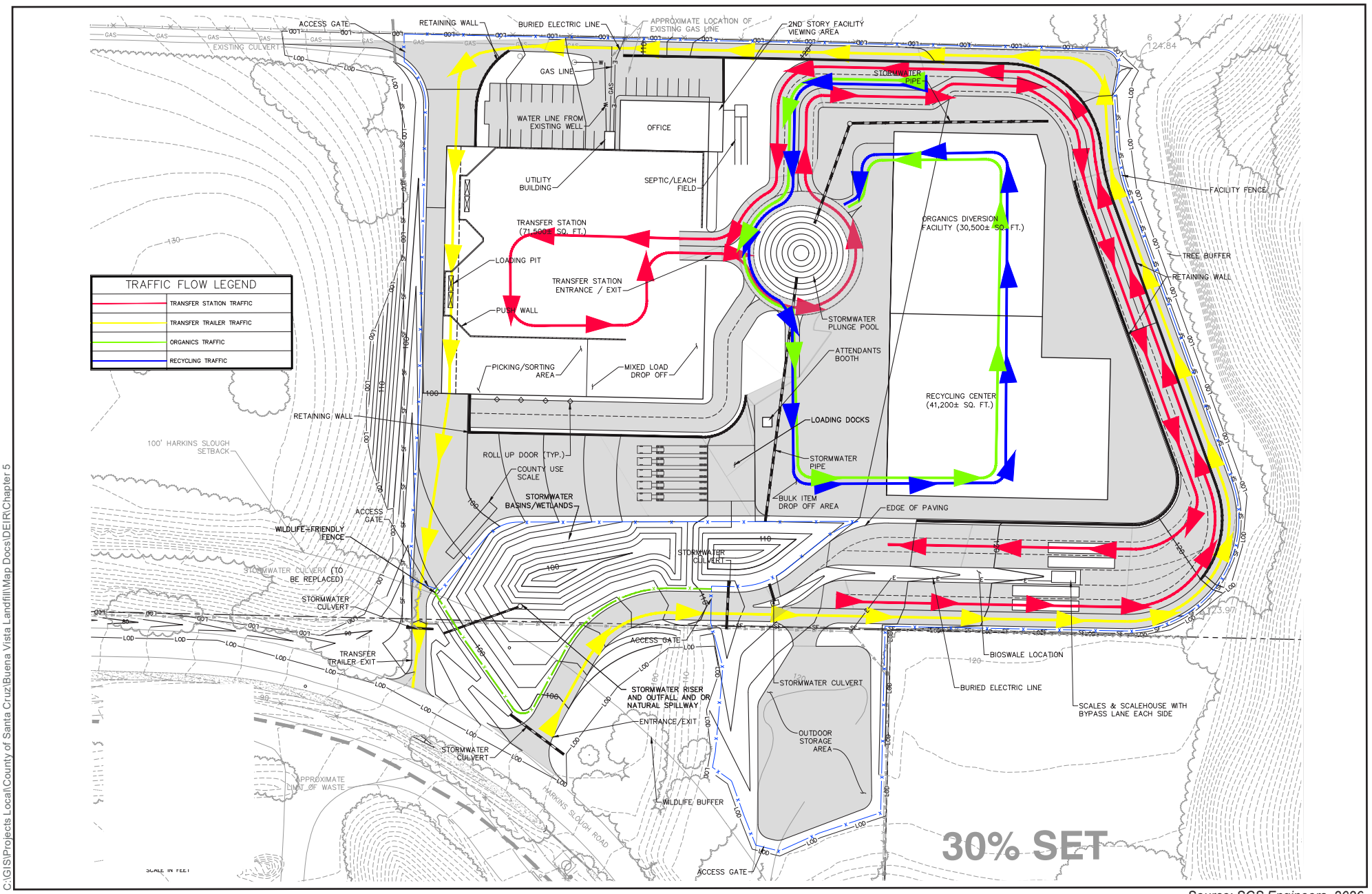
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Figure 5-12d

Alternative 3. Site Plan for Combined Facilities on Adjacent Property



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Source: SCS Engineers, 2026.

Harris & Associates

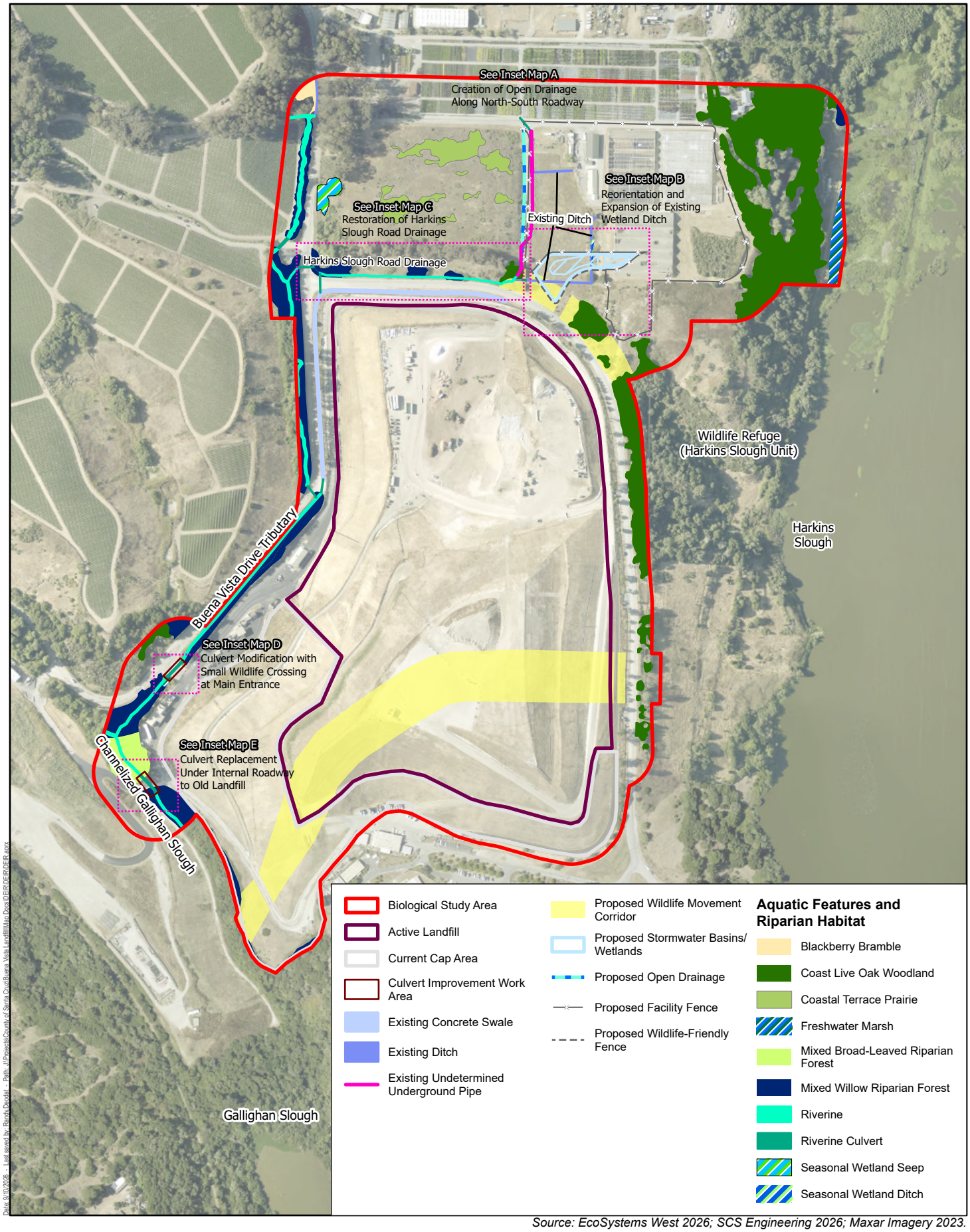
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Figure 5-12e

Alternative 3. Circulation Pattern for Combined Facilities on Adjacent Property



Source: EcoSystems West 2026; SCS Engineering 2026; Maxar Imagery 2023.

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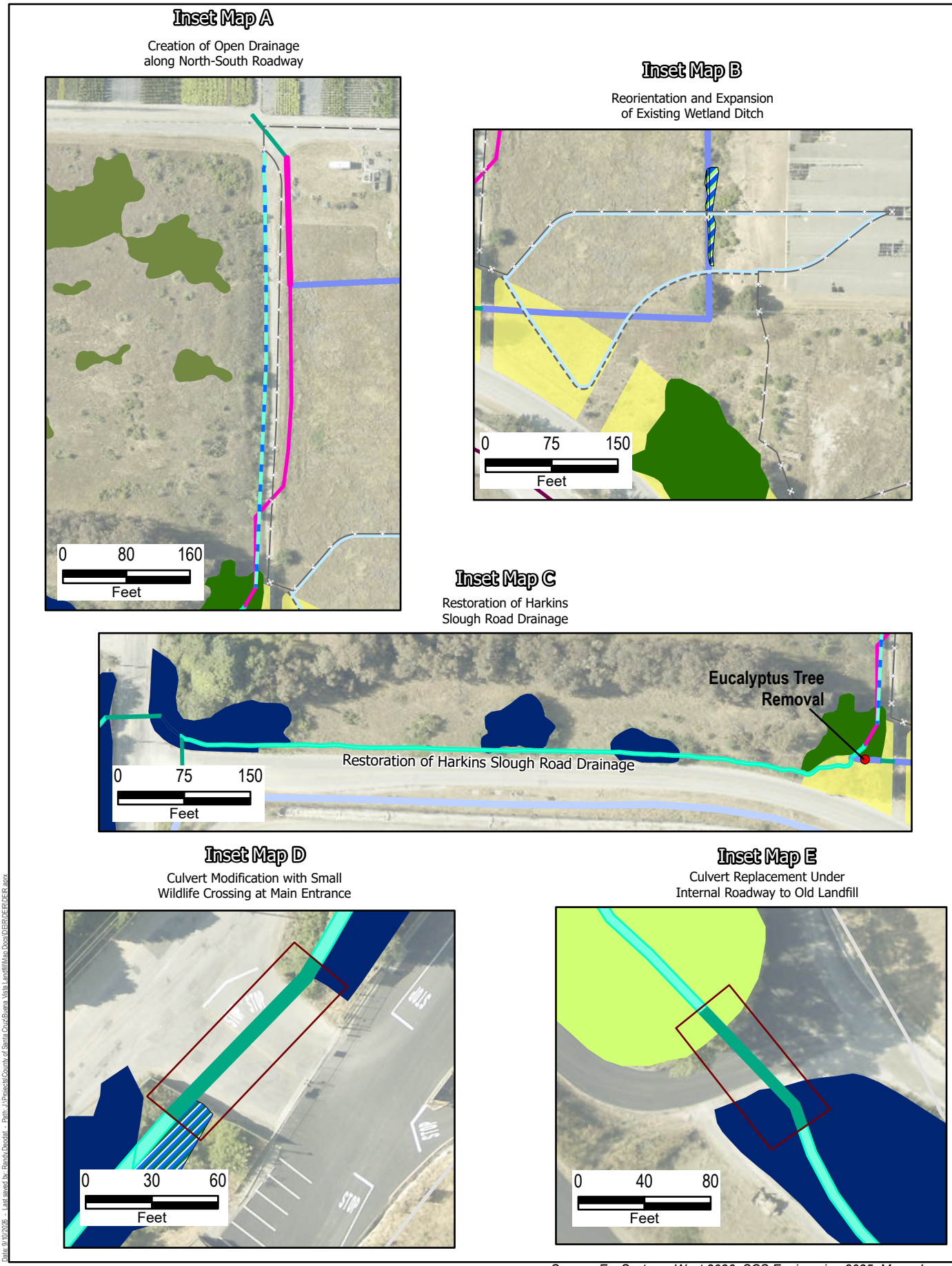
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Figure 5-13a

Alternative 3 Environmental Enhancement and Habitat Restoration Features

Buena Vista Landfill Redevelopment Project



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Source: EcoSystems West 2026; SCS Engineering 2025; Maxar Imagery 2023.

Harris & Associates

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Figure 5-13b
Alternative 3 Environmental Enhancement
and Habitat Restoration Features
Buena Vista Landfill Redevelopment Project

6 Alternative 3 Environmental Impact Analysis

A description of physical and operational features of Alternative 3, Combined Facilities on Adjacent Property (Alternative 3), is provided in Chapter 5, Project Alternatives, Section 5.2.3. The Alternative 3 site and plans are shown in **Figures 5-12 and 5-13** at the end of Chapter 5.

Chapter 6 includes a discussion of the potential environmental impacts that could result from implementation of Alternative 3, with a summary comparison to the Proposed Project provided in Chapter 5, Sections 5.2.3 and 5.3.

This chapter is divided into sections for each of the following environmental or resource topics identified in Appendix G of the California Environmental Quality Act (CEQA) Guidelines:

1. Aesthetics and Scenic Resources
2. Agricultural and Forestry Resources
3. Air Quality
4. Biological Resources
5. Cultural Resources
6. Energy
7. Geology and Soils
8. Greenhouse Gas Emissions
9. Hazards and Hazardous Materials
10. Hydrology and Water Quality
11. Land Use and Planning
12. Mineral Resources
13. Noise
14. Population and Housing
15. Public Safety and Services
16. Recreation
17. Transportation
18. Tribal Cultural Resources
19. Utilities and Service Systems
20. Wildfire

Existing Conditions and Regulatory Setting

In each resource section, the Existing Conditions discussion describes the existing or baseline conditions for the resources in the study area; the Regulatory Setting discussion describes applicable plans, policies, and regulations. The study area varies depending on the resources. The study area is the same as the Alternative 3 site for some resources and is larger for other resources, such as air quality.

Impacts and Mitigation Measures

The Methodology and Significance Thresholds discussion for each environmental topic describes the methodology used to identify potential impacts and the criteria used to determine the significance of those potential impacts. A "significant effect" is defined by the CEQA Guidelines, Section 15382, as the following:

> A substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance. An economic or social change by itself shall not be considered a significant effect on the environment, but may be considered in determining whether the physical change is significant.

For each potential impact, one of the following significance determinations is made and presented in bold:

- **No Impact.** Alternative 3 would have no adverse effect at all on environmental conditions or would have a beneficial effect by reducing the severity of existing environmental problems or hazards.
- **Less than Significant.** An impact that may be adverse but does not exceed the identified significance threshold levels and does not require mitigation measures. Although CEQA does not require the formulation or adoption of mitigation measures for less than significant effects, the County of Santa Cruz (County), in approving Alternative 3, could formulate conditions of approval that could further lessen the environmental effect.
- **Less than Significant with Mitigation.** An impact that can be reduced to below the significance threshold level with the adoption of identified mitigation measures. The identification of an impact that would require mitigation would require the County to adopt findings pursuant to Section 15091 of the CEQA Guidelines as part of its process for approving either Alternative 3 that would also cause such impacts.
- **Significant and Unavoidable.** An impact that cannot be reduced to below the significance threshold level, even with the adoption of any recommended mitigation measures. The identification of a significant and unavoidable impact would require the County to adopt a Statement of Overriding Considerations pursuant to Section 15093 of the CEQA Guidelines if the County chooses to approve Alternative 3 that would also result in such impacts.

The thresholds used to determine the significance of a potential impact differ based on the environmental topic and largely follow Appendix G of the CEQA Guidelines. Appendix G provides a checklist that includes a number of factual inquiries for each required environmental topic.

Notably, lead agencies are under no obligation to use these inquiries from Appendix G of the CEQA Guidelines in fashioning thresholds of significance (Save Cuyama Valley v. County of Santa Barbara [2013] 213 Cal.App.4th 1059, 1068). Rather, and with few exceptions, "CEQA grants agencies discretion to develop their own thresholds of significance" (CEQA Guidelines, Section 15064[d]). Even so, it is a common practice for lead agencies to use the language from the inquiries set forth in Appendix G to fashion thresholds. The County has done so in this Environmental Impact Report (EIR), as described under the Significance Thresholds discussion in each section of this chapter.

In the Impact Analysis discussion, the threshold is presented first, followed by the potential impact[1] associated with that threshold. Each discussion concludes with the significance determination (in bold) and any required mitigation measures. If a mitigation measure applies to a specific Project component (e.g., Transfer Station A), it is indicated in the mitigation measure statement. In cases where the mitigation measure for an impact could have a significant environmental impact in another issue area, this impact is discussed and evaluated as a secondary impact.

Approach to Cumulative Impacts

The term "cumulative impacts" refers to "two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts" (CEQA Guidelines, Section 15355).

A cumulative impact can result from the combination of two or more individually significant impacts or the combination of two or more impacts that are individually less than significant but constitute a significant change in the environment when considered together. To analyze a proposed project's contribution to cumulative impacts, CEQA requires the lead agency to identify past, present, and probable future projects in the vicinity of the proposed project, summarize their effects, identify the incremental contribution of the proposed project to any significant cumulative impacts occurring in the project region, and recommend mitigation measures as appropriate (CEQA Guidelines, Section 15130[b]). Mitigation measures should focus on any cumulatively considerable incremental contribution from the proposed project or alternative to any significant cumulative effect created by the past, present, and probable future projects, together with the proposed project or alternative (CEQA Guidelines, Section 15130[a][3]; refer also to CEQA Guidelines, Section 15126.2[a][4]).

For each resource topic, cumulative impacts were determined in the following manner:

- Determine if there is a significant cumulative impact under future conditions with the Project. If yes, then
- Determine if the Project would or would not make a cumulatively considerable (i.e., significant) contribution to the identified significant cumulative impact.

The potential cumulative impacts of Alternative 3 would be similar to those of the Proposed Project, which are presented for each issue area in Chapter 4, Other CEQA-Required Discussions. Therefore, at the end of the analysis in each resource topic section (Sections 6.1–6.20), there is a Cumulative Impact Discussion that references Chapter 4 and notes any differences that could occur from Alternative 3.

In summary and for comparison, the Proposed Project's contribution to significant cumulative impacts would not be considerable for all the environmental topics discussed, except biological resources, due to impacts on sensitive habitat from oak woodland tree removal. Alternative 3's contribution to significant cumulative impacts would not be considerable for all the environmental topics discussed, including biological resources, because it would reduce the impact to oak woodland.

Summary of Impacts and Mitigation Measures

At the beginning of each resource section, a summary table provides the potential impacts from Alternative 3 and any required mitigation measures.

[1] In the impact discussions throughout this EIR, the terms "potential impact" and "impact" are used synonymously. All the impacts discussed are potential impacts because the Project is proposed (not approved). Additionally, in some cases, an impact is a possibility and not a certainty.

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6.1 Aesthetics and Scenic Resources

This section presents a discussion of existing visual resources and an evaluation of potential impacts of Alternative 3, Combined Facilities on Adjacent Property (Alternative 3) on those resources. A summary of the potential impacts is presented in **Table 6.1-1**. All figures are presented at the end of Section 6.1.

Table 6.1-1. Summary of Alternative 3 Impacts Related to Aesthetics and Scenic Resources

Impact	Significance before Mitigation	Mitigation	Significance after Mitigation
AES-1. Alternative 3 would not have an adverse effect on scenic resources and vistas or degrade the existing visual character or quality of public views of the site or its surroundings.	Less than Significant	None Required	Less than Significant
AES-2. Alternative 3 would not damage scenic resources within a state scenic highway.	No Impact	None Required	No Impact
AES-3. Alternative 3 would not create a significant source of substantial light and glare that would adversely affect daytime or nighttime views.	Less than Significant	None Required	Less than Significant

Note: The impact, significance determination, and mitigation apply to Alternative 3 as a whole, considering all components, unless otherwise noted.

6.1.1 Existing Conditions

Regional Setting

Like the Proposed Project at the Buena Vista Landfill site, the Alternative 3 site is located between Highway 1 and the Pacific Ocean in unincorporated southern Santa Cruz County (**Figure 1-1**, Regional Location, in Chapter 1, Introduction). This region west of Highway 1 is within the California Coastal Zone and is dominated by agricultural uses and undeveloped open space and sloughs, as well as rural residences, public facilities (e.g., Buena Vista Landfill, Watsonville Landfill, Santa Cruz Branch Rail Line, Rountree Medium [Jail] Facility, state beaches), and the Monterey Bay Academy.

Santa Cruz County is known for its scenic resources, which include ocean views, agricultural fields, wooded forests, open meadows, and mountain hillside views (Santa Cruz County 2024). The ocean views, agricultural fields, as well as the Watsonville Slough systems and wetlands, are primary scenic resources in southern Santa Cruz County.

Alternative 3 Site Setting

The Alternative 3 site is located north of Harkins Slough Road and east of Buena Vista Drive, a County-designated scenic roadway (**Figure 5-12a**). The eastern portion of the site where the combined facility would be located is disturbed by historical agricultural activities and is occupied by three large greenhouses, a packing shed, a boiler house, a bathroom/lunchroom, and several other miscellaneous structures associated with previous cattle grazing and greenhouse uses that are no longer occurring. The western portion is undeveloped grassland, and the far eastern portion is undeveloped oak woodland with a residence occupied by the property owners.

Like the Proposed Project site, the Alternative 3 site is located amid low-lying hills that gradually slope westward toward the coastline between Highway 1 and the Pacific Ocean and is adjacent to lands zoned for public facilities and agricultural uses.

Agricultural uses are located to the north and west of the site and include a landscape nursery, row crops, horse stables, fallow lands, and row crops farther north and on the west side of Buena Vista Drive. The undeveloped open space to the east and southeast includes grasses, trees, and woody vegetation that is part of Harkins Slough and federally owned land managed by the U.S. Fish and Wildlife Service as a National Wildlife Refuge for the benefit of native plant and wildlife species. The Buena Vista Landfill is located to the south.

Other public facilities located south of the Buena Vista Landfill include the publicly owned Buena Vista Migrant Center (farmworker housing and childcare facility) and Tierra Alta affordable housing on Tierra Alta Drive to the southeast, the County's Rountree Medium (Jail) Facility, as well as wastewater treatment detention basins, the Santa Cruz Branch Rail Line, and the Watsonville Landfill.

Visual Character and Scenic Resources

As described above, the Alternative 3 surrounding land uses include agricultural uses (landscape nursery, horse stables, fallow lands, row crops) to the north and west; Harkins Slough and the USFWS Wildlife Refuge to the east and southeast; and the Buena Vista Landfill and other public facilities to the south. The Alternative 3 site can be viewed from Harkins Slough Road to the south but is not visible from Buena Vista Drive to the east (**Figure 5-12a**), nor is it visible from any other public viewpoints or vistas.

The only existing public views of the Alternative 3 site are from Harkins Slough Road, which extends from Buena Vista Drive to Rountree Lane. Existing views from Harkins Slough Road are dominated by the elevated Buena Vista Landfill located to the south and west, as the roadway curves around the landfill.

Designated Scenic Roadways

A portion of **Buena Vista Drive**, from San Andreas Road to Larkin Valley Road, is a County-designated scenic roadway (Santa Cruz County 2024). This designated portion extends along the west side of the Alternative 3 site. It is a winding road that provides views of the trees and vegetation along the roadway, with intermittent views of rural and agricultural land. There are no views of the Alternative 3 site due to intervening trees and topography.

San Andreas Road, which is located 1.3 miles southwest of the Alternative 3 site and is the terminus of Buena Vista Drive, is also a County-designated scenic roadway. The approximately 8.5-mile-long roadway extends from Highway 1 to the northwest to West Beach Street to the south (Santa Cruz County 2024). The roadway provides views of rural and agricultural land, but no views of the Alternative 3 site due to the distance, topography, and intervening vegetation.

State Route 1 (SR-1), also referenced as Highway 1 throughout this Environmental Impact Report (EIR), is located approximately 0.7 mile north of the Alternative 3 site and is eligible for designation as a state scenic highway (Santa Cruz County 2024). The Alternative 3 site is not visible from SR-1, and similarly, SR-1 is not visible from the site due to the distance and intervening topography and landscape features.

Light and Glare

The Alternative 3 site is located in a generally rural area characterized by agricultural uses, open space, and limited nighttime activity. Existing development on the site consists of former agricultural structures, including three large greenhouses, a packing shed, a boiler house, a bathroom/lunchroom building, and several miscellaneous structures associated with previous cattle grazing and greenhouse operations that are no longer active. The western portion of the site consists of undeveloped grassland, while the far eastern portion includes undeveloped oak woodland. An occupied residence is located in the far eastern portion of the property.

Due to the inactive nature of these uses, the site currently generates minimal lighting at night from periodic use of the exterior light above the packing shed door (on the north side of the structure) that is activated by a sensor but is currently not functional. Additionally, the residence in the far eastern portion generates minimal lighting from interior lighting, limited exterior fixtures, and vehicular headlights. Large portions of the site, including the undeveloped grassland and oak woodland areas, do not contain installed lighting. Glare sources within the Alternative 3 site are minimal under existing conditions. The existing agricultural structures are generally composed of weathered and nonreflective materials, and there are no notable reflective surfaces or lighting features on the site visible from public viewpoints along Harkins Slough Road.

Surrounding light sources include the Buena Vista Landfill to the south, which has security and operational lighting, as well as the Rountree Medium (Jail) Facility and other nearby public facilities that contribute to nighttime lighting in the area. Overall, existing light and glare conditions at the Alternative 3 site are low and consistent with the rural and agricultural setting.

6.1.2 Regulatory Setting

This section describes the federal, state, and local plans, policies, and laws relevant to aesthetics for the Project.

Federal

No federal regulations related to aesthetics are applicable to the Project.

State

California Coastal Act

The California Coastal Act, enacted in 1976, establishes procedures for the review of proposed developments in the Coastal Zone and policies for the protection of coastal resources and public access to the coastline. The following Coastal Act regulations in the Public Resources Code pertain to aesthetics.

SECTION 30251

The scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance. Permitted development shall be sited and designed to protect views to and along the ocean and scenic coastal areas, to minimize the alteration of natural landforms, to be visually compatible with the character of surrounding areas, and, where feasible, to restore and enhance visual quality in visually degraded areas. New development in highly scenic areas, such as those designated in the California Coastline Preservation and Recreation Plan prepared by the

Department of Parks and Recreation and by local government, shall be subordinate to the character of its setting.

SECTION 30253

New development shall do all of the following:

(a) Minimize risks to life and property in areas of high geologic, flood, and fire hazard

(b) Assure stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area or in any way require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs

(c) Be consistent with requirements imposed by an air pollution control district or the state Air Resources Board as to each particular development

(d) Minimize energy consumption and vehicle miles traveled

(e) Where appropriate, protect special communities and neighborhoods that, because of their unique characteristics, are popular visitor destination points for recreational uses

Local

Santa Cruz County General Plan/Local Coastal Program

The Conservation and Open Space Element of the Santa Cruz County General Plan/Local Coastal Program (LCP) includes objectives and policies to protect visual resources (Santa Cruz County 2024). Key policies relevant to the Project are listed below:

- **Policy ARC-5.1.2 (LCP) Development Within Visual Resource Areas.** Recognize that designated visual resources of Santa Cruz County possess diverse characteristics that are worthy of protection. Require projects in visual resource areas to be evaluated against the context of their unique environments and regulate structure height, setbacks, materials, and design to protect these resources consistent with the objectives and policies of this section.
- **Policy ARC-5.1.3 (LCP) Protection of Public Vistas and Scenic Assets.** Protect significant public vistas and public scenic assets as identified in Policy ARC-5.1.1, even those that are not mapped and designated as visual resource areas, scenic roads, coastal special scenic areas, or other unique features, by minimizing disruption of landform and aesthetic character caused by grading operations, timber harvests, utility wires and poles, signs, inappropriate landscaping and structure design. Provide necessary landscaping to screen development that is unavoidably sited within these vistas. Proposed landscaping within public vistas should be sited and designed to retain existing public views of vistas and scenic assets especially for coastal designated visual resources.
- **Policy ARC-5.1.4 Preserving Natural Buffers.** Preserve the vegetation and landform of natural wooded hillsides that serve as a backdrop for new development. Also comply with Policy ARC-5.1.8 regarding protection of ridgetops and natural landforms.
- **Policy ARC-5.1.6 (LCP) Preserving Ocean Vistas.** Where public ocean vistas exist, require these vistas be retained to the maximum extent possible as a condition of approval for any new development.

- **Policy ARC-5.1.7 (LCP) Open Beaches and Blufftops.** Do not permit or allow the placement of new permanent structures that would be visible from a public beach, except where allowed on existing parcels of record, or for shoreline protection, public beach access, or public ocean viewing, and where consistent with Santa Cruz County Code, Chapter 13.11. Use the following criteria:

  (1) Allow infill structures (typically residences and accessory structures on existing lots of record) where compatible with the pattern of existing development.

  (2) Require shoreline protection and access structures to use natural materials and finishes to blend with the character of the area and integrate with the landform.

In addition, Policy ARC-5.2.1 (LCP) designates scenic roads and highways in the County and requires that public vistas from these roads be afforded the highest level of protection. Buena Vista Drive is considered a County-designated scenic roadway, and although it is located just west of the Alternative 3 site, the site is not visible from Buena Vista Drive. San Andreas Road and Highway 1 are also designated scenic routes; however, they are located far from the Alternative 3 site and are not visible from the site.

Santa Cruz County Code

Section 13.20.130 (Design criteria for Coastal Zone developments) of the County Code outlines design criteria for projects sited anywhere in the Coastal Zone. Criteria relevant to the Project include the following:

- **Visual Compatibility.** All development shall be sited, designed, and landscaped to be visually compatible and integrated with the character of surrounding neighborhoods or areas.
- **Minimum Site Disturbance.** Grading, earthmoving, and removal of major vegetation shall be minimized. Developers shall be encouraged to maintain all mature trees over 6 inches in diameter except where circumstances require their removal, such as obstruction of the building site, dead or diseased trees, or nuisance species. Special landscape features (rock outcroppings, prominent natural landforms, tree groupings) shall be retained.
- **Ridgeline Development**. Ridgeline protection shall be ensured by restricting the height and placement of buildings and landscape species and by providing landscape screening in order to prevent projections above the ridgeline that are visible from public roads or other public areas.
- **Landscaping.** Development shall include landscaping meant to provide visual interest and articulation, to complement surrounding landscaping (including landscaping in adjacent rights-of-way), to screen and/or soften the visual impact of development, and to help improve and enhance visual resources. When a landscaping plan is required, new or replacement vegetation shall be consistent with water-efficient landscape regulations, compatible with surrounding vegetation, and shall be suitable to the climate, soil, and ecological characteristics of the area.
- **Fences, walls, and hedges**. Development shall be sited and designed so that it does not block or significantly adversely impact significant public views and scenic character, including by situating lots, access roads, driveways, buildings, and other development (including fences, walls, hedges and other landscaping) to avoid view degradation and to maximize the effectiveness of topography and landscaping as a means to eliminate, if possible, and/or soften, if not possible, public view impacts.

County Code, Chapter 13.10, outlines zoning regulations and other regulations governing scenic quality, and Chapter 13.11 imposes requirements for site, architectural, and landscape design review. County Code, Section 13.11.070(C)(4) for Lighting includes the following:

> (a) All site, building, security, and landscape lighting shall be directed onto the site and away from adjacent properties. Light sources shall not be visible from adjacent properties. Light sources can be shielded by landscaping, structure, fixture design, or other physical means. Building and security lighting shall be integrated into the building design.
>
> (b) All lighted parking and circulation areas shall utilize low-rise light poles or light fixtures attached to the building. Light poles to a maximum height of 15 feet are allowed.
>
> (c) Area lighting shall be high-pressure sodium vapor, metal halide, fluorescent, or equivalent energy-efficient fixtures.

6.1.3 Methodology and Significance Thresholds

Methodology

The assessment of impacts to scenic vistas, scenic resources, and visual character involves qualitative analysis that is inherently subjective in nature. Different viewers react to viewsheds and aesthetic conditions differently. Visual or aesthetic resources are generally defined as both the natural and built features of the landscape that contribute to the public's experience and appreciation of the environment. Depending on the extent to which a project's presence would alter the perceived visual character and quality of the environment, a visual or aesthetic impact may occur.

This analysis compares existing visual conditions in and around the Alternative 3 site to those anticipated after implementing the combined facilities. The Alternative 3 site was observed and photographed along with its surrounding context during both daylight and nighttime. The Project design plans (**Figures 5-12b and 5-12d**) were analyzed to determine aesthetic impacts of the Project.

The only public views of the Alternative 3 site are from Harkins Slough Road to the south. The site is not visible from Buena Vista Drive. There are no designated scenic vistas or other public viewing locations in the vicinity with views of the Alternative 3 site. Although the Buena Vista Landfill is open to the public, it is not considered a public view for purposes of this analysis because, in general, the public does not go to the landfill for views of the surrounding area.

Harkins Slough Road is located on the south side of the Alternative 3 site, extending from Buena Vista Drive to Tierra Alta Drive/Rountree Lane, curving around the northern and eastern perimeter of the Buena Vista Landfill. The roadway is primarily used by landfill staff, Rountree Medium (Jail) Facility staff and visitors, and residents of the Buena Vista Migrant Center and the Tierra Alta Affordable Housing complex on Tierra Alta Drive.

The following four viewpoints from Harkins Slough Road were identified to describe the potential change in public views from Alternative 3 development. These viewpoints are described further in the impact discussion and are shown on **Figures 6.1-1 to 6.1-5** at the end of this section. The viewpoints are as follows:

- **Viewpoint 1:** View from Harkins Slough Road Westbound (Facing North)
- **Viewpoint 2:** View from Harkins Slough Road Westbound (Facing North)
- **Viewpoint 3:** View from Harkins Slough Road Eastbound (Facing Northward)

- **Viewpoint 4:** View from Harkins Slough Road Eastbound (Facing Northeast)

Significance Thresholds

As stated in the Chapter 6 introduction, the significance thresholds used in this analysis are based on Appendix G of the California Environmental Quality Act Guidelines, which provides a sample Initial Study checklist that includes a number of factual inquiries related to the subject of aesthetics and other environmental topics. Thus, the letters and thresholds presented below correspond with the questions in the Appendix G Initial Study checklist.

For purposes of this EIR and consistent with the analysis for the Proposed Project, a significant impact would occur if implementation of Alternative 3 resulted in any of the following conditions:

A. Have a substantial adverse effect on a scenic resource or vista.

B. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway.

C. In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings. (Public views are those that are experienced from a publicly accessible vantage point). If in an urbanized area, conflict with applicable zoning and other regulations governing scenic quality.

D. Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area.

In applying these thresholds to the impact analysis below, the County is concerned only with visual impacts from public views and not from private views, which is common industry practice. The County has discretion to make this distinction and does so because requiring mitigation for impacts to purely private views would give private landowners a kind of power over land uses on adjacent or nearby properties that they do not enjoy under California law (refer to Mira Mar Mobile Community v. City of Oceanside [2004] 119 Cal.App.4th 492–493, quoting Wolford v. Thomas [1987] 190 Cal.App.3d 347, 358, for the proposition that "California landowners do not have a right of access to air, light and view over adjoining property").

Regarding Threshold A, a scenic resource or vista is defined as a publicly accessible viewpoint that provides views of high visual quality or highly valued landscape. As stated above, there are no publicly accessible viewpoints of a scenic resource or vista within, adjacent to, or of the Project area. Therefore, the analysis considers if the Project would have a substantial adverse effect on quality of views from the four public viewpoints identified above.

Regarding Threshold B, the analysis evaluates potential effects to views of and from Highway 1, which is the closest highway and is eligible for designation as a state scenic highway.

Regarding Threshold C, the Project area and surrounding area are considered a non-urbanized area. Therefore, the analysis evaluates if the Project would substantially degrade the existing quality of public views of the site and its surroundings from the four viewpoints identified above.

Regarding Threshold D, the analysis considers new sources of substantial light or glare that could be introduced in the Project area.

For Thresholds A and C, the analysis considers if the Project would adversely affect the quality of views from the four public viewpoints identified above (**Figure 6.1-1**). Visual quality and value are subjective based on the viewer's perception and sensitivity. It is reasonable to assume that most

viewers consider views of the ocean, mountains, and undeveloped open space and rural areas to be high quality.

Visual sensitivity can be described as viewer awareness of visual changes in the environment and is based on viewers' activities from public areas near a particular site. From the four public viewpoints identified for this analysis, viewers are driving on public roadways. There are no pedestrian or bicycle facilities (e.g., sidewalks, bike lanes), pullouts, or rest areas along the roadways. Thus, it is reasonable to assume that viewers would be focused on driving and may be less aware of visual changes in the surrounding area.

6.1.4 Alternative 3 Impact Analysis

For each impact, the discussion is separated into construction, operation, and project components as needed to describe the potential impact. The overall conclusion or significance determination is presented at the end of the discussion, as well as in parentheses at the end of the numbered impact statement.

As described in Section 5.2.3, Alternative 3, Combined Facility on Adjacent Property (in Chapter 5, Project Alternatives), Alternative 3 includes the following components:

- Transfer Station
- Organics Diversion Facility
- Recycling Center
- Scale House
- General Plan/Local Coastal Program Land Use Designation and Zoning Map Amendments

Additionally, Landfill Closure and Revegetation, including the Environmental Enhancement and Restoration Features, would be implemented as described in Chapter 2, Section 2.4, Project Components, and the potential impacts of those features are included in the analysis in Section 3.1.4. The additional enhancement and restoration features included as part of Alternative 3 (described in Section 5.2.3 under Additional Design Information) are considered in the evaluation below.

Threshold A:	Have a substantial adverse effect on a scenic resource or vista.
Threshold C:	In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings. (Public views are those that are experienced from publicly accessible vantage point). If in an urbanized area, conflict with applicable zoning and other regulations governing scenic quality.

Impact AES-1 ALTERNATIVE 3 WOULD NOT HAVE AN ADVERSE EFFECT ON SCENIC RESOURCES AND VISTAS OR DEGRADE THE EXISTING VISUAL CHARACTER OR QUALITY OF PUBLIC VIEWS OF THE SITE OR ITS SURROUNDINGS. (LESS THAN SIGNIFICANT)

Public views of the Alternative 3 site from Harkins Slough Road would change from construction and operation of the combined facilities. The existing views include open space with vegetation (grasses, trees, shrubs), greenhouses, sheds, and other structures associated with previous agricultural activities on the site (**Figures 6.1-1 to 6.1-5**). The change in views from Harkins Slough Road would range from a minor change (Viewpoint 1) to a moderate/major change (Viewpoints 2–4). However,

for reasons described below, the change in views would not be considered an adverse effect on scenic resources and vistas, nor a substantial degradation of public views.

During construction, there would be excavators, dump trucks, loaders, bulldozers, concrete trucks, cranes, and compactors throughout the Alternative 3 site. The most visible activities from public viewpoints would be associated with construction of the Transfer Station, Recycling Center, and associated site improvements such as the access roads from Harkins Slough Road, scale house, and stormwater management ponds. Construction of other Project components within the Alternative 3 site, including the Organics Diversion Facility and internal circulation roads, would be largely obscured by the aforementioned construction activities, existing topography and vegetation, and distance from Harkins Slough Road. Visibility of construction equipment and activities would be temporary and localized and would not result in substantial or lasting obstruction of public views of scenic resources.

Once in operation, portions of the combined facilities and associated vehicular activity would be visible from Harkins Slough Road. The following discussion describes how the views would change from the four identified public viewpoints (**Figure 6.1-1**), and if the change would substantially degrade the existing visual quality of the views or otherwise adversely affect scenic resources.

VIEWPOINT 1: VIEW FROM HARKINS SLOUGH ROAD WESTBOUND (FACING NORTH)

A photograph from Viewpoint 1 is shown on **Figure 6.1-2**. Under existing conditions, public views include vegetation (trees and shrubs) and an unpaved access road leading to the County's outdoor storage area in the foreground. The outdoor storage area is located on the County's landfill property, is unpaved and heavily disturbed, and is currently used to store approximately 10 large metal collection bins (roll-off boxes) and landfill equipment. In the background beyond the outdoor storage area, the greenhouses on the adjacent property are visible, as well as the utility pole and powerlines in front of the greenhouses and the tree line in the far distance behind the greenhouses.

With implementation of Alternative 3, there would be minimal change in the foreground view because the trees/vegetation would remain and the outdoor storage area would remain. The only difference is that the outdoor storage area would be paved and accessed from the new internal paved road on the north side (**Figures 5-12b and 5-12d**), rather than the unpaved road connecting to Harkins Slough Road on the south side, and would be within the new perimeter fence.

The change in background views would be minor as well due to the distance. The existing greenhouses currently visible from this viewpoint are approximately 20 feet in height. Under Alternative 3, these structures would be removed and replaced with the internal paved roadway and the Recycling Center building, which would have a maximum height of approximately 40 feet. The roadway would be at grade and would not be visible. The new Recycling Center would be taller than the existing greenhouses, but it would not be substantially more visible because it would be set back over 100 feet farther from Harkins Slough Road than the existing greenhouses. The utility pole and lines would remain in place and visible, and it is anticipated the tree line in the far distance would be visible. The other facilities, such as the transfer station and Organics Diversion Facility, would not be visible from Viewpoint 1.

Further, the existing trees located along the north side of Harkins Slough Road would remain and continue to provide a partial visual buffer of the proposed facilities for motorists traveling along the roadway. The viewers of the proposed facilities would be motorists primarily, and the views would be brief and fleeting as they travel along Harkins Slough Road, particularly as the road curves away from the Alternative 3 site. The Buena Vista Landfill currently dominates views along this roadway, and the

proposed facilities would continue to be viewed within the context of an existing industrial and disturbed landscape.

As a result, while Alternative 3 would result in minor changes to views from Viewpoint 1, the changes would not have an adverse effect on scenic resources or vistas, or substantially degrade the visual character or quality of public views given the fleeting nature of views by motorists. Therefore, the impact would be less than significant.

VIEWPOINT 2: VIEW FROM HARKINS SLOUGH ROAD WESTBOUND (FACING NORTH)

A photograph from Viewpoint 2 is shown on **Figure 6.1-3**. Under existing conditions, public views include shrubs and grassy weeds in the foreground. In the background, there are grassy open space; sheds, greenhouses, and other agricultural buildings to the right; trees and undeveloped hillside to the left; and neighboring nursery, agricultural uses, and rolling hills in the distant center beyond the grassy open space.

With implementation of Alternative 3, there would be moderate to major visual change in the foreground and background views. The primary project components that would be visible from Viewpoint 2 are the at-grade access driveways from Harkins Slough Road in the foreground, the transfer station in the background, and the stormwater management ponds and internal roadways in between (**Figures 5-12b and 5-12d**). The dense trees and undeveloped hillside to the left would remain visible similar to existing conditions. The view of existing agricultural structures to the right would be replaced with views of the transfer station structure, and the distant views in the far background of the neighboring nursery would be blocked by the transfer station. The transfer station would be approximately 71,500 square feet. Vehicles would enter the transfer station from the north side of the building and exit from the south side. The exterior building height would be approximately 40 feet.

Thus, compared to existing conditions, the proposed Transfer Station would introduce a substantially larger structure within the view, which viewers could consider a moderate to major change. The viewers of the proposed facilities would be motorists primarily, and the views would be brief and fleeting as they travel along Harkins Slough Road, particularly as the road curves away from the Alternative 3 site. In addition, the Buena Vista Landfill currently dominates views within the surrounding area, and the proposed facilities would continue to be viewed within the context of an existing industrial and disturbed landscape.

As a result, while Alternative 3 would introduce noticeable visual changes from Viewpoint 2, the changes would not have an adverse effect on scenic resources or vistas, or substantially degrade the visual character or quality of public views of the site given the fleeting nature of the views by motorists. Therefore, the impact would be less than significant.

VIEWPOINT 3: VIEW FROM HARKINS SLOUGH ROAD EASTBOUND (FACING NORTHWARD)

A photograph from Viewpoint 3 is shown on **Figure 6.1-3**. Under existing conditions, public views include grassy weeds, low fencing, and utility pole/lines in the foreground, with eucalyptus trees and unpaved roadway on the left side. In the background, there are greenhouses and agricultural buildings associated with former agricultural operations, as well as trees on the right side; and a tree line is visible in the far distance behind the structures.

With implementation of Alternative 3, there would be moderate to major visual changes in the foreground and background views. The primary project components that would be visible from

Viewpoint 3 are the at-grade access driveways from Harkins Slough Road in the foreground, the transfer station and recycling center in the background, and the at-grade stormwater management ponds and internal roadways in between (**Figures 5-12b and 5-12d**). Two eucalyptus trees on the left side of the unpaved roadway and the two oak trees visible in front of the greenhouses would be removed, and it is anticipated the tree line in the far distance would remain visible. Views of the greenhouses and agricultural buildings with open space in the foreground would be replaced with views of the transfer station, recycling center, and associated activities. When looking at the existing structures on **Figure 6.1-3**, the transfer station would be located over 350 feet from Harkins Slough Road where the existing structures in the middle of the photo (behind the utility pole) are located. The recycling center would be located over 350 feet from Harkins Slough Road where the existing greenhouses are located. The approximately 40-foot-tall transfer station would be set back farther than the 20-foot-tall greenhouses. Similar to Viewpoint 2, the combined facilities in Alternative 3 would introduce larger structures into the distant portion of the view and at-grade driveways in the foreground, which would result in a noticeable visual change, which viewers would likely consider a moderate to major change compared to existing conditions.

Although Alternative 3 would introduce noticeable visual changes from Viewpoint 3, the changes would not have an adverse effect on scenic resources or vistas, or substantially degrade the visual character or quality of public views of the site given the fleeting nature of the views by motorists. Therefore, the impact would be less than significant.

VIEWPOINT 4: VIEW FROM HARKINS SLOUGH ROAD EASTBOUND (FACING NORTHEAST)

A photograph from Viewpoint 4 is shown on **Figure 6.1-4**. Viewpoint 4 is similar to Viewpoint 3 but provides closer and more direct views of the southern portion of the Alternative 3 site as the motorist is approaching the curve in Harkins Slough Road, whereas from Viewpoint 3 the motorist would need to look left while the roadway is curving right. Under existing conditions, public views from Viewpoint 4 include direct views of the existing greenhouses on the hill, with utility lines, fencing, and grassy vegetation, shrubs, and trees in the foreground. The existing greenhouses are a prominent visual feature from this viewpoint.

With implementation of Alternative 3, there would be moderate to major visual changes in the foreground and background views. The primary project components that would be visible from Viewpoint 4 are the at-grade access driveways from Harkins Slough Road and the Recycling Center in the background (**Figures 5-12b and 5-12d**). The two eucalyptus trees on the left side of the unpaved roadway and the two oak trees visible in front of the greenhouses would be removed, but all the trees and vegetation to the right (which would be the east side of the new entrance/exit driveway) would remain in place and visible. Similar to Viewpoint 3, views of the greenhouses with open space in the foreground would be replaced with views of the recycling center, associated activities, and paved driveways. The approximately 40-foot-tall transfer station would be set back farther than the 20-foot-tall existing greenhouses, which could make the change in views less prominent.

Nonetheless, from Viewpoint 4, Alternative 3 facilities would introduce new paved driveways in the foreground, remove two trees in the center of views, and replace the visible greenhouses with a larger recycling center set farther back from the roadway. This would be a noticeable visual change, which viewers would likely consider a moderate to major change compared to existing conditions.

Although Alternative 3 would introduce noticeable visual changes from Viewpoint 4, the changes would not have an adverse effect on scenic resources or vistas, or substantially degrade the visual character or quality of public views of the site given the fleeting nature of the views by motorists. Therefore, the impact would be less than significant.

SUMMARY

Development of the Alternative 3 combined facilities would change public views from Harkins Slough Road, the only public views of the Alternative 3 site.

Foreground. Existing views in the foreground adjacent to Harkins Slough Road include undeveloped land composed of vegetation (weedy grasses, shrubs, and trees), two unpaved roads, and a heavily disturbed area in the northeastern portion used by the County landfill for outdoor storage. With Alternative 3, the foreground view in the eastern portion would change very little because the area would continue to be used for storage, and the cluster of trees and vegetation in the central portion near Harkins Slough Road would remain in place. The foreground view in the western portion would change to paved driveways and entrance signage.

Background. Existing views in the background include flat undeveloped land composed of weedy grasses and solitary trees by existing structures, and developed land composed of three large greenhouses, a packing shed, a boiler house, and several other miscellaneous structures. Distant views include rolling hills with vegetation and agricultural uses.

With Alternative 3, the background view for eastbound motorists would change from existing greenhouse structures on the elevated land (and the two solitary trees in front of the southernmost greenhouse) to the recycling center and operational activities. The recycling center would be substantially taller than the existing greenhouses but set farther back, which would reduce the noticeable change. The new stormwater management pond and internal roadways in the middle ground would be at grade and less visible. The Organics Diversion Facility would not be visible to motorists because it would be located behind the recycling center, and the transfer station would require the motorists to look back left as the roadway curves right.

The background view for westbound motorists would be the most noticeable change. As motorists approach the roadway curve, the view of the existing greenhouses would change to the recycling center, which would be located farther away than the existing greenhouses, and possibly the at-grade internal road in front of the recycling center. As the roadway curves left, the view of flat undeveloped grassy land would change to structures and activities associated with operation of the combined facilities. The most noticeable visual change would be from Viewpoint 2, as westbound travelers round the curve, where the view to the north would change from expansive undeveloped land (with agricultural structures visible to the right and in the distance) to a stormwater management pond, paved roadways, and operational areas used by solid waste transport vehicles. The large transfer station would be visible in the distance, approximately 360 feet north of Harkins Slough Road. The vegetated hillside to the west would remain visible because the internal roadway and operational activities would be at grade, but some distant views to the north would be blocked by the new transfer station.

Conclusion. Although Alternative 3 would create noticeable visual changes that could be considered moderate to major from some public viewpoints along Harkins Slough Road, there would not be an adverse effect on scenic resources or vistas, nor would the changes substantially degrade the visual character or quality of public views. There are no pedestrian or bicycle facilities (e.g., sidewalks, bike lanes), pullouts, or rest areas along the roadway that offer views of scenic resources or a scenic vista, nor is the Alternative 3 site visible from distant scenic vistas.

The existing viewers are motorists driving on a public roadway. Thus, it is reasonable to assume that viewers would be focused on driving and may be less aware of visual changes, particularly in the background; and that views are fleeting, particularly since the roadway curves away from the Alternative 3 site at this location. The changes to more noticeable foreground views would be minor to

moderate, because a new driveway would be added to the open space composed of weedy grasses and shrubs, but the dense cluster of trees (oak woodland) would be retained, providing a visual buffer.

Further, existing views from Harkins Slough Road are dominated by the elevated Buena Vista Landfill to the south and west, as the roadway curves around the landfill perimeter. It is reasonable to expect the landfill would continue to dominate views in the surrounding area due to its height, and the proposed combined facilities on the other side of Harkins Slough Road would be viewed within the context of existing industrial uses and disturbed landscape. Although the proposed facilities would introduce taller and more prominent structures on the Alternative 3 site compared to the existing agricultural buildings and greenhouse structures currently visible from this viewpoint, the facilities would be consistent with the operational and developed character of the adjacent landfill area to the south. Additionally, the exterior of larger structures (transfer station, Organics Diversion Facility, recycling center) would be earth tones, possibly with artistic murals.

Therefore, Alternative 3 (Combined Facilities on Adjacent Property), including the associated General Plan/LCP land use designation and zoning map amendments and environmental enhancement/restoration features, would not result in an adverse effect on scenic resources or vistas, nor substantially degrade the visual character or quality of public views. The overall impact would be **Less than Significant**. No mitigation is required.

Threshold B:	Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway.

Impact AES-2 ALTERNATIVE 3 WOULD NOT DAMAGE SCENIC RESOURCES WITHIN A STATE SCENIC HIGHWAY. (NO IMPACT)

SR-1, also referenced as Highway 1 throughout this EIR, is the closest state highway to the Alternative 3 site. SR-1 is recognized for its scenic qualities and is eligible for designation as a state scenic highway under the California Scenic Highway Program. SR-1 is also designated as a County scenic roadway by the County General Plan/Local Coastal Program. SR-1 runs along the California coast and provides views of coastal landscapes, agricultural areas, and rural countryside.

The Alternative 3 site is located approximately 1 mile south of SR-1. The Alternative 3 site and SR-1 are separated by intervening topography, including hills and vegetation, which block any direct line of sight between the two locations. Due to the site's location and the surrounding landscape features, the Alternative 3 site is not visible from SR-1. Vehicles transporting solid waste from the transfer stations to the regional facility would travel on SR-1. The use of SR-1 would be similar to existing conditions, whereby solid waste collection trucks and other large trucks use the highway for transportation; and there would be no effect on resources within or views from SR-1. Consequently, the scenic resources within SR-1 and the scenic views motorists enjoy from SR-1 would not be affected by Alternative 3.

Therefore, Alternative 3 (Combined Facilities on Adjacent Property), including the associated General Plan/LCP land use designation and zoning map amendments and environmental enhancement/restoration features, would not damage scenic resources within a state scenic highway. There would be **No Impact**.

Threshold D: Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area.

Impact AES-3 ALTERNATIVE 3 WOULD NOT CREATE A SIGNIFICANT SOURCE OF SUBSTANTIAL LIGHT AND GLARE THAT WOULD ADVERSELY AFFECT DAYTIME OR NIGHTTIME VIEWS. (LESS THAN SIGNIFICANT)

The construction and operation of the combined facilities at the Alternative 3 site would not create a significant source of substantial light and glare that would affect daytime or nighttime views.

Construction activities associated with Alternative 3 would not occur during nighttime hours, eliminating the potential for nighttime lighting impacts during construction. During daytime construction activities, temporary glare could occur from sunlight reflecting off construction equipment, vehicles, and metal building materials associated with development of the proposed Transfer Station, Recycling Center, and Organics Diversion Facility. Temporary glare could be visible to motorists traveling along Harkins Slough Road during certain phases of construction, but it would not impair driving due to the distance, as the large facility construction activities would be set back from the roadway. Further, Harkins Slough Road has relatively low traffic volumes, and views of construction equipment and reflective surfaces would generally be brief for passing motorists. Construction activities would not be visible from Buena Vista Drive. Therefore, temporary construction-related light and glare impacts would be less than significant.

Once operational, exterior site lighting at the combined facilities would be kept to a minimum to what is required for safety and operational needs during normal operating hours from 7:00 a.m. to 5:00 p.m. All lighting would be affixed to structures or on standards not exceeding the structure height, and the lighting would be directed downward and away from adjacent land. Lighting may include motion sensor site lighting, which would be limited to areas where needed for security (e.g., office and scale house area) and would be avoided in other areas. The large structures in the combined facilities would be earth tones to minimize reflectivity and glare, and the use of reflective materials would be minimized. Therefore, operational light and glare impacts would be less than significant.

In summary, Alternative 3 (Combined Facilities on Adjacent Property), including the associated General Plan/LCP land use designation and zoning map amendments and environmental enhancement/restoration features, would not create a significant source of substantial light and glare that would adversely affect daytime or nighttime views. The impact would be **Less than Significant**. No mitigation would be required.

6.1.5 Cumulative Impact Discussion

The potential cumulative impacts of Alternative 3 would be similar to those of the Proposed Project, which are presented in Chapter 4, Other CEQA-Required Discussions.

Alternative 3 would not have an adverse effect on scenic resources, degrade public views, or create a significant source of substantial light or glare, nor would any of the cumulative projects as described in Section 4.1.2, Analysis. Even when considering the combined effect of Alternative 3 and the projects provided in **Table 4-1**, List of Cumulative Projects, the cumulative aesthetic impact would be less than significant due to limited public views in the cumulative viewshed, no adverse effects on scenic resources, no substantial degradation of existing visual character or quality of public views, and no significant sources of new light and glare that would affect daytime or nighttime views.

Impact AES-C: Cumulative development would not result in a significant cumulative impact. Therefore, the **Alternative 3 contribution would not be cumulatively considerable**, which is the same as the Proposed Project.



Source: Maxar Imagery 2023.

Harris & Associates

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0 100 200

Feet

Figure 6.1-1

Alternative 3 Viewpoint Locations

Buena Vista Landfill Redevelopment Project



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Source: Harris and Associates 2024.

Harris & Associates

Figure 6.1-2

Viewpoint 1: View from Harkins Slough Road Westbound (Facing North)

Buena Vista Landfill Redevelopment Project



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Source: Harris and Associates 2024.

Harris & Associates

Figure 6.1-3

Viewpoint 2: View from Harkins Slough Road Westbound (Facing North)



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Source: Harris and Associates 2024.

Harris & Associates

Figure 6.1-4

Viewpoint 3: View from Harkins Slough Road Eastbound (Facing Northward)



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Source: Harris and Associates 2024.

Harris & Associates

Figure 6.1-5

Viewpoint 4: View from Harkins Slough Road Eastbound (Facing Northeast)

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6.2 Agricultural Resources

This section presents the environmental and regulatory setting for agricultural resources and an evaluation of potential impacts of Alternative 3, Combined Facilities on Adjacent Property (Alternative 3) on those resources. **Table 6.2-1** presents a summary of potential impacts related to agricultural resources.

Table 6.2-1. Summary of Alternative 3 Impacts Related to Agricultural Resources

Impact	Significance before Mitigation	Mitigation	Significance after Mitigation
AG-1. Alternative 3 would not convert Important Farmland to non-agricultural use.	No Impact	None Required	No Impact
AG-2. Alternative 3 would not conflict with a Williamson Act contract, but would conflict with existing zoning for agricultural use.	Potentially Significant	AG-2	Less than Significant with Mitigation
AG-3. Alternative 3 would not conflict with existing zoning for, or cause rezoning of, forest land or timberland, or result in the loss of forest land or conversion of forest land to non-forest use.	No Impact	None Required	No Impact
AG-4. Alternative 3 would not involve other changes in the existing environment which could result in conversion of farmland to non-agricultural use.	Less than Significant	None Required	Less than Significant

Note: The impact, significance determination, and mitigation apply to Alternative 3 as a whole, considering all components, unless otherwise noted.

6.2.1 Existing Conditions

Overview of Agriculture in Santa Cruz County

Agriculture has historically played an important role in Santa Cruz County, and it continues to be a major economic sector. Agricultural lands are areas that have been determined to be most suitable for a diversity of commercial and noncommercial farming operations such as the production of food, fiber, and ornamental crops, livestock, small family farming, and animal raising (Santa Cruz County 2021).

According to the County's most recent Crop Report (Santa Cruz County 2024a), the total gross production value of the County's agricultural commodities was approximately $742 million, including a timber value of $6.3 million. Fruit crops were the single largest production category by dollar value. Berries dominate this category, including strawberries, raspberries, and blackberries. Taken together, berry production represented approximately 60 percent of the County's total gross production value. Nursery crops represented the second-largest category, including key crops such as potted plants, landscape plants, Christmas trees, and cut flowers and cut greens. Together, these two categories accounted for approximately 82 percent of the County's direct farm production values.

The California Department of Conservation identifies and designates important farmlands throughout the state as part of its Farmland Mapping and Monitoring Program (FMMP). The FMMP rating system classifies farmland according to the following criteria:

- **Prime Farmland.** Farmland with the best combination of physical and chemical features able to sustain long-term agricultural production. This land has the soil quality, growing season, and moisture supply needed to produce sustained high yields. These are Class I and Class II soils.

- **Farmland of Statewide Importance.** Farmland similar to Prime Farmland but with minor shortcomings, such as greater slopes or less ability to store soil moisture. Land must have been used for irrigated agricultural production at some time during the four years prior to the mapping date.
- **Unique Farmland**. Farmland of lesser quality soils used for the production of the state's leading agricultural crops. This land is usually irrigated, but may include non-irrigated orchards or vineyards as found in some climatic zones in California.
- **Farmland of Local Importance**. Land of importance to the local agricultural economy as determined by each county's board of supervisors and a local advisory committee.
- **Grazing Land**. Land on which the existing vegetation is suited to the grazing of livestock. This category was developed in cooperation with the California Cattlemen's Association, University of California Cooperative Extension, and other groups interested in the extent of grazing activities. The minimum mapping unit for Grazing Land is 40 acres.
- **Urban and Built-Up Land**. Land occupied by structures with a building density of at least one unit to 1.5 acres, or approximately six structures to a 10-acre parcel. This land is used for residential, industrial, commercial, construction, institutional, public administration, railroad and other transportation yards, cemeteries, airports, golf courses, sanitary landfills, sewage treatment, water control structures, and other developed purposes.
- **Other Land**. Land not included in any other mapping category. Common examples include low-density rural developments; brush, timber, wetland, and riparian areas, not suitable for livestock grazing; confined livestock, poultry, or aquaculture facilities; strip mines, borrow pits; and water bodies smaller than 40 acres. Vacant and nonagricultural land surrounded on all sides by urban development and greater than 40 acres is mapped as Other Land.

"Important Farmland" includes those areas designated as Prime Farmland, Farmland of Statewide Importance, or Unique Farmland under the FMMP. In total, Santa Cruz County has approximately 13,147 acres of Prime Farmland, 2,190 acres of Farmland of Statewide Importance, and 3,273 acres of Unique Farmland (DOC 2020). The majority of this Important Farmland is located in the southeast portion of the County, in the Pajaro River Valley surrounding Watsonville.

Santa Cruz County has a large concentration of organic farms. Just over 30 percent of all Santa Cruz County farms are certified organic (California Grown 2024).

Alternative 3 Site

The Alternative 3 site consists of 11 acres within Assessor's Parcel Number (APN) 052-011-11, a 26.95-acre parcel that is zoned Commercial Agriculture and Airport Combining Zone (CA-AIA) and classified as Other Land on maps prepared for the FMMP. Existing land uses on the 11 acres include paved and unpaved roadways and several vacant structures last used in 2016, including three large greenhouses, a packing shed, a boiler house, a bathroom/lunchroom, and several other miscellaneous structures (**Figure 5-12a**).

The other 15.95 acres of the 26.95-acre parcel are largely undeveloped. There is a small residence currently occupied by a property owner in the far eastern portion of the property, which is dominated by oak woodland. The western portion of the property is undeveloped grassland. Prior to development of the greenhouses in the central/eastern portion of the parcel, the property was used

for cattle grazing. Implementation of Alternative 3 assumes the entire 26.95-acre parcel would be purchased by the County, and the occupant of the residence would vacate the property.

The Alternative 3 site also includes 2 acres within APN 052-021-33, which is owned by the County and part of the Buena Vista Landfill property. The 2-acre area is classified as Other Land on maps prepared for the FMMP, is zoned Commercial Agriculture and Airport Combining Zone (CA-AIA), and is used as an outdoor storage area.

The surrounding area is a mix of uses. The area to the south is the Buena Vista Landfill. The area to the north is a commercial landscape nursery with a residence on site, and there is an equestrian facility farther north. The areas to the east and southeast consist of undeveloped open space with grasses, trees, and woody vegetation that is national wildlife refuge and Harkins Slough. The areas to the west on the other side of Buena Vista Drive are mixed farmlands on large, open tracts with farmable soils.

County Agricultural Resources Land Type

The General Plan/Local Coastal Program (LCP) Land Use Plan designates, by ordinance, specific agricultural land type designations for parcels identified as commercial agricultural land, based on the criteria set forth in the General Plan/LCP and maintains Agricultural Resource Maps identifying the distribution of lands considered suitable to the commercial production of food, fiber, and ornamental crops and livestock. The mapped agricultural resource land type associated with parcel APN 052-011-11 is Type 3, which is identified as viable agricultural land within the Coastal Zone (Prime Farmland, Unique Farmland, and Prime Rangeland). Type 3 land is further defined by the Agricultural Land Preservation and Protection Ordinance (16.50.040) as follows:

Type 3 "Coastal Zone Prime Agricultural Land." This category includes all of the following lands outside the urban services line and the rural services line within the Coastal Zone in Santa Cruz County:

> (1) Land which meets the U.S. Department of Agriculture Soil Conservation Service criteria of prime farmland soils and which are physically available (i.e., open lands not forested or built on) for agricultural use.
>
> (2) Land which meets the California Department of Food and Agriculture criteria for prime rangeland soils and which are physically available (i.e., open lands not forested or built on) for agricultural use.
>
> (3) Land planted with fruit or nut-bearing trees, vines, bushes, or crops which have a nonbearing period of less than five years, and which normally return during the commercial bearing period on an annual basis from the production of unprocessed plant production not less than $200.00 per acre; the $200.00 per acre value shall be utilized to establish a base value per acre as of 1965. This base value per acre figure shall be adjusted annually in accordance with any change in the San Francisco Bay Area Consumer Price Index to reflect current values.
>
> (4) Land which has returned from the production of unprocessed agricultural plant products an annual gross value of not less than $200.00 per acre for three of the five previous years, as provided in subsection (C)(3) of this section.
>
> (5) Land which meets the California Department of Food and Agriculture criteria for unique farmland of Statewide importance and which is physically available (i.e., open lands not forested or built on) for agricultural use. The criteria for "prime farmland soils," "prime

rangeland soils," and "unique farmland of Statewide importance" are further defined in the General Plan and Local Coastal Program glossary.

6.2.2 Regulatory Setting

This section describes the federal, state, regional, and local plans, policies, and laws relevant to the portion of the Project area zoned Commercial Agriculture and Airport Combining Zone (CA-AIA) and agricultural uses to the north and northwest of the Project area.

Federal

No federal regulations related to agriculture are applicable to the Project.

State

Farmland Mapping and Monitoring Program

The California Department of Conservation's FMMP monitors the conversion of the state's farmland to and from agricultural use. County-level data is collected, and a series of maps are prepared that identify eight classifications and uses based on a minimum mapping unit size of 10 acres. The program also produces a biennial report on the amount of land converted from agricultural to non-agricultural use. The program maintains an inventory of state agricultural land and updates the Important Farmland Series Maps every 2 years. The FMMP is an informational service only and does not constitute state regulation of local land use decisions.

Under the FMMP, agricultural land is rated according to several variables, including soil quality and irrigation status, with Prime Farmland being considered the most optimal for farming practices.

California Land Conservation Act of 1965 (Williamson Act)

The California Land Conservation Act of 1965 (California Government Code, Section 51200 et seq.), commonly referred to as the Williamson Act, enables local governments to enter into contracts with private landowners for the purpose of restricting specific parcels of land to agricultural or related open space use. In return, landowners receive property tax assessments that are much lower than normal because they are based upon farming and open space uses as opposed to full market value of the land. Local governments receive an annual subvention of forgone property tax revenues from the state via the Open Space Subvention Act of 1971. Participation in this program is voluntary, requiring 100 contiguous acres of agricultural land under one or more ownerships to file an application for agricultural preserve status. After an agricultural preserve has been established, the land in the preserve is automatically restricted to agricultural and agriculturally compatible uses, and the landowners may enter into a Williamson Act land use contract. The land may also be subject to agricultural rezoning.

After a contract has expired, the landowners may remove the subject property from an agricultural preserve. Prior to the expiration of a contract, a landowner also has the option to petition to cancel the contract. Contract cancellation requires the landowner to pay a substantial fee as outlined in California Government Code, Sections 51280–51287.

Approximately 20,000 acres are preserved under Williamson Act contracts in the County. The County of Santa Cruz stipulates eligibility for Williamson Act contracts according to land use designation and property size (Santa Cruz County 2024b). The State of California discontinued the

subvention funding from the state budget in 2009. As a result, the County of Santa Cruz placed a moratorium on new Williamson Act contracts in 2013. Regardless, the Project area is not under Williamson Act contract.

California Right to Farm Act

The California Right to Farm Act (California Civil Code, Section 3482.5) details that a farming activity cannot be a public nuisance if all of the following factors are met:

a. The activity is in support of the production of an agricultural commodity
b. The agricultural activity is commercial in nature
c. The activity is conducted "in a manner consistent with proper and accepted customs and standards as established and followed by similar agricultural operations in the same locality"
d. The farming activity must have been in operation for at least three years
e. The farming activity was not a nuisance at the time it began

The California Right to Farm Act does not require best management practices; rather, it allows adherence to accepted customs and practices. In addition, the statute specifically states that the act prevails over any contrary provision of a city or county ordinance or regulation but does allow cities and counties to require disclosures be given to prospective home buyers that a dwelling is situated near an agricultural operation.

California Organic Food and Farming Act

The California Organic Food and Farming Act was signed by the governor in 2016. The act updated California's State Organic Program fee schedule and streamlined the organic registration process. The State Organic Program supports the National Organic Program. The act ensures that the State Organic Program processes stay up to date and aligned with National Organic Program processes. By reducing the fees and paperwork associated with organic registration, the act supports organic farmers and facilitates growth of organic agriculture in California.

Local

Santa Cruz County Agricultural Commissioner's Office

The Santa Cruz County Agricultural Commissioner conducts outreach and provides some oversight to agricultural production in the County. The Agricultural Commissioner's office is divided into two departments consisting of the Agricultural Department and the Weights and Measures Department. The Agricultural Department conducts the majority of the outreach and assembles the annual Crop Report, in addition to certifying producers for farmers markets, overseeing nursery inspections, and overseeing the County's Organic Program. The Weights and Measures Department primarily oversees agricultural manufacturing in the County and end-product measuring at locations such as grocery stores. Requirements for pesticides and organic producers entail participation and oversight from the California Environmental Protection Agency, the County Agricultural Commissioner, and the California Department of Food and Agriculture, which has oversight of all agricultural products.

Santa Cruz County General Plan/Local Coastal Program

The County of Santa Cruz General Plan/LCP (Santa Cruz County 2024b) provides a framework for development and growth in the County. The Agriculture, Natural Resources, and

Conservation Element of the General Plan includes objectives and policies to protect agricultural resources. For example, Objective 5.13 recognizes agriculture as a priority land use and favors preserving and promoting agriculture on designated commercial agricultural lands.

Key agricultural policies pertinent to the Project are listed below for informational purposes (Santa Cruz County 2024b):

- **Policy ARC-1.3.1, Conversion of Commercial Agricultural Lands.** Consider conversion and/or development of commercial agricultural lands to non-agricultural uses only when all of the following criteria are met:
    - It is determined that the land is not viable for farming or for other allowable agriculture uses, and that it is not likely to become viable in the future (See Policy ARC-1.3.2); and
    - Findings are made that new information has been presented to demonstrate that the conditions on the land in question do not meet the criteria for commercial agricultural land; and
    - The conversion of such land or use to non-agricultural uses will not impair the viability of, or create potential conflicts with, other commercial agricultural lands in the area; and
    - The conversion of such land is concentrated on the site or parcel to the minimum area necessary to achieve the objectives of the proposed conversion.
- **Policy ARC-1.3.2, Determining Agricultural Viability.** Require a viability study to be conducted in conjunction with an application that proposes to convert commercial agricultural and prime agricultural lands to non-agricultural land uses, to include but not limited to an economic feasibility evaluation which contains at least:
    - An analysis of the gross revenue from the agricultural products grown in the area for the five years immediately preceding the date of filing the application.
    - An analysis of the operational expenses, excluding the cost of land, associated with the production of agricultural products grown in the area for the five years immediately preceding the date of filing the application.
    - An identification of the geographic area used in the analyses. The area shall be of sufficient size to provide an accurate evaluation of the economic feasibility of agricultural uses for the land stated in the application.

  Recommendations regarding viability shall be made by the Agricultural Policy Advisory Commission based on evaluation of the viability study and the following criteria: parcel size, sizes of adjacent parcels, degree of non-agricultural development in the area, inclusion of the parcel in utility assessment districts, soil capabilities and topography, water availability and quality, and proximity to other agricultural use.
- **Policy ARC-1.4.1, Agricultural Buffers Required.** In order to prevent or minimize potential land use conflicts, nonagricultural habitable uses such as residences (excluding farmworker housing), habitable accessory structures and non-agricultural commercial businesses that are located on land adjacent to a parcel in the Commercial Agriculture or Agriculture Preserve zone districts are required to provide a 200-foot buffer setback to the property line of the adjacent commercial agricultural parcel, unless an exception, as provided in ARC-1.4.2, is approved to reduce the extent of the agricultural buffer.

- **Policy ARC-1.4.2 (LCP), Reduced Agricultural Buffer Setbacks.** Any reduction in the 200-foot agricultural buffer setback may only occur as approved by the Agricultural Policy Advisory Commission or other County decision-maker, as established by the Agricultural Land Preservation and Protection ordinance.

Santa Cruz County Code

Chapter 16.50 (Agricultural Land Preservation and Protection) of the Santa Cruz County Code is intended to support and encourage continued agricultural operations in the County and to forewarn prospective purchasers and residents of property adjacent to agricultural operations of the necessary sounds, odors, dust, and hazardous chemicals that may accompany agricultural operations:

Santa Cruz County Code 16.50.010(C)

> Accordingly, no agricultural activity, operation, or facility or appurtenances thereof shall be or become a nuisance, public or private, if it has been conducted and maintained for commercial purposes, and in a manner consistent with proper and accepted customs and standards as established and followed by similar agricultural operations, and in a manner consistent with all applicable federal, state, and local laws, regulations, permits and approvals, and the conditions thereof, after it has been in operation for more than 3 years if it was not a nuisance when it began . . .

Santa Cruz County Code 16.50.080(A) Preservation of Type 3 agricultural lands requires:

> Lands designated as Type 3 agricultural land shall be maintained in the Commercial Agriculture ("CA") Zone District, or if within an area designated as a timber resource, be maintained in the Timber Production ("TP") Zone District, or if within a public park owned either by a public agency, or by a nonprofit that is organized to protect or provide agricultural, open space, timber and/or recreation lands and uses, be maintained in the Parks and Recreation ("PR") Zone District. Type 3 land shall not be rezoned to any other zone district unless the Type 3 designation is first removed pursuant to SCCC 16.50.050.

Accordingly, rezoning of agricultural resource land types requires an agricultural viability analysis for determination of whether new information has become available regarding the appropriateness of any specific agricultural resource land type redesignations and rezoning. This would potentially include Type 3, Type 2, or Type 1 resource type land.

Additionally, to prevent or minimize potential conflicts between either existing or future commercial agricultural and other land uses that involve habitable structures or other areas of intensive human activity, Santa Cruz County Code, Section 16.50.095 outlines requirements for 200-foot agricultural buffer setbacks. Agricultural buffers are designed to provide a physical barrier to noise, dust, odor, and other effects that may be a result of normal commercial agricultural operations. Santa Cruz County Code 16.50.095(B) establishes the requirements for development subject to agricultural buffer setbacks:

> (B)(2) Requirements for Development Projects. All development for habitable uses, including residential habitable accessory structures and primary and accessory dwellings; for commercial, industrial, recreational, or institutional uses where the public will gather or be stationed for work; for agricultural uses involving intensive human activity (such as facilities for public assembly, sleeping quarters or workplace facilities where employees are stationed); and for outdoor areas designed for intensive human use that are within 200 feet of the property line of any parcel containing Type 1, Type 2, or Type 3 commercial

> agricultural land shall provide and maintain a 200-foot buffer setback from the Type 1, Type 2 or Type 3 commercial agricultural land. The 200-foot agricultural buffer setback shall incorporate vegetative or other physical barriers as determined necessary to minimize potential land use conflicts. Where required to comply with agricultural buffer setback requirements, an accessory dwelling unit (ADU) 13.10.631.

Santa Cruz County Code 16.50.095(D) provides for conditional reductions to agricultural buffers:

> (D) Development Projects. Notwithstanding the buffer setback provisions of subsections (B) and (C) of this section, an agricultural setback distance of less than 200 feet may be established for developments on existing parcels of record when the Agricultural Policy Advisory Commission (APAC) makes one of the following findings in addition to the requirements in subsection (D)(3) of this section:
>
> (a) Significant topographic differences exist between the agricultural and nonagricultural uses that eliminates or minimizes the need for a 200-foot agricultural buffer setback;
>
> (b) Permanent substantial vegetation (such as a riparian corridor or woodland protected by the County's riparian corridor or sensitive habitat ordinances) or other physical barriers exist between the agricultural and nonagricultural uses that eliminate or minimize the need for a 200-foot agricultural buffer setback;
>
> (c) A lesser setback distance is found to be adequate to prevent conflicts between the nonagricultural development and the adjacent agricultural development and the adjacent agricultural land, based on the establishment of a physical barrier (unless it is determined that the installation of a barrier will hinder the affected agricultural use more than it would help it, or would create a serious traffic hazard on a public or private right-of-way) or the existence of some other factor that effectively supplants the need for a 200-foot agricultural buffer setback; or
>
> (d) The imposition of a 200-foot agricultural buffer setback would preclude building on a parcel of record in which case a lesser buffer setback distance may be permitted; provided, that the maximum possible setback distance is required, coupled with a requirement for a physical barrier (e.g., solid fencing and/or vegetative screening) to provide the maximum buffering possible, consistent with the objective of permitting building on a parcel of record.

Accordingly, the Alternative 3 project would include solid fencing and a vegetative barrier along the north property line, adjacent to APN 052-011-09, subject to review and approval by the Agricultural Policy Advisory Commission.

Zoning Regulations

Santa Cruz County's Zoning Ordinance identifies specific zoning districts in the County and development standards that apply to each district. The County's agricultural zoning districts include Agriculture (A), Commercial Agriculture (CA), and the Agricultural Preserve (-P) combining district overlay. The Agriculture (A) zoning district provides for noncommercial agricultural uses, such as family farming and animal raising, and allows limited commercial agricultural activities on the small amount of agricultural land remaining in the County that is not designated as commercially suitable but that still constitutes a productive natural resource. The purposes of the Commercial Agriculture (CA) zoning district are to preserve the commercial agricultural lands in Santa Cruz County that are a limited and irreplaceable natural resource, and to protect their economic integrity. The Agricultural Preserve (-P) combining district denotes lands under an agricultural preserve contract. The

Agricultural Preserve (-P) designation is used as an overlay to indicate parcels with Williamson Act agricultural preservation or open space contracts.

According to Santa Cruz County geographic information system (GIS) data, the Alternative 3 site is zoned Commercial Agriculture and Airport Combining Zone (CA-AIA). The Airport Influence Area (AIA) combining zone is associated with the Watsonville Municipal Airport and is defined as the area within 2 miles of the airport's boundaries. The Airport Influence Area (AIA) is an area where airport-related factors like noise, overflight, safety, and airspace protection may affect land use or require restrictions on land use. However, no portion of the Alternative 3 site is subject to Williamson Act agricultural preservation or open space contracts, or similar preservation easements (DOC 2024).

6.2.3 Methodology and Significance Thresholds

Methodology

This analysis considers the potential impacts of Alternative 3 with respect to agriculture, based on a review of site information, existing conditions, proposed activities, and the questions presented in Appendix G of the California Environmental Quality Act (CEQA) Guidelines (described under Significance Thresholds).

Significance Thresholds

As stated in the Chapter 6 introduction, the significance thresholds used in this analysis are based on Appendix G of the CEQA Guidelines, which provides a sample Initial Study checklist that includes a number of factual inquiries related to the subject of agricultural resources and other environmental topics. Thus, the letters and thresholds presented below correspond with the questions in the Appendix G Initial Study checklist.

For purposes of this Environmental Impact Report (EIR) and consistent with the analysis for the Proposed Project, a significant impact would occur if implementation of Alternative 3 would result in any of the following conditions:

A. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Important Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use

B. Conflict with existing zoning for agricultural use, or a Williamson Act contract

C. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))

D. Result in the loss of forest land or conversion of forest land to non-forest use

E. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use

6.2.4 Alternative 3 Impact Analysis

For each impact, the discussion is separated into construction, operation, and project components as needed to describe the potential impact. The overall conclusion or significance determination is presented at the end of the discussion, as well as in parentheses at the end of the numbered impact statement.

As described in Section 5.2.3, Alternative 3. Combined Facilities on Adjacent Property (in Chapter 5, Project Alternatives), the Alternative 3 project includes the following components:

1. Transfer Station
2. Organics Diversion Facility
3. Recycling Center
4. Scale House
5. General Plan/Local Coastal Program Land Use Designation and Zoning Map Amendments

In addition to the above components, Landfill Closure and Revegetation (including the Environmental Enhancement and Restoration Features) would be implemented as described in Chapter 2, Section 2.4, Project Components, and potential impacts associated with that project component are described in Section 3.2.4. The additional enhancement and restoration features included as part of Alternative 3 (described in Section 5.2.3 under *Additional Design Information*) are considered in the evaluation below.

Threshold A:	Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Important Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use

Impact AG-1 ALTERNATIVE 3 WOULD NOT CONVERT IMPORTANT FARMLAND TO NON-AGRICULTURAL USE. (NO IMPACT)

The land on the Alternative 3 site, as shown within the red boundary on **Figure 5-12b**, is not designated as Important Farmland on the California Department of Conservation FMMP maps. Rather, the site is designated "Other Land," indicating land not qualifying for other mapping categories.

The FMMP evaluates and maps agricultural land according to soil quality and irrigation status and identifies Prime Farmland as land "with the best combination of physical and chemical features able to sustain long term agricultural production. This land has the soil quality, growing season, and moisture supply needed to produce sustained high yields. Land must have been used for irrigated agricultural production at some time during the four years prior to the mapping date" (DOC 2026).

The conditions evaluated at the Alternative 3 site are consistent with the FMMP mapping; as discussed in the Agricultural Viability Study, the Alternative 3 site has not been used for agricultural production, irrigated or otherwise, in the last 10 years, and the soil qualities at the Alternative 3 site are not expected to produce sustained high yields.

Therefore, the Alternative 3 project components, as well as the associated General Plan/LCP land use designation and zoning map amendments, would not convert Important Farmland to non-agricultural use. There would be **No Impact**.

Threshold B: Conflict with existing zoning for agricultural use, or a Williamson Act contract

Impact AG-2 ALTERNATIVE 3 WOULD NOT CONFLICT WITH A WILLIAMSON ACT CONTRACT, BUT WOULD CONFLICT WITH EXISTING ZONING FOR AGRICULTURAL USE. (LESS THAN SIGNIFICANT IMPACT WITH MITIGATION)

Alternative 3 includes four primary components: Transfer Station, Organics Diversion Facility, Recycling Center, and Scale House. It also includes internal roadways, stormwater management ponds, and environmental enhancement and restoration features. The Alternative 3 site is zoned Commercial Agriculture and Airport Combining Zone (CA-AIA), and no portion of the site is enrolled in a Williamson Act contract. Therefore, there would be no conflict with a Williamson Act contract.

The Agricultural Uses chart contained in Santa Cruz County Code, Section 13.10.312, does not allow public facilities, such as the combined facilities (transfer station, organics diversion facility, recycling center) in the Commercial Agriculture (CA) zone district. This zone district limits uses to agricultural production exclusively and incidental uses that support agricultural production. Principally permitted uses in the Commercial Agriculture (CA) zone include apiculture (beekeeping), berry and other vine crops, field crops, livestock raising, nursery crops, orchards, poultry and other fowl raising, and row crops. A range of other agricultural uses and associated uses, including farmworker housing, may be approved with administrative or Planning Commission review.

As stated above and described in Section 5.2.3, Alternative 3 includes General Plan/LCP Land Use Designation and zoning map amendments to APNs 052-011-11 and 052-021-33. Included with the proposed amendments is removal of the agricultural resources land designation (Type 3) from the Agricultural Resource Map. Amendments to the Agricultural Resource Maps, including amendments to eliminate or add Type 1, Type 2, or Type 3 agricultural land designations, constitute a change to the County General Plan/LCP and must be processed concurrent with a General Plan/LCP amendment. The amendment also requires a change to the General Plan/LCP Land Use Designation maps to redesignate the parcel's land use from Agriculture (AG) to Public Facility/Institutional (P) and to amend the County Zoning Map for this parcel from Commercial Agriculture and Airport Combining Zone (CA-AIA) to Public and Community Facilities and Airport Combining Zone (PF-AIA).

Policy ARC-1.3.1 of the County General Plan/LCP establishes requisite criteria to support the proposed land use plan amendments and rezone from Commercial Agriculture and Airport Combining Zone (CA-AIA) to Public and Community Facilities and Airport Combining Zone (PF-AIA), including the requirement for an evaluation of the site's viability for current and future agricultural uses. An Agricultural Viability Study for Alternative 3 (**Appendix N**) was prepared to conduct an agronomic-based evaluation of the condition and status of the land within APN 052-011-11. The study evaluated the site's historic agricultural use, soil characteristics (including review of the Natural Resources Conservation Service Soil Survey, Irrigated Capability Classification, and California Revised Storie Index), and the potential effects of the proposed development on adjacent agricultural resources.

The study concluded that approximately 16 acres of the Alternative 3 site consist of Watsonville Loam, while the remaining approximately 10 acres consist of Tierra-Watsonville complex soils. Neither soil type is classified as Prime Farmland. Watsonville Loam is designated as Farmland of Statewide Importance by the Natural Resources Conservation Service; however, evaluation of the site's Irrigated Capability Classification and California Revised Storie Index determined a Class 3 irrigated capability, indicating severe limitations that restrict crop selection or require specialized

conservation practices; and Grade 5 on the California Revised Storie Index, indicating very poor land productivity. In addition, the site is characterized as containing soils exhibiting high erosion potential and containing a substantial proportion of hydric soils that are susceptible to saturation, flooding, and ponding.

The Tierra-Watsonville complex soils comprising 10 acres of the Alternative 3 site are classified as Class IV irrigated capability and Grade 4 on the California Revised Storie Index, indicating severe limitations for agricultural production and poor land productivity.

Based on these characteristics, the Alternative 3 site has limited potential for viable commercial agricultural use, which is reflected in the lack of commercial agricultural use over the past decade. The site's overall soil capability, productivity limitations, erosion potential, and hydric conditions indicate that it does not exhibit the characteristics associated with Type 3 Agricultural Resource Lands identified in General Plan Policy ARC-1.1.2.

In addition to evaluation of the on-site agricultural resources, the Viability Study also included an evaluation of the combined facilities' potential impacts to off-site resources, pursuant to the third criterion of General Plan Policy ARC-1.3.1. The study identified that the combined facilities could potentially limit future suitability for production of leafy greens or other food crops at the property immediately north of the site (APN 052-011-09), which in its present use as a commercial ornamental plant nursery is not expected to be impacted. County staff consulted with Greg Komar, technical director of the Leafy Greens Marketing Association, seeking expertise and technical information related to pathogen transport studies, airborne particulate dispersal, and potential mitigations to protect food safety. Mr. Komar indicated that the use of fencing and vegetative buffers, such as required under Santa Cruz County Code, Section 16.50.095, are recognized mitigation measures. Therefore, where the combined facilities include development or area of intensive human use within 200 feet of the adjacent property to the north (APN 052-011-09), solid fencing at least 6 feet in height and a vegetative barrier would be installed and permanently maintained (Mitigation Measure AG-2).

Mr. Komar further acknowledged that the fully enclosed design of the Alternative 3 combined facilities on the adjacent parcel (transfer station, organics diversion facility, and recycling center) would be a net positive improvement compared to the existing conditions at the adjacent Buena Vista Landfill site, which uses open-air operations. Alternative 3 would also be an improvement over the Proposed Project, which cannot be modified to enclose either of the two organics diversion facility options due to construction design limitations. Buildings built over waste at a closed landfill site are not feasible due to differential settlement in the waste body that would lead to failure of the building's foundation. Also, footings necessary to construct a building over the waste body would impact the integrity of the state-mandated landfill cap, which is necessary to prevent the escape of landfill gas as required by state law at all closed landfill sites.

In summary, Alternative 3 would not conflict with a Williamson Act contract but would conflict with uses allowed under the existing Commercial Agriculture (CA) zoning designation. The Agricultural Viability Study required for the proposed land use amendments concluded that the Alternative 3 site is not viable for commercial-scale agriculture and, in accordance with County General Plan Policy ARC-1.3.1, can be converted for non-agricultural use provided that potential impacts to the viability of the adjacent commercial agricultural land immediately north of the Alternative 3 site can be resolved. The potentially significant impact to adjacent agricultural land would be reduced to a less than significant level by fully enclosing waste management activities at the Alternative 3 site, as currently designed (refer to Section 5.2.3 and **Figure 5-12d**); using best management practices, in

compliance with the state-mandated Solid Waste Transfer Operations permit issued by the California Department of Resources Recycling and Recovery to control potential vectors (e.g., birds, rodents, and flies); and managing waste handling and acceptance policies to reduce the potential for pathogens to enter and leave the combined facilities site, in compliance with the operations permit issued by the California Department of Resources Recycling and Recovery. Thus, the combined facilities will not accept items that cannot be properly managed in the transfer operation or that would impact neighboring land uses. Additional measures to resolve potential land use conflicts and protect commercial agricultural land, consistent with Santa Cruz County General Plan Objective ARC-1.4, include providing solid fencing (at least 6 feet in height) and a vegetative barrier along the northern property line (Mitigation Measure AG-2). In addition, Alternative 3 would be subject to review by the Agricultural Policy Advisory Commission to ensure consistency with applicable requirements for proposals involving the conversion of commercial agricultural land.

Therefore, the impact of Alternative 3 (Combined Facilities on Adjacent Property), which includes the associated General Plan/LCP land use designation and zoning map amendments to designate the site for public facilities, would not conflict with the existing zoning for agricultural use, nor would it conflict with a Williamson Act contract. The impact would be **Less than Significant with Mitigation** (Mitigation Measure AG-2).

Mitigation Measure AG-2: Agricultural Buffer (Solid Board Fencing and Evergreen Vegetation) along Northern Property Line

Prior to the start of construction, a solid fence at least six feet in height and a vegetative barrier shall be installed along the northern property line to provide a physical buffer between the Alternative 3 site and the adjacent commercial agricultural property. The fencing and vegetative barrier shall extend laterally at least 25 feet beyond the extent of any development or area of intensive human use located within 200 feet of the adjacent commercial agricultural property.

The proposed barrier shall be reviewed by the Santa Cruz County Agricultural Policy Advisory Commission to ensure consistency with applicable County policies, verify that the barrier provides adequate protection from potential land use conflicts, and ensure that the height and design of the barrier do not detrimentally affect the adjacent agricultural property through excessive shading. The vegetative barrier shall consist of plant varieties identified on the County's Agricultural Buffer Plant List.

Both the fencing and vegetative barrier shall be maintained for the operational life of the facility.

Threshold C:	Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))
Threshold D:	Result in the loss of forest land or conversion of forest land to non-forest use

Impact AG-3 ALTERNATIVE 3 WOULD NOT CONFLICT WITH EXISTING ZONING FOR, OR CAUSE REZONING OF, FOREST LAND OR TIMBERLAND, OR RESULT IN THE LOSS OF FOREST LAND OR CONVERSION OF FOREST LAND TO NON-FOREST USE. (NO IMPACT)

The Alternative 3 site is not considered by the County to be forest land, and it is not zoned Timber Production District (TP), a designation which is intended to identify parcels suitable for growing and harvesting timber and other forest products. Therefore, Alternative 3 would not convert forest land to a non-forest use, nor conflict with existing timber production zoning or cause rezoning of forest land or timberland.

The Alternative 3 site is comprised of an 11-acre portion of APN 052-011-11 and a 2-acre portion of APN 052-021-33, both zoned Commercial Agriculture and Airport Combining Zone (CA-AIA). Alternative 3 includes rezoning the parcels from Commercial Agriculture and Airport Combining Zone (CA-AIA) to Public and Community Facilities and Airport Combining Zone (PF-AIA). Timber production and harvesting is only permitted in Commercial Agriculture and Airport Combining Zone (CA-AIA) zoning districts located outside the Coastal Zone. The Alternative 3 site is located within the Coastal Zone, and timber production and harvesting is not a permitted use in the Public and Community Facilities and Airport Combining Zone (PF-AIA) zone. Therefore, timberland production is not a permitted use on the Alternative 3 site under the current or proposed zoning.

In summary, Alternative 3 (Combined Facilities on Adjacent Property), including the associated General Plan/LCP land use designation and zoning map amendments and environmental enhancement/restoration features, would not conflict with existing zoning for, or cause rezoning of, forest land or timberland, or result in the loss of forest land or conversion of forest land to non-forest use. There would be **No Impact**.

Threshold E:	Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use

Impact AG-4 ALTERNATIVE 3 WOULD NOT INVOLVE OTHER CHANGES IN THE EXISTING ENVIRONMENT WHICH COULD RESULT IN CONVERSION OF FARMLAND TO NON-AGRICULTURAL USE OR FOREST LAND TO NON-FOREST USE. (LESS THAN SIGNIFICANT IMPACT)

As discussed under Impact AG-1, the Alternative 3 site is classified as Other Land on maps prepared for the FMMP. The existing land uses on the 11-acre portion (APN 052-011-11) where the combined facilities would be located include paved and unpaved roadways and several vacant structures last used in 2016, including three large greenhouses, a packing shed, a boiler house, a bathroom/lunchroom, and several other miscellaneous structures. The existing land uses on the 2-acre portion (APN 052-021-33) include unpaved driveways and outdoor storage for landfill facilities (e.g., storage bins), with undeveloped oak woodland in between. As discussed under Impact AG-2, the Alternative 3 site does not maintain the characteristics or soil qualities that are suitable for farming, and does not contain land classified as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance based on the California Department of Conservation FMMP maps (DOC 2026). The Alternative 3 project, as designed and operated, would reduce impacts to adjacent commercial agricultural properties by using enclosed operations and best management practices, and would include the construction of solid and vegetative barriers between the site and adjacent commercial agricultural properties. Therefore, developing the site with the combined facilities would not convert farmland, on site or off site, to a non-agricultural use.

As discussed under Impact AG-3, the Alternative 3 site is not used or zoned for forest land, timberland, or timberland production. There are 18 trees that would be removed to construct the combined facilities and stormwater basin/wetlands and 21 trees that would be removed to restore the Harkins Slough Tributary with native species, but the County does not consider this area "forest land." The potential impacts associated with tree removal for Alternative 3 are addressed in Section 6.4, Biological Resources. Therefore, development of the site with the combined facilities would not convert forest land to non-forest uses.

In summary, Alternative 3 (Combined Facilities on Adjacent Property), including the associated General Plan/LCP land use designation and zoning map amendments and environmental enhancement/restoration features, would not involve other changes in the existing environment which, due to their location or nature, could result in conversion of farmland to non-agricultural use or forest land to non-forest use. The impact would be **Less than Significant**. No mitigation is required.

6.2.5 Cumulative Impact Discussion

The potential cumulative impacts of Alternative 3 would be similar to but more than those of the Proposed Project, which are presented in Chapter 4, Other CEQA-Required Discussions.

As discussed in Chapter 4, the County's Sustainability Update EIR concluded that, because cumulative development and growth would tend to be located in developed urban areas and along transportation corridors (rather than on agricultural lands), cumulative impacts related to potential conversion of Important Farmlands, conflicts with agricultural zoning or Williamson Act contracts, or other changes that could potentially lead to conversion of agricultural lands would be less than significant.

As discussed above, Alternative 3 would not convert Important Farmland to non-agricultural use (Impact AG-1), and no portion of the Alternative 3 site is enrolled in a Williamson Act contract (Impact AG-2); therefore, there is no potential contribution to a cumulative impact to Important Farmland or land under Williamson Act contract. Because the site is zoned Commercial Agriculture and Airport Combining Zone (CA-AIA), Alternative 3 includes amending the General Plan/LCP Land Use Designation and zoning map to support the development of the combined facilities, which requires an Agricultural Viability Study. An Agricultural Viability Study was prepared by Rush and Duttle Consulting, dated April 2026, and concluded that the Alternative 3 site is not viable for commercial-scale agriculture, based on the soil irrigated capability classification of either Class 3 or Class 4 with a subclass "e" rating. These ratings severely limit the choice of plants, or require special conservation practices, or both. The greenhouse area of the parcel is also considered "Grade 5 – Very Poor" for agricultural production, and the remainder of the soils contemplated for redevelopment to the east of the greenhouses are not rated and considered unsuitable for irrigated agriculture based on their erosion potential resulting from soil composition and slope. Further, with the proposed amendments to redesignate the site for Public Facility use, there would be no conflict with existing zoning for agricultural use.

Impact AG-C: Cumulative development would not result in a significant cumulative impact to agricultural resources, according to the Sustainability Update EIR. Because there is not an existing significant cumulative impact, **the Alternative 3 contribution would not be cumulatively considerable**.

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6.3 Air Quality

This section describes existing regional air quality, outlines the regulatory framework applicable to air quality management, and evaluates impacts related to criteria air pollutant emissions as a result of Alternative 3, Combined Facilities on Adjacent Property (Alternative 3) construction and operation. **Table 6.3-1** presents a summary of potential impacts related to air quality.

Table 6.3-1. Summary of Alternative 3 Impacts Related to Air Quality

Impact	Significance before Mitigation	Mitigation	Significance after Mitigation
AIR-1. Alternative 3 would not conflict with or obstruct implementation of the adopted MBARD AQMP.	Less than Significant	None Required	Less than Significant
AIR-2. Alternative 3 would not result in a cumulatively considerable net increase of any criteria pollutant for which the region is designated non-attainment.	Less than Significant	None Required	Less than Significant
AIR-3. Alternative 3 would not expose sensitive receptors to substantial pollutant concentrations.	Less than Significant	None Required	Less than Significant
AIR-4. Alternative 3 would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.	Less than Significant	None Required	Less than Significant

Notes: The impact, significance determination, and mitigation apply to Alternative 3 as a whole, considering all components, unless otherwise noted.

AQMP = Air Quality Management Plan; MBARD = Monterey Bay Air Resources District

6.3.1 Existing Conditions

Regional and Project Area Setting

Climate and Topography

The regional climate and topography for Alternative 3 would be the same as the Proposed Project. They are both located in the North Central Coast Air Basin (NCCAB), and the air patterns are influenced by the Santa Cruz Mountains and the semi-permanent high-pressure cell in the eastern Pacific Ocean. Refer to Section 3.3.1 for additional detail.

Air Pollutants of Primary Concern

The federal and state Clean Air Acts mandate the control and reduction of certain air pollutants. Under these acts, the U.S. Environmental Protection Agency (USEPA) and the California Air Resources Board (CARB) have established ambient air quality standards (AAQS) for certain "criteria pollutants" considered harmful to public health and the environment. Ambient air pollutant concentrations are affected by the rates and distributions of corresponding air pollutant emissions and by the climatic and topographic influences discussed above. The primary determinant of concentrations of non-reactive pollutants (such as carbon monoxide [CO] and particulate matter) is proximity to major sources. Ambient CO levels in particular usually closely follow the spatial and temporal distributions of vehicular traffic. Refer to Section 3.3.1 for a discussion of the following primary criteria air

pollutants: ozone, CO, nitrogen dioxide (NO_2), and suspended particulate matter (inhalable airborne dust) that is 10 and 2.5 microns or less (PM_{10} and $PM_{2.5}$).

Current Air Quality

Federal and state standards have been established for ozone, CO, NO_2, sulfur dioxide (SO_2), lead, and fine particulates (PM_{10} and $PM_{2.5}$). **Table 6.3-2** summarizes the current federal and state standards for each of these pollutants. The primary standards listed below have been set at levels intended to protect public health. California standards are generally more restrictive than federal standards. Depending on if the standards are met or exceeded, the local air basin is classified as in "attainment" or in "non-attainment."

Table 6.3-2. Current Federal and State Ambient Air Quality Standards

Pollutant	Averaging Time	Federal Primary Standards	California Standard
Ozone	1-Hour	—	0.09 ppm
	8-Hour	0.070 ppm	0.070 ppm
Carbon Monoxide (CO)	8-Hour	9 ppm	9 ppm
	1-Hour	35 ppm	20 ppm
Nitrogen Dioxide (NO_2)	Annual	0.053 ppm	0.030 ppm
	1-Hour	0.1 ppm	0.18 ppm
Sulfur Dioxide (SO_2)	24-Hour	0.14 ppm	0.04 ppm
	1-Hour	0.075 ppm	0.25 ppm
Respirable Particulate Matter (PM_{10})	Annual	—	20 µg/m^3
	24-Hour	150 µg/m^3	50 µg/m^3
Fine Particulate Matter ($PM_{2.5}$)	Annual	9 µg/m^3	12 µg/m^3
	24-Hour	35 µg/m^3	—
Lead	30-Day Average	—	1.5 µg/m^3
	3-Month Average	0.15 µg/m^3	—

Source: CARB 2024a.
Notes: µg/m^3 = micrograms per cubic meter; ppm = parts per million

The Monterey Bay Air Resources District (MBARD) consists of all three counties in the NCCAB, including Santa Cruz County. Therefore, like the Proposed Project area, the Alternative 3 site is under the jurisdiction of the MBARD. The MBARD is responsible for air monitoring, permitting, enforcement, long-range air quality planning, regulatory development, education, and public information activities related to air pollution in the NCCAB. The MBARD monitors ambient air quality in the NCCAB at monitoring stations located in Carmel Valley, Davenport, Hollister, Salinas, Santa Cruz, Scotts Valley, and Watsonville.

The MBARD monitors air pollutant levels to measure and determine if air quality standards are met and, if they are not met, to develop strategies to meet the standards. As indicated above, depending on if the standards are met or exceeded, the air basin is classified as being in "attainment" or in "non-attainment," respectively. **Table 6.3-3** summarizes the federal and state attainment status for criteria air pollutants.

As shown in **Table 6.3-3**, the NCCAB is in attainment or unclassifiable status for all federal AAQS. For state AAQS, the NCCAB is currently in non-attainment status for PM_{10}.

Table 6.3-3. Santa Cruz County Air Basin Attainment Status

Pollutant	Averaging Time	California Standards	Federal Standards
Ozone	1-Hour	Attainment	No Federal Standard
	8-Hour		Attainment
Respirable Particulate Matter (PM_{10})	Annual Arithmetic Mean	Non-Attainment	No Federal Standard
	24-Hour		Unclassified[a]
Sulfur Dioxide (SO_2)	24-Hour	Attainment	Unclassified/Attainment
	1-Hour		
Fine Particulate Matter ($PM_{2.5}$)	Annual Arithmetic Mean	Attainment	Attainment
	24-Hour	No State Standard	
Carbon Monoxide (CO)	8-Hour	Unclassified	Unclassified/Attainment
	1-Hour		
Nitrogen Dioxide (NO_2)	Annual Arithmetic Mean	No State Standard	Unclassified/Attainment
	1-Hour	Attainment	No Federal Standard

Source: CARB 2022.
Notes:
[a] Unclassified; indicates data are not sufficient for determining attainment or non-attainment.
Attainment = Meeting air quality standards; Non-attainment = Exceeding air quality standards

Table 6.3-4 summarizes available annual air quality data for the County for the most recent years available at the MBARD's Soquel Avenue monitoring station and the San Juan Bautista-Nyland monitoring station. The Soquel Avenue monitoring station, located at 2544 Soquel Avenue in Santa Cruz (11 miles northwest of Buena Vista Landfill), is the closest station. The San Juan Bautista-Nyland monitoring station, located at 100 Nyland Drive in San Juan Bautista (16 miles southeast of Buena Vista Landfill), is the closest station to monitor PM_{10} in the NCCAB that has data available for multiple years. The data collected at the MBARD-operated stations is shown in **Table 6.3-4**.

Table 6.3-4. Ambient Air Quality Data

Pollutant	Monitoring Station	2021	2022	2023
Ozone, ppm – Worst Hour	Soquel Avenue	0.072	0.060	0.070
Number of Days of State Exceedances (>0.09 ppm)		0	0	0
Ozone, ppm – Worst 8-Hour Average	Soquel Avenue	0.058	0.050	0.054
Number of Days of Federal/State Exceedances (>0.07 ppm)		0	0	0
Particulate Matter <10 microns, $\mu g/m^3$ Worst 24 Hours	San Juan Bautista-Nyland	56.1	53.4	79.8
Number of Samples of State Exceedances (>50 $\mu g/m^3$)		2	2	2
Number of Samples of Federal Exceedances (>150 $\mu g/m^3$)		0	0	0
Particulate Matter <2.5 microns, $\mu g/m^3$ Worst 24 Hours	Soquel Avenue	17.5	14.7	47.4
Number of Days Federal Exceedances		0	0	1

Source: CARB 2024b.
Notes: $\mu g/m^3$ = micrograms per cubic meter; ppm = parts per million

Given that the NCCAB is designated as non-attainment for PM_{10}, this is the primary pollutant of concern for the NCCAB. As indicated in **Table 6.3-4**, average PM_{10} concentrations exceeded the state standard for PM_{10} twice in each year from 2021 to 2023.

Sensitive Receptors

Certain population groups are more sensitive to air pollution than others, in particular children, older adults, and people with acute and chronic illnesses, especially those with cardio-respiratory diseases. As described in the MBARD's 2008 California Environmental Quality Act (CEQA) Air Quality Guidelines (MBARD Guidelines), a sensitive receptor is defined as any residence, including private homes, condominiums, apartments, and living quarters; education resources, such as preschools and kindergarten through grade 12 (K–12) schools; daycare centers; and healthcare facilities, such as hospitals or retirement and nursing homes (MBARD 2008).

The nearest existing sensitive receptor is the residence located 115 feet north of the Alternative 3 site boundary. There are six additional residences located between 500 feet and 1,500 feet of the Alternative 3 site boundary. The existing residence on the site would be vacated as part of Alternative 3 implementation and thus would not be a sensitive receptor for potential project impacts.

6.3.2 Regulatory Setting

This section describes the federal, state, regional, and local plans, policies, and laws relevant to air quality for Alternative 3, as well as the Proposed Project and Alternatives 1 and 2.

Federal

Clean Air Act and National Ambient Air Quality Standards

The Clean Air Act (CAA) of 1970 is the comprehensive federal law that regulates air emissions from stationary and mobile sources. The CAA authorizes the USEPA to establish National Ambient Air Quality Standards to protect public health and public welfare and to regulate emissions of hazardous air pollutants. Refer to Section 3.3.2 for additional detail. **Table 6.3-2** lists the current National Ambient Air Quality Standards, and **Table 6.3-3** lists the attainment status of the NCCAB for the criteria air pollutants. The NCCAB is in attainment or unclassified for all criteria air pollutants.

State

California Clean Air Act and California Ambient Air Quality Standards

As described in Section 3.3.2, CARB adopted the California Ambient Air Quality Standards, which are equal to or stricter than the federal standards for six criteria air pollutants and provided in **Table 6.3-2**. Similar to the federal CAA, areas have been designated as attainment, non-attainment, or unclassified with respect to the California Ambient Air Quality Standards. The NCCAB is currently in state non-attainment status for PM_{10}.

Additionally, in September 2000, CARB approved the Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles (CARB 2000) and has adopted several regulations that reduce diesel emissions from in-use vehicles and engines throughout California. In 2005, CARB's Community Health Program made available the Air Quality and Land Use Handbook: A Community Health Perspective to serve as a general reference guide for evaluating and reducing air pollution impacts associated with new projects that go through the land use decision-making process (CARB 2005). Refer to Section 3.3.2 for more information.

Regional

The MBARD regulates air quality in the NCCAB and is responsible for attainment planning related to criteria air pollutants and for district rule development and enforcement. It also reviews air quality analyses prepared for CEQA assessments and published the MBARD Guidelines (last revised February 2008) for use in the evaluation of air quality impacts (MBARD 2008). The purpose of the MBARD Guidelines is to assist in the review and evaluation of air quality impacts from projects that are subject to CEQA. The MBARD Guidelines are an advisory document intended to provide lead agencies, consultants, and project proponents with uniform procedures for assessing potential air quality impacts and preparing the air quality section of environmental documents. The MBARD Guidelines are also intended to help these entities anticipate areas of concern from the MBARD in its role as a lead, commenting, and/or responsible agency for air quality.

During construction, an impact would occur if a project would cause a violation of PM_{10} AAQS at nearby or upwind of sensitive receptors by emitting more than 82 pounds (lbs)/day of PM_{10}. Ozone impacts during construction would potentially occur if a project uses equipment that is not "typical construction equipment." Typical construction equipment includes, but is not limited to, dump trucks, scrapers, bulldozers, compactors, and front-end loaders. Construction projects using typical construction equipment are accommodated in the emission inventories of federally and state-required air plans and would not have a significant impact.

During operation, a project is considered to have a significant impact if it would:

- Generate direct (area source or stationary) plus indirect (operational or mobile) emissions of either reactive organic gases (ROG) or oxides of nitrogen (NOx) that exceed 137 lbs/day
- Generate on-site emissions of PM_{10} exceeding 82 lbs/day
- Generate direct emissions of CO exceeding 550 lbs/day
- Generate direct emissions of sulfur oxides (SO_x) exceeding 150 lbs/day

The MBARD Guidelines state that the 82 lbs/day threshold for construction emissions of PM_{10} is the threshold for both individual and cumulative impacts on local air quality. Projects that are inconsistent with the Air Quality Management Plan (AQMP), described below, would result in a significant cumulative impact related to ozone emissions. A project is consistent with the AQMP if it is consistent with the growth assumptions in the AQMP and is, therefore, accommodated in the emissions inventories.

For impacts related to CO, the MBARD Guidelines indicate that any of the following traffic effects should be assumed to generate a significant CO impact unless CO dispersion modeling demonstrates otherwise:

- Intersections or road segments that operate at level of service (LOS) D or better that would operate at LOS E or F with the project's traffic
- Intersections or road segments that operate at LOS E or F where the volume-to-capacity ratio would increase 0.05 or more with the project's traffic
- Intersections that operate at LOS E or F where delay would increase by 10 seconds or more with the project's traffic
- Unsignalized intersections that operate at LOS E or F where the reserve capacity would decrease by 50 or more with a project's traffic (this criterion is based on the turning movement with the worst reserve capacity)
- Project would generate substantial heavy-duty truck traffic or generate substantial traffic along urban street canyons or near a major stationary source of CO

In accordance with the California CAA, the MBARD has developed an AQMP (MBARD 2017). The focus of the plan is achieving the 8-hour ozone standard in the region. The plan includes an updated air quality trends analysis; an emissions inventory that includes the latest information on stationary, area, and mobile emission sources; and mobile source programs.

Local

Santa Cruz County General Plan/Local Coastal Program

Protection of air quality is incorporated into several elements of the County of Santa Cruz's (County) General Plan/Local Coastal Program (LCP). Built Environment Element strategy BE-3.1c requires buffer zones between new industrial land uses and sensitive receptors in accordance with CARB siting recommendations, and Policy BE-5.1g requires new coastal-dependent industry to implement all applicable MBARD regulations. Objective AM-1.1 of the Access and Mobility Element is to reduce emissions through reducing vehicle miles traveled (VMT) and increasing clean vehicle usage. Additionally, the Public Safety Element includes requirements that new emissions sources mitigate emissions such that the facility would not contribute to non-attainment of AAQS or substantially deteriorate conditions.

Santa Cruz County Code

Chapter 16.92 of the County Code, Environmental Principles and Policies to Guide County Government, includes a policy to ensure that future development does not create unacceptable levels of air pollution.

6.3.3 Methodology and Significance Thresholds

Methodology

The analysis of air quality impacts follows the guidance and methodologies recommended in the MBARD Guidelines and in Appendix G of the CEQA Guidelines.

The construction and net increase operation criteria air pollutant emissions for Alternative 3 are estimated using the California Emissions Estimator Model (CalEEMod), Version 2022.1.1.43.

Construction assumptions are provided by the Project design engineer. These assumptions include anticipated construction equipment, schedule, and earth movement, which are summarized in Section 5.2.3, Alternative 3, Combined Facilities on Adjacent Property, including planned construction best management practices (BMPs). These include limiting vehicle speeds on unpaved roads to a maximum of 25 miles per hour and watering exposed dirt surfaces in active construction areas twice daily.

Operational emissions assume default assumptions for the CalEEMod manufacturing land use, except where Alternative 3-specific information is available. The manufacturing land use was determined to be the most representative of Alternative 3 operation because it is intended to represent land uses where the primary activity is the conversion of raw materials into finished products, and generally also has office functions at the site.

Additionally, with Alternative 3 operation, there would be no new natural gas use, and new materials handling and heating, ventilation, and air conditioning (HVAC) systems would include electric-powered equipment. The net increase in vehicle trips is based on data from the transportation analysis for Alternative 3 (**Appendix T)**. A net increase of 24 trucks per day (48 daily truck trips) is anticipated for the transfer of materials from Buena Vista Landfill to the ReGen Monterey Landfill.

Ten additional personal vehicle trips are also assumed. Operation assumes intermittent use of a new forklift and loader at the new transfer station, but such uses as the organics diversion facility (ODF) and recycling center would be similar to existing operations occurring at the landfill. On-site vehicle use and operations would be on paved roadways/surfaces. The assumption of a net increase in equipment is conservative because similar off-road equipment currently operates on the site that would no longer operate following landfill closure.

Operational modeling does not specifically include the implementation of the landfill closure plan (which would involve earth movement until closure is complete), because emissions would be similar to existing conditions (which involve solid waste and earth movement).

CO hotspots are qualitatively evaluated based on the traffic data provided for Alternative 3 in **Appendix T**. To determine if Alternative 3 would conflict with or obstruct implementation of the 2012–2015 AQMP, Alternative 3 is compared to AQMP strategies and growth assumptions for the County of Santa Cruz in accordance with the MBARD Guidelines.

Significance Thresholds

As stated in the Chapter 6 introduction, the significance thresholds used in this analysis are based on Appendix G of the CEQA Guidelines, which provides a sample Initial Study checklist that includes a number of factual inquiries related to the subject of air quality and the other environmental topics. For air quality, CEQA Guidelines Appendix G states that "where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon" in making significance determinations. Thus, the County uses the MBARD Guidelines.

For the purposes of this Environmental Impact Report (EIR) and consistent with the analysis for the Proposed Project, a significant impact would occur if implementation of Alternative 3 would result in any of the following conditions:

A. Conflict with or obstruct implementation of the adopted MBARD AQMP.

B. Result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is non-attainment under an applicable federal or state ambient air quality standard.

C. Expose sensitive receptors to substantial pollutant concentrations.

D. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

6.3.4 Alternative 3 Impact Analysis

For each impact, the discussion is separated into construction, operation, and facility components as needed to describe the potential impact. The overall conclusion or significance determination is presented at the end of the discussion, as well as in parentheses at the end of the numbered impact statement.

As described in Section 5.2.3, Alternative 3, Combined Facilities on Adjacent Property (in Chapter 5, Project Alternatives), Alternative 3 includes the following components:

- Transfer Station
- Organics Diversion Facility
- Recycling Center

- Scale House
- General Plan/Local Coastal Program Land Use Designation and Zoning Map Amendments

Additionally, Landfill Closure and Revegetation, including the Environmental Enhancement and Restoration Features, would be implemented as described in Chapter 2, Section 2.4, Project Components, and potential impacts are described in Section 3.3.4. The additional enhancement and restoration features included as part of Alternative 3 (described in Section 5.2.3 under *Additional Design Information*) are considered in the evaluation below.

Threshold A: Conflict with or obstruct implementation of the adopted MBARD AQMP.

Impact AIR-1 ALTERNATIVE 3 WOULD NOT CONFLICT WITH OR OBSTRUCT IMPLEMENTATION OF THE ADOPTED MBARD AQMP. (LESS THAN SIGNIFICANT IMPACT)

According to the MBARD Guidelines, a project would conflict with or obstruct implementation of the AQMP for the NCCAB if it is inconsistent with the growth assumptions included in the AQMP in terms of population, employment, or regional growth in VMT (MBARD 2008). The growth assumptions inform estimated future emissions, particularly from vehicle use.

Alternative 3 does not contain new residential or commercial components and, therefore, would not increase the residential population or employment in the area. Alternative 3 results in changes to operation at the existing Buena Vista Landfill, including development of the project components listed above to meet solid waste disposal needs from current use and from anticipated countywide population growth, as the landfill reaches capacity.

Construction of Alternative 3 would generate temporary employment opportunities, which could be filled by the existing workforce in the city, county, or immediately surrounding areas, such as the San Francisco Bay Area and Monterey Bay Area. No direct growth inducement is expected to result from Alternative 3 implementation.

The AQMP outlines strategies for reducing vehicle-related emissions of ozone precursors. The 2012–2015 AQMP mobile source programs include a focus on direct emissions reduction. That is, the AQMP introduces programs that target consumer vehicle choices, including incentives for purchase or lease of electric vehicles, funding for electric vehicle infrastructure, and voluntary accelerated vehicle retirement programs for older vehicles. These programs focus on the choices of individual consumers. Implementation of Alternative 3 (operation) is not related to consumer vehicle choice, and Alternative 3 would have no impact on implementation of these AQMP mobile source programs. It is anticipated that the County's diesel trucks will be replaced by alternative fuel vehicles over time.

In summary, Alternative 3 (Combined Facilities on Adjacent Property), including the associated General Plan/LCP land use designation and zoning map amendments and environmental enhancement/restoration features, would be consistent with AQMP growth assumptions and emissions reduction goals. Therefore, Alternative 3 would not conflict with or obstruct implementation of the adopted MBARD AQMP. The impact would be **Less than Significant**. No mitigation is required.

Threshold B:	Result in a cumulatively considerable net increase of any criteria air pollutant for which the Project region is non-attainment under an applicable federal or state ambient air quality standard.

Impact AIR-2 ALTERNATIVE 3 WOULD NOT RESULT IN A CUMULATIVELY CONSIDERABLE NET INCREASE OF ANY CRITERIA AIR POLLUTANT FOR WHICH THE REGION IS DESIGNATED NON-ATTAINMENT. (LESS THAN SIGNIFICANT IMPACT)

Under Alternative 3, construction and operation of the transfer station, ODF, recycling center, and scale house would be together at the combined facilities, unlike the Proposed Project where the activities would be dispersed at different locations. As such, all components are addressed together below. Construction impacts from landfill closure would be the same as the Proposed Project (**Table 3.3-10**, Estimated Construction Daily Maximum Air Pollutant Emissions (lbs/day) – Landfill Closure and Revegetation) and are included below in total Alternative 3 construction emissions.

Construction

The NCCAB is in non-attainment of the state PM_{10} standard. Regarding construction impacts, the MBARD Guidelines state that the 82 lbs/day threshold for construction emissions of PM_{10} is the threshold for both individual and cumulative impacts on local air quality since the background concentration reflects the collective contribution of PM_{10} from nearby sources.

Construction of Alternative 3 would result in the temporary generation of air pollutants from operation of heavy construction equipment and generation of fugitive dust in the construction area and emissions from worker vehicle trips and hauling of import and export materials. Maximum daily emissions levels associated with construction of Alternative 3 are shown in **Table**

6.3-5. The MBARD has only adopted a quantitative threshold for PM_{10} emissions during construction; however, emissions from the other criteria air pollutants are also provided for informational purposes.

Table 6.3-5. Estimated Construction Daily Maximum Air Pollutant Emissions (lbs/day) – Transfer Station

Construction Phase	VOC	NOx	CO	SO_x	PM_{10}	$PM_{2.5}$
Demolition	2	32	24	<1	41	5
Site Preparation	3	28	29	<1	11	5
Grading	3	32	31	<1	25	5
Building Construction	1	11	17	<1	16	2
Paving	2	7	11	<1	5	<1
Architectural Coating	200	1	2	<1	3	<1
Landfill Closure Maximum Daily Emissions	3	33	32	<1	41	8
Maximum Daily Emissions	**33**	**28**	**29**	**<1**	**41**	**6**
MBARD Threshold	—	—	—	—	82	—
Significant Impact?	—	—	—	—	No	—

Source: CAPCOA 2022 (CalEEMod Version 2022.1.1.43).

Notes: Emission quantities are rounded to the nearest whole number. Exact values are provided in **Appendix O**, Air Quality and GHG Modeling Assumptions.

CO = carbon monoxide; MBARD = Monterey Bay Air Resources District; NO_x = oxides of nitrogen; $PM_{2.5}$ = particulate matter 2.5 microns or less in size; PM_{10} = particulate matter 10 microns or less in size; SO_x = sulfur oxides; VOC = volatile organic compound

As shown in **Table 6.3-5**, construction of Alternative 3 is estimated to generate a maximum of 41 lbs/day of PM_{10} during construction, which is below the MBARD threshold of 82 lbs/day. Simultaneous construction of Alternative 3 and the landfill closure would not exceed the MBARD threshold during the worst-case daily emissions at both locations (82 lbs/day total). This estimate is conservative because it assumes the most intensive construction activity required for each component would occur simultaneously.

The MBARD does not identify quantitative thresholds for other criteria air pollutants during construction. Construction projects using typical construction equipment, such as dump trucks, scrapers, bulldozers, compactors, and front-end loaders that temporarily emit precursors of ozone (i.e., volatile organic compounds [VOC] or NO_x), are accommodated in the emission inventories of state- and federally required air plans and would not have a significant impact on the attainment and maintenance of ozone AAQS. However, a project that would use non-typical equipment would have the potential to result in a significant impact related to emissions of VOCs or NO_x. Alternative 3 would employ typical construction equipment, and it would not require any non-typical construction equipment or techniques that have not been accounted for in the NCCAB emissions inventories.

Construction of Alternative 3 would result in a less than significant impact related to maximum daily criteria air pollutant emissions during construction, including during simultaneous construction with landfill closure. Because the emissions would be below the applicable health-based significance thresholds, no adverse health effects would occur. Because construction of Alternative 3 would be below the PM_{10} threshold and would not require any construction practices that would be atypical, Alternative 3 would not result in a cumulatively considerable impact during construction. Therefore, the construction impacts would be less than significant.

Operation

Total operational emissions from Alternative 3 operation, including the transfer station, ODF, and recycling center, are summarized in **Table 6.3-6**. Operation of the new scale house would relocate existing facilities and would not result in an increase in criteria air pollutant emissions from vehicle trips or maintenance operations. New equipment, such as scales, would be electric-powered and would not result in new criteria air pollutant emissions from energy demand. As shown in **Table 6.3-6**, Alternative 3 operation would not exceed the MBARD thresholds for any criteria air pollutant. Emissions from all Alternative 3 components would be less than significant.

Table 6.3-6. Estimated Operation Daily Maximum Air Pollutant Emissions (lbs/day) – All Alternative 3 Components

Emissions Source	VOC	NOx	CO	SO_x	PM_{10}	$PM_{2.5}$
Mobile	<1	<1	<1	<1	<1	<1
Area	6	<1	9	<1	<1	<1
Energy	<1	<1	<1	<1	<1	<1
Off-road Equipment	1	9	17	<1	<1	<1
Maximum Daily Emissions	**7**	**9**	**26**	**<1**	**<1**	**<1**
MBARD Threshold	137	137	550	150	82	—
Significant Impact?	No	No	No	No	No	No

Source: CAPCOA 2022 (CalEEMod Version 2022.1.1.43). Refer to **Appendix O.**

Notes:

[a] Average daily emissions assume emissions factor of 0.2 lbs-VOC/ton and maximum capacity of 160,000 tons per year.

Emission quantities are rounded to the nearest whole number. Exact values are provided in **Appendix O**.

CO = carbon monoxide; MBARD = Monterey Bay Air Resources District; NO_x = oxides of nitrogen; $PM_{2.5}$ = particulate matter 2.5 microns or less in size; PM_{10} = particulate matter 10 microns or less in size; SO_x = sulfur oxides; VOC = volatile organic compound

In summary, Alternative 3 (Combined Facilities on Adjacent Property), including the associated General Plan/LCP land use designation and zoning map amendments and environmental enhancement/restoration features, would not result in a cumulatively considerable net increase of any criteria air pollutant for which the region is designated non-attainment. The impact would be **Less than Significant**. No mitigation is required.

Threshold C: Expose sensitive receptors to substantial pollutant concentrations.

Impact AIR-3 ALTERNATIVE 3 WOULD NOT EXPOSE SENSITIVE RECEPTORS TO SUBSTANTIAL POLLUTANT CONCENTRATIONS. (LESS THAN SIGNIFICANT IMPACT)

The nearest sensitive receptor to the Alternative 3 site is the residence located approximately 115 feet north of the site. There are six additional residences located between 500 feet and 1,500 feet of the Alternative 3 site boundary. Potential impacts are addressed below for new sources of pollutants from Alternative 3 components.

The pollutant of primary concern during construction is diesel particulate matter. However, as shown in **Table 6.3-5**, construction-related emissions associated with Alternative 3 construction would be in compliance with the PM_{10} threshold (<82 lbs/day). Emissions of PM_{10} would be below the MBARD threshold during all construction activities, and simultaneous construction with landfill closure would be spread out across two sites. Because the emissions for all Alternative 3 components are below the applicable MBARD threshold, it would not contribute to regional long-term health impacts related to non-attainment of the AAQS.

Operation of Alternative 3 would not include any new stationary sources of toxic air contaminants. CARB recommends a 1,000-foot buffer between sensitive receptors and land uses generating more than 100 truck trips per day (CARB 2005). Trucks have the potential to expose sensitive receptors to diesel particulate matter from exhaust, a toxic air contaminant. The closest operational component to a sensitive receptor would be the ODF, located approximately 115 feet from the nearest residence. However, Alternative 3, including all components, would result in a net increase in truck trips of 48 trips per day and would not exceed the 100 daily truck trips screening level. Additionally, as shown in **Table 6.3-6**, particulate matter emissions from Alternative 3 operation are anticipated to be minimal. Therefore, operation of Alternative 3 would not result in significant exposure to diesel particulate matter.

Because Alternative 3 would result in minimal new vehicle trips, it would not contribute to any potential CO hotspot. Alternative 3 would result in a total of 28 new peak hour trips and would not result in a substantial increase in traffic at any intersection. As discussed under Impact AIR-2, Alternative 3 operational emissions of all criteria air pollutants would be below MBARD thresholds.

Therefore, Alternative 3 would not significantly contribute to potential regional health impacts related to AAQS non-attainment. Operation of Alternative 3 would not expose sensitive receptors to substantial pollutant concentrations. This impact would be less than significant.

As discussed in Section 6.3.1, Existing Conditions, the criteria air pollutants also have the potential to result in health impacts, such as headaches or throat irritation, at the time of exposure. However, individual exposure levels and individual reactions to exposure to pollutant emissions from Alternative 3 cannot be feasibly determined. As previously described, the concentration of criteria air pollutants at any given time depends on a variety of factors, including ambient traffic levels and other emissions sources, weather conditions that affect pollutant formation and dissipation, and time of day or year. Additionally, concentrations of ozone precursors at the Alternative 3 site do not indicate levels of ozone exposure because ozone is not necessarily formed there, as NO_x and VOC may be

carried away before forming ozone (USEPA 2024). As such, localized impacts from criteria air pollutants are not further discussed below for other Alternative 3 components.

In summary, Alternative 3 (Combined Facilities on Adjacent Property), including the associated General Plan/LCP land use designation and zoning map amendments and environmental enhancement/restoration features, would not expose sensitive receptors to substantial pollutant concentrations. The impact would be **Less than Significant**. No mitigation is required.

Threshold D:	Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

Impact AIR-4 ALTERNATIVE 3 WOULD NOT RESULT IN OTHER EMISSIONS (SUCH AS THOSE LEADING TO ODORS) ADVERSELY AFFECTING A SUBSTANTIAL NUMBER OF PEOPLE. (LESS THAN SIGNIFICANT IMPACT)

During construction of all Alternative 3 components, operation of heavy equipment has the potential to result in odors from diesel construction equipment exhaust. However, as shown in **Table 6.3-5**, emissions of sulfurous gases, the main source of odors from construction equipment, would be extremely limited during construction (MBARD 2008).

Operation of all Alternative 3 components could involve the handling and processing of solid waste, which is a common source of odors, as well as preprocessing organic materials for composting off site. The landfill site is an existing source of solid waste odor; however, the Alternative 3 components would be developed outside the existing landfill boundary. The proposed activities would be similar to existing activities, which include movement and handling of solid waste and preprocessing organics. The solid waste would be directed to the transfer station (for off-site disposal), the ODF, and/or the recycling center. All three facilities would be enclosed structures, reducing the potential for noticeable odors.

In summary, Alternative 3 (Combined Facilities on Adjacent Property), including the associated General Plan/LCP land use designation and zoning map amendments and environmental enhancement/restoration features, would not create objectionable odors affecting a substantial number of people. The impact would be **Less than Significant**. No mitigation is required.

6.3.5 Cumulative Impact Discussion

The potential cumulative impacts of Alternative 3 would be similar to those of the Proposed Project, which are presented in Chapter 4, Other CEQA-Required Discussions.

As discussed in Chapter 4, Other CEQA-Required Discussions, the County's Sustainability Update EIR concluded that air pollution by nature is largely a cumulative impact. As such, the analysis of whether an individual project would result in a cumulatively considerable net increase of any criteria air pollutant for which the region is in non-attainment is the appropriate analysis for cumulative impacts related to air quality.

Impact AIR-C: The NCCAB is in non-attainment for the California Ambient Air Quality Standards for PM_{10}. As such, there is an existing cumulative air quality impact. However, similar to the Proposed Project, Alternative 3 would not conflict with the AQMP and would not result in a cumulatively considerable net increase of any criteria air pollutant, as demonstrated under Impact AIR-1 and Impact AIR-2. Therefore, the **Alternative 3 contribution to the existing cumulative impact would not be cumulatively considerable**, which is the same determination as the Proposed Project.

6.4 Biological Resources

This section evaluates potential impacts relating to biological resources within and near the Alternative 3 (combined facilities) site. This analysis is based on observations made during a series of field surveys between 2018 and 2026, and a review of available literature and data for known and potentially occurring biological resources. This section includes an analysis of sensitive habitats, including aquatic resources, and special-status plants and sensitive wildlife that may be impacted by Alternative 3. **Table 6.4-1** presents a summary of potential impacts on biological resources. The analysis was conducted by qualified biologists[1] with EcoSystems West (ESW), unless otherwise specified as biologists with Biosearch Environmental Consulting (Biosearch) (refer to Section 7.1, List of Preparers); and supporting documentation is included in **Appendix G.** All figures are presented at the end of Section 6.4, except for **Figure 2-4 and Figure 5-13,** which are presented in Chapter 2 and Chapter 5, respectively.

Table 6.4-1. Summary of Alternative 3 Impacts Related to Biological Resources

Impact	Significance before Mitigation	Mitigation	Significance after Mitigation
BIO-1. Alternative 3 construction may result in impacts to Crotch's bumble bee, if present.	Potentially Significant	BIO-1a, BIO-1b, BIO-1c, BIO-1d, BIO-8e	Less than Significant
BIO-2. Alternative 3 construction and operation would not result in impacts to roosting monarch butterflies.	Less than Significant	None Required	Less than Significant
BIO-3. Alternative 3 construction and operation may result in impacts to California red-legged frog.	Potentially Significant	BIO-1a, BIO-1b, BIO-3, BIO-8e	Less than Significant
BIO-4. Alternative 3 construction and operation may result in impacts to northwestern pond turtle.	Potentially Significant	BIO-1a, BIO-1b, BIO-3, BIO-8e	Less than Significant
BIO-5. Alternative 3 construction and operation may result in impacts to avian species, their habitats, and nesting activities.	Potentially Significant	BIO-1a, BIO-1b, BIO-5a, BIO-5b, BIO-8e	Less than Significant
BIO-6. Alternative 3 construction and operation may result in impacts to bat species, their habitats, and roosting activities.	Potentially Significant	BIO-1a, BIO-1b, BIO-6, BIO-8e	Less than Significant
BIO-7. Alternative 3 construction may result in impacts to San Francisco dusky-footed woodrat houses, individuals, or young.	Potentially Significant	BIO-1a, BIO-1b, BIO-7, BIO-8e	Less than Significant
BIO-8. Alternative 3 construction and operation would result in impacts to coast live oak woodland.	Potentially Significant	BIO-8a, BIO-8b, BIO-8c, BIO-8e	Less than Significant
BIO-9. Alternative 3 construction would result in minimal impacts to riparian forest.	Potentially Significant	BIO-8a, BIO-8b, BIO-8c, BIO-8e BIO-9a, BIO-9b	Less than Significant

[1] A qualified biologist shall have a minimum of 5 years of academic training and professional experience in biological sciences and related resource management activities with a minimum of 2 years conducting surveys for each species that may be present within the Study Area. The biologists who evaluated the Study Area possessed considerably more experience with biological resources, CDFW and USFWS standards and protocols, have been authorized on previous projects, and are trained and recognized experts on specific resources.

Table 6.4-1. Summary of Alternative 3 Impacts Related to Biological Resources

Impact	Significance before Mitigation	Mitigation	Significance after Mitigation
BIO-10. Alternative 3 construction would result in impacts to other Environmentally Sensitive Habitat Areas.	Potentially Significant	BIO-8a, BIO-8b, BIO-8c, BIO-8e, BIO-9a, BIO-9b	Less than Significant
BIO-11. Alternative 3 construction would result in minimal impacts to wetlands.	Potentially Significant	BIO-8a, BIO-8b, BIO-8c, BIO-8e	Less than Significant
BIO-12. Alternative 3 construction would result in minimal impacts to riverine habitats.	Potentially Significant	BIO-8a, BIO-8b, BIO-8c, BIO-8e	Less than Significant
BIO-13. Alternative 3 construction would result in impacts to wildlife movement.	Potentially Significant	BIO-1a, BIO-1b, BIO-3, BIO-8e, BIO-13	Less than Significant
BIO-14. Alternative 3 construction would conflict with local policies or ordinances protecting biological resources.	Potentially Significant	BIO-8a, BIO-8b, BIO-8c, BIO-8e, BIO-14	Less than Significant

Note:

The impact, significance determination, and mitigation apply to Alternative 3 as a whole, considering all components, unless otherwise noted.

Beneficial Effects: Alternative 3 includes several following *Environmental Enhancement and Habitat Restoration Features.* Like the Proposed Project, Alternative 3 includes: Restoration of Harkins Slough Road Drainage, Culvert Modification with Small Wildlife Crossing at Main Entrance, Culvert Replacement under the Internal Roadway to the Old Landfill, Wildlife Movement Corridor between Gallighan Slough and Harkins Slough, and Wildlife Directional Features at Key Locations (described in Section 2.4 and shown on **Figure 2-4**). Additionally, at the combined facilities site, Alternative 3 includes: Re-establishment of Open Drainage along North-South Roadway, Wildlife Movement Corridor between USFWS Refuge and Undeveloped Open Space to the West, and Culvert and Fencing Designed for Wildlife Movement (described in Section 5.2.3 and shown on **Figure 5-13**).

For terminology clarification, "Alternative 3" and the "Alternative 3 project area" include:

1. New combined facilities – located north of Harkins Slough Road, including 2 acres of County-owned property (APN 052-021-33) and 11 acres on the adjacent property to the north (APN 052-011-11), as shown in **Figure 5-12b**. This 13-acre area is hereinafter referenced as the "Alternative 3 site" and/or the "combined facilities site."
2. Landfill closure – located on the landfill site south of Harkins Slough Road (APN 052-021-33), as shown in **Figure 5-12c**.
3. Environmental enhancement and restoration features described for the Proposed Project and additional features on the adjacent property, as shown in **Figure 5-13** and described in Sections 2.4 and 5.2.3.

The "Biological Study Area (Study Area)" for Alternative 3 includes the areas listed above and an approximately 150-foot buffer to capture contiguous habitats, wildlife dispersal corridors, and areas of potential indirect impacts during construction (**Figure 6.4-1).**

6.4.1 Existing Conditions

Regional and Alternative 3 Setting

Like the Proposed Project, the Alternative 3 project area is located along Buena Vista Drive and Harkins Slough Road in unincorporated southern Santa Cruz County, west of Highway 1 within the California Coastal Zone (**Figure 1-3** and **Figure 5-12b**). The immediate setting for the Alternative 3 project area is the same as for the Proposed Project, as described in Section 3.4 of the DEIR.

Surrounding land uses are also the same, with the following exceptions: a commercial plant nursery is located immediately north of the combined facilities site. Both the Alternative 3 site and the Proposed Project (Transfer Station A) directly abut the Harkins Slough Unit of the Ellicott Slough National Wildlife Refuge (Wildlife Refuge), federally owned land managed by the U.S. Fish and Wildlife Service, which protects and conserves important aquatic and upland habitat for the benefit of native plants and wildlife species.

As with the Proposed Project, several natural drainages and constructed channels are present within and along the margins of the Alternative 3 project area (**Figure 6.4-1**). Harkins Slough Road Drainage flows along Harkins Slough Road from the combined facilities site to Buena Vista Drive, makes a 90-degree turn to the south, flowing under Buena Vista Drive via a culvert, into a concrete-lined ditch that flows south along the Landfill frontage. The Buena Vista Drive Tributary flows along the west side of Buena Vista Drive, crossing under the road via a culvert at the previous entrance to the Landfill, to run along the Landfill frontage to the confluence with Channelized Gallighan Slough. Channelized Gallighan Slough flows from west to east, between the Landfill and the Old Landfill, to Gallighan Slough at the southern boundary of the biological resources study area. The drainages support riparian and emergent wetland vegetation and contribute to on-site habitat complexity and hydrologic connectivity. Portions of the Alternative 3 project area provide potential habitat and dispersal opportunities for native wildlife.

As stated above, the Alternative 3 project area includes the combined facilities site (**Figures 5-12b and 5-12d**), which includes portions of the two parcels located immediately north of the existing Landfill, across Harkins Slough Road:

- APN 052-021-33 (69.69 acres zoned CA-AIA; PF-AIA). A 2-acre portion in the northeast corner of this County-owned parcel would be used for ingress and egress (driveways) to the combined facilities, a portion of the storm water basins/wetlands, and outdoor storage.

  Existing land uses on the 2-acre section include coast live oak woodland and ruderal grassland open space (utilized by wildlife for movement), two unpaved driveways, and outdoor storage for Landfill bins and equipment. The coast live oak woodland would not be impacted.

- APN 052-011-11 (26.95 acres zoned CA-AIA). An 11-acre area in the central/eastern portion of the privately owned property would be used for the combined facilities (transfer station, ODF, recycling center) and most of the storm water basins/wetlands.

  Existing land uses include commercial agriculture and associated infrastructure (three large greenhouses, packing shed, boiler house, bathroom/lunchroom, and several other miscellaneous structures associated with previous cattle grazing uses that are no longer occurring) (**Figure 5-12a**).

Internal roadways include the paved driveway along the northern property line, from Buena Vista Drive on the west to the residence on the east; an unpaved roadway extending from the driveway around the two northern greenhouses; and a paved roadway extending from the driveway to the southern property line near Harkins Slough Road, effectively bisecting the property.

The Alternative 3 project area also includes the Current Active Landfill, where Landfill closure would occur (**Figure 5-12c**). This portion of the Alternative 3 project area includes associated infrastructure such as internal access roads, leachate and stormwater collection systems, and areas of previously buried waste where landfill cover supports ruderal vegetation. Discrete services (closed landfill maintenance; equipment maintenance, parking, and storage; and HHW collection) would continue in this area after construction of the combined facilities.

The Alternative 3 project area also includes the environmental enhancement and habitat restoration locations described in Section 5.2.3 and shown in **Figure 5-13**.

The Biological Study Area (Study Area) for Alternative 3 includes the Alternative 3 project area described above and an approximately 150-foot buffer to capture contiguous habitats, wildlife dispersal corridors, and areas of potential indirect impacts during construction (**Figure 6.4-1**). In some areas, the Study Area was expanded beyond the buffer based on unique site-specific conditions, including proximity to sensitive biological resources, and topographic and hydrologic connectivity. In addition, aquatic features such as creeks and wetlands were surveyed up to 300 feet upstream and downstream of the project areas, where accessible.

Land cover within the Study Area is characterized by a mix of natural and semi-natural, disturbed, and developed areas that include: native and non-native grassland, scrub, woodland, wetland, riparian, and ruderal types interspersed with the greenhouse facility on the combined facilities site and engineered infrastructure and former disposal zones on the landfill site, reflecting a legacy of landfill operations, maintenance activities, and passive revegetation in areas no longer subject to daily waste management activities.

Within the Study Area, but east of and outside the combined facilities site, the property is mostly undeveloped and includes oak woodland sloping towards Harkins Slough, a patch of naturalized redwood forest, as well as a paved driveway and small residence.

Within the Study Area, but west of and outside the combined facilities site, the property consists of undeveloped native and non-native grassland, lined with trees along the western and southern perimeters (predominately eucalyptus trees). This western grassland is situated on an elevated terrace that was historically used for cattle grazing and is currently undeveloped, except for the paved driveway along the northern property line.

No new waste operation facilities are proposed in these less developed western and eastern areas of the property (APN 052-011-11).

Literature Review

To obtain baseline knowledge of the biological resources within the Study Area, qualified biologists reviewed relevant studies and information sources prior to conducting their field surveys, as described for the Proposed Project in Section 3.4. Based on the literature review, the biologists compiled target lists of sensitive plants (**Appendix G1.1)** and sensitive wildlife species (**Appendix G2.1)** known or with potential to occur within or near the Study Area.[2] Species narratives were prepared for species with potential to occur (**Appendix G1.2 and Appendix G2.2**), and additional information was provided for species which were considered and subsequently eliminated from further consideration (**Appendix G2.3** and **Appendix G3.2**).

Field Surveys

Qualified biologists with EcoSystems West (unless otherwise specified as biologists with Biosearch) conducted field surveys of the Landfill Closure Study Area during spring and fall of 2018, spring/fall/winter of 2022, winter/spring/summer of 2023, summer of 2024, spring/summer of 2025, and spring/summer of

[2] Following CNDDB and other standard survey protocols, the biologists reviewed distribution information for sensitive species to determine which species would have the potential to occur in or near the alignments and which species could be eliminated from consideration, based on vegetation and habitat types in the alignments and surroundings, locations of known occurrences, dispersal distances (for wildlife), and professional knowledge of the region and local sensitive species.

2026. The biologists conducted field surveys of the Alternative 3 Study Area during spring and fall of 2018 and winter and spring of 2026. The purpose of field surveys was to:

- Characterize habitat types, including sensitive habitats;
- Conduct assessment of aquatic resources;
- Conduct a floristic-level rare plant survey for species listed in **Appendix G1.1** and **Appendix G3.1**;
- Assess the Study Area for common and sensitive wildlife species and their habitats (A**ppendix G2.1** and **Appendix G3.1**);
- Conduct a preliminary assessment of wildlife movement within the Study Area.

Survey methods are described in Section 3.4.1, and specific survey dates are listed below.

BOTANY AND AQUATIC RESOURCES

On May 24, 2022, June 5 and July 29, 2025 (for the Landfill portions of the Study Area), and March 30 and June 25, 2026 (for the combined facilities site), a Senior Plant Ecologist conducted an aquatic resources assessment and focused rare plant surveys. The timing of the assessment was adequate for identification of the special-status species listed in **Appendix G1.1** and **Appendix G3.1.**

The aquatic resources assessment was completed using protocols outlined in the U.S. Army Corps of Engineers (USACE) Wetlands Delineation Manual (Environmental Laboratory 1987) and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region, Version 2.0 (USACE 2008).

Because Alternative 3 occurs in the Coastal Zone, wetlands using the California Coastal Act's "one parameter" criteria were also identified and mapped in the field using resource-grade GPS technology. A formal aquatic resources delineation will be completed prior to preparing regulatory permit applications for the Project.

WILDLIFE

Wildlife biologists with EcoSystems West conducted site visits of the Landfill Closure portion of the Study Area on June 3 and August 5, 2018; March 30 and November 10, 2022; February 22 (night), May 10 (night), June 5, June 6, and July 26, 2023; July 1, 2024 (day and night); and July 30, 2025. We conducted site visits of Combined Facilities Project site and surroundings on January 13, March 29 and 30 and May 15, 2026. Wildlife biologists with Biosearch (2026) conducted an amphibian site assessment on July 30, 2025, and June 29, 2026 (**Appendix G2.3**). The objective during these visits was to assess and identify potential habitat for the special-status species listed in **Appendix G2.1** and **Appendix G3.1** following standard survey techniques for each species.

Habitat Characterization

The majority of the Alternative 3 Study Area and surrounding lands consist of developed, ruderal, and naturalized habitats including the Landfill, former greenhouse and agricultural facilities, and a private single-family residence. The open grassland, forested, and aquatic (including wetland) habitats within and near the Study Area constitute more naturalized habitats. Other exceptions to this disturbed landscape include the Wildlife Refuge that borders the Study Area to the east, and the Ellicott Slough Unit of the Wildlife Refuge, located approximately 1 mile west of the Study Area.

Together, these areas provide important aquatic and upland habitats for native wildlife species, including sensitive herpetofauna.

Non-native planted/ornamental trees, including blue gum eucalyptus, coast redwoods, and Monterey cypress, are found within the Study Area, occurring as dense groves and solitary trees in areas surrounding the developed landscape. Non-native and ruderal grasslands are widespread within the western portion of the Study Area and surrounding the greenhouses on the eastern terrace.

Additional native or naturalized habitats within the Study Area include coast live oak woodland and forest, mixed willow riparian scrub and forest, mixed willow riparian forest, mixed broadleaved riparian forest, and small, isolated patches of semi-natural mixed evergreen and coast redwood forest.

Three drainages are present in the Study Area (**Figure 6.4-1**): 1) Harkins Slough Road Drainage – which flows westward along the north side of Harkins Slough Road, from the unpaved (compact gravel) road that is gated and extends onto the property north of the Landfill, to the intersection with Buena Vista Drive; 2) Buena Vista Drive Tributary – which originates near agricultural fields east of the Study Area and borders the east side of Buena Vista Drive, before crossing under Buena Vista Drive and flowing south along the landfill frontage to the confluence with Channelized Gallighan Slough; and 3) Channelized Gallighan Slough, which flows southeast to Gallighan Slough. In addition, there are ephemeral to seasonal ditches and drainages, palustrine emergent wetlands including a seasonal wetland seep bordering Buena Vista Drive, and an aggraded seasonal irrigation ditch wetland situated in the low-lying terrace in the central portion of the Alternative 3 site.

The biologists recognize fourteen predominant habitat types occurring within the Alternative 3 Study Area, as listed in **Table 6.4-2** and depicted in **Figures 6.4-1 and 6.4-1a–d.**

Table 6.4-2. Habitat Types within the Buena Vista Landfill Redevelopment Alternative 3 Study Area, Santa Cruz County, California

Habitat Type	Biological Study Area (Acres)
Blackberry Bramble	**0.12**
Coast Live Oak Woodland	**7.53**
Coastal Scrub	**0.37**
Coastal Terrace Prairie	**1.11**
Riparian Forest and Scrub	
Mixed Broadleaved Riparian	**0.62**
Mixed Willow Riparian Forest and Scrub	**3.50**
Palustrine Emergent Wetland	
Freshwater Emergent Marsh	**0.58**
Seasonal (Irrigation) Ditch Wetland	**0.02**
Riverine	
Riverine (Aquatic)	**0.71**
Riverine (Culvert)	**0.06**
Mixed Evergreen Forest	0.37
Solitary Trees	0.18
Coast Redwood Grove (Naturalized)	0.90
Non-Native Forest	3.98

Table 6.4-2. Habitat Types within the Buena Vista Landfill Redevelopment Alternative 3 Study Area, Santa Cruz County, California

Habitat Type	Biological Study Area (Acres)
Non-Native Grassland	10.39
Ruderal	
Ruderal Grassland	36.16
Ruderal Mixed Herbs	6.54
Ruderal Scrub	0.52
Agriculture	5.09
Developed	43.92

Notes:

[i] Sensitive habitat types are indicated in bold.

Within the Study Area, agriculture, non-native grasslands, non-native forests, ruderal, and developed habitats are considered non-native, as they are typically associated with heavy, ongoing, or repeated human disturbance; and the majority of this vegetation is naturalized or has been introduced, oftentimes intentionally. The blackberry bramble, coast live oak woodland, coastal scrub, coastal terrace prairie, mixed evergreen forest, riparian, riverine, and wetland habitats are generally considered native or naturalized, as they do not persist solely as a result of human influence. Some degree of past disturbance may have affected these habitat types, so non-native species usually occur and may even be dominant within these areas. Some of these native habitat types are also considered sensitive habitats (designated in bold above) and are discussed in further detail in **Section 6.4.2** below.

AGRICULTURE (COMMERCIAL PLANT NURSERY)

Agriculture uses in the Study Area include a commercial plant nursery (potted woody trees, shrubs, and herbs for ornamental landscaping) located on the parcel immediately north of the Alternative 3 site. Additionally, row crop agriculture (e.g., strawberries) is situated in the westernmost portion of the Study Area immediately west of Buena Vista Drive. Previously, the Alternative 3 site was used for the production of cut flowers and later organic vegetables grown in three large greenhouses. Agricultural activities on the property were discontinued in 2016.

Agricultural areas within the Study Area provide limited habitat for wildlife. However, the large greenhouse rooftops may provide suitable nesting substrate for birds, such as the California gull (*Larus californicus*). Common bird species such as house finches and barn swallows are likely to utilize these habitats for foraging and nesting. Additionally, numerous small mammal burrows were observed in cultivated areas outside the greenhouses, likely created by species common to agricultural lands, including Botta's pocket gopher (*Thomomys bottae*), ground squirrel, and California meadow vole (*Microtus californicus*), as well as lizards such as the coast range fence lizard (*Sceloporus occidentalis bocourtii*). These species provide prey for garter snake (*Thamnophis* sp.), gopher snake (*Pituophis catenifer catenifer*), and raptors, along with bobcat (*Lynx rufus*) and coyote (*Canis latrans*). Mammal burrows may also serve as refuge for common and sensitive amphibian and reptile species.

BLACKBERRY BRAMBLE

One habitat patch of blackberry bramble is situated within the northwestern corner of the Study Area (across Buena Vista Drive to the west) and is dominated almost entirely by a dense, nearly impenetrable thicket of California blackberry (*Rubus ursinus*). This habitat type corresponds to the *Rubus ursinus* Association (63.909.05) of the *Gaultheria shallon – Rubus* (*ursinus*) Alliance (63.909.00) of Sawyer et al. (2009) and CDFW (2026d). Blackberry brambles are not described by Holland (1986), but represent an uncommon phase of the Northern (Franciscan) coastal scrub habitat type dominated by native California blackberry. Within the Study Area, California blackberry comprises the majority of the vegetation; however, poison oak (*Toxicodendron diversilobum*), poison hemlock (*Conium maculatum*), and non-native grasses and forbs are also common within this feature. Blackberry brambles dominated by California blackberry are considered a sensitive habitat type by CDFW and Coastal Act ESHA (i.e., coastal scrub) per the Santa Cruz County LCP.

The blackberry bramble habitat patch provides roosting, foraging, and nesting habitat for birds, and may support a range of common mammal species such as skunk (*Mephitis mephitis*), raccoon (*Procyon lotor*), and western gray squirrel (*Sciurus griseus*).

COAST LIVE OAK WOODLAND AND FOREST

In the Study Area, coast live oak forest/woodland closely corresponds to the *Quercus agrifolia* Forest and Woodland Alliance (71.060.00) and *Quercus agrifolia-Toxicodendron diversilobum* Association (71.060.13) of Sawyer et al. (2009) and CDFW (2026d), and to the Central California Coast phase of the coast live oak forest type described by Holland (1986). The overstory is comprised entirely of coast live oak (*Quercus agrifolia*) with a dense understory dominated by California blackberry and poison oak. Other common understory associates include coyote brush (*Baccharis pilularis*), California coffeeberry (*Frangula californica*), stinging nettle (*Urtica dioica* ssp. *dioica*), cleavers (*Galium aparine*), Italian thistle (*Carduus pycnocephalus*), California manroot (*Marah fabacea*), miner's lettuce (*Claytonia perfoliata*), bracken fern (*Pteridium aquilinum*), and Pacific sanicle (*Sanicula crassicaulis*). French broom (*Genista monspessulana*), English ivy (*Hedera helix*), and Cape ivy (*Delairea odorata*), which are invasive weeds classified by the California Invasive Plant Council (Cal-IPC 2026) as having "high potential for severe ecological impacts on physical processes, plant and animal communities, and vegetation structure," are also present within oak woodland habitat of the Study Area, although somewhat limited in their overall distribution on the site.

Coast live oak woodland and forest in the Study Area occurs in three discrete areas including: 1) immediately south of the combined facilities site along Harkins Slough Road; 2) along the east side of Harkins Slough Road, on the moderately steep hillslope to the Wildlife Refuge bordering Harkins Slough; and 3) in the undeveloped area east of the combined facilities site (surrounding the existing single-family residence). These areas are described in more detail below. Coast live oak woodland and forest is located beyond the extent of identified permanent impacts for Alternative 3, and only a small area is expected to incur temporary understory clearing to restore the Harkins Slough Road Drainage and native habitats associated with this feature.

Immediately south of the combined facilities site, in the northeast section of the County-owned parcel, several discrete patches of coast live oak woodland are situated on the relatively steep west-facing slope. At this location, coast live oak woodland occurs in a habitat mosaic comprising developed, ruderal, non-native forest, and non-native grassland habitats. In 2021, the understory vegetation and several smaller oak trees were cleared. The understory vegetation is now recovering from this action and was observed to support native shrubs including coyote brush, poison oak, and

coffeeberry with native purple needlegrass also present. The overstory canopy is mostly closed to partly open and dominated by medium-sized, relatively immature oak trees (< 40 years old). A review of historic aerial photographs indicates much of this woodland/forest was either planted or developed naturally following the realignment of Harkins Slough Road for the 1985 landfill expansion. There are no available records (e.g., permits, monitoring reports, deed restrictions, etc.) that indicate this area was planted as mitigation for the landfill expansion, Harkins Slough Road realignment, or any other formally permitted project.

Coast live oak forest is situated east of and outside the combined facilities site, but within the Study Area. This patch of forest surrounds the existing single-family residence and paved driveway on the moderately steep hillslope west of Harkins Slough and contiguous with the Wildlife Refuge. Within this coast live oak forest, the overstory canopy is dense and mostly closed with dappled sunlight penetration that allows for persistent patchy to locally dense understory vegetation dominated by native shrubs, perennial grasses and forbs, including many of the species listed above. The mature coast live oak trees in this forest patch are very large, many supporting complex structural elements for wildlife habitat including multiple trunks, cavities, and perches. Big leaf maple (*Acer macrophyllum*) and arborescent elderberry (*Sambucus mexicanus*) were also observed within this habitat type as a sub-dominant component of the overstory. This coast live oak forest patch intergrades with a naturalized (planted) stand of coast redwood (*Sequoia sempervirens*) encompassing the residence and described in detail below.

Numerous bird species are likely to use this habitat type for nesting, including foliage-nesting, cavity-nesting, and ground-nesting birds. Some avian species such as oak titmouse (*Baeolophus inornatus*), acorn woodpecker (*Melanerpes formicivorus*), and Nuttall's woodpecker (*Dryobates nuttallii*) are especially reliant on oak woodlands. Foliage and crevice roosting bats may also be present in the larger mature oaks on the adjacent Wildlife Refuge property. Striped skunk, raccoon, and opossum (*Didelphis virginiana*) may use this habitat type for denning, foraging, cover, and refuge. In addition, the San Francisco dusky-footed woodrat (*Neotoma fuscipes annectens*) frequently uses this habitat type, and woodrat houses were observed during biological surveys.

COASTAL TERRACE PRAIRIE

Coastal terrace prairie is a unique herbaceous plant community corresponding to the *Danthonia californica* Coastal Association (42.251.00) of the *Festuca idahoensis – Danthonia californica* Herbaceous Alliance (42.251.01) of Sawyer et al. (2009) and CDFW (2026d), and to a Central California phase of the coastal terrace prairie community type described by Holland (1986). Intact coastal prairie is typically dominated by native perennial grasses with widely scattered annual and perennial forbs. Due to past anthropogenic disturbance, including cultivation and domestic livestock grazing that began with Spanish colonization in the late 1700s, the majority of remaining native coastal terrace prairie vegetation has largely been displaced by non-native annual grasses and forbs of Eurasian origin. Presently, much of California's historic coastal prairies have been lost to development and agriculture. Remaining coastal prairie habitat is typically located in close proximity to the coast, in areas with annual rainfall nearing 30 inches and cooler summer temperatures due to the influence of persistent fog. This habitat type is typically dependent on periodic disturbances including grazing, mowing, and/or fire that prevent natural succession to woody shrub and tree dominated plant communities. It should be noted, however, that the type and extent of disturbance may be either beneficial or detrimental to coastal terrace prairie structure and function.

The coastal terrace prairie habitat type within the Study Area is patchy and distributed throughout the upper western terrace of the adjacent property north of the Landfill (west of the combined

facilities site). Coastal terrace prairie intergrades with non-native grassland and scattered coyote brush on the terrace. Coastal terrace prairie is defined as areas comprised of at least 10 percent native bunchgrasses, including California oatgrass (*Danthonia californica*) with occasional purple needlegrass (*Stipa pulchra*). Native forbs are less abundant but include blue-eyed grass (*Sisyrinchium bellum*), harvest brodiaea (*Brodiaea elegans* var. *elegans*), slender juncus (*Juncus occidentalis*), and common woodrush (*Luzula comosa*). As is typical with coastal prairie habitats, a substantial proportion of vegetation is comprised of non-native annual grasses and forbs commonly found in non-native and ruderal grassland habitats, described below. Native coastal terrace prairie indicator species have high rates of endemism and are often associated with unique edaphic (soil) conditions, many of which are considered rare or have limited contemporary distribution within the California Floristic Province.

Many bird species utilize coastal terrace prairie (and contiguous non-native grassland) to forage and hunt for invertebrates, seeds, and/or small mammals, and some species utilize prairie and grassland habitats for nesting [e.g., grasshopper sparrow (*Ammodramus savannarum),* killdeer (*Charadrius vociferus*), mourning dove *(Zenaida macroura)*, western meadowlark *(Sturnella neglecta)*, song sparrow (*Melospiza melodia*), and northern harrier (*Circus hudsonius)* (previously *cyaneus*)]. Numerous small mammal burrows were present within the prairie habitat. Botta's pocket gopher, ground squirrel, and California meadow vole commonly occur in coastal terrace prairie along with lizards such as coast range fence lizard. These species in turn provide prey for garter snake, gopher snake, and raptors, along with bobcat and coyote. Mammal burrows are also utilized by amphibian and reptile species for refuge. Additionally, the scat of black-tailed deer (*Odocoileus hemionus*) was observed within the prairie habitat. The edge habitats[3] or ecotones between the prairie habitat and adjacent eucalyptus stands, coast live oak woodland, and mixed evergreen forest habitats are particularly productive and provide a range of foraging, refuge, and nesting opportunities for wildlife species.

A number of bird species were observed utilizing the prairie habitat of the Study Area for foraging and breeding activities (see avian species section below). A large [> 4.0 feet (1.2 meters)] molted gopher snake skin, coast range fence lizards, and coyote scat were also observed within the prairie habitat of the Study Area.

COAST REDWOOD GROVE (NATURALIZED)

Within the Study Area, coast redwood grove corresponds to the upland redwood forest type of Holland (1986) and to the *Sequoia sempervirens* Alliance (CODE) and Association (CODE) of Sawyer et al. (2009) and CDFW (2026d). Coast redwoods typically grow in canyons or on protected north- and west-facing slopes with annual precipitation exceeding 25 inches per year. The relatively mature coast redwood grove on the property surrounds the existing residence east of and outside the combined facilities site. The forest is positioned on a moderate slope and intergrades with the nearly closed canopy coast live oak forest. The redwood trees were planted as ornamental vegetation in the 1960s by the previous property owners and now support an understory similar in composition and structure to the coast live oak woodland and forest of the property described above. In general, the understory supports a mix of native and non-native low-growing herbaceous grasses, forbs, and vines including cleavers, hedge nettle (*Stachys bullata*), wide leaved forget-me-

[3] Edge habitats occur when two or more habitat types abut one another. Edge habitats provide an abundance and variety of food sources because they have diverse plant species and microhabitat variability, including cover, shelter, and shade, as well as sun exposure for warmth and air flow for circulation.

not (*Myosotis latifolia*), stinging nettle, California manroot, brome grasses (*Bromus* spp.), veldt grass (*Ehrharta erecta*), rattlesnake grass (*Briza maxima*), and yerba buena (*Clinopodium douglasii*).

Within the Study Area, redwood forest complements the surrounding habitat types, expanding opportunities for food, shelter, and refuge. This habitat type likely provides nesting habitat for a number of bird species, including: chestnut-backed chickadee (*Poecile rufescens*), western flycatcher (*Empidonax difficilis*), Steller's jay (*Cyanocitta stelleri*), brown creeper (*Certhia americana*), and dark-eyed junco (*Junco hyemalis*). Raptors may use the tall trees within the redwood grove for nesting. These may include but are not limited to: red-shouldered hawk (*Buteo lineatus*), red-tailed hawk (*Buteo jamaicensis*), great horned owl (*Bubo virginianus*), and western screech owl (*Megascops kennicottii*). Representative mammal species that utilize redwood forest habitat types include: shrew mole (*Neurotrichus gibbsii*), broad-footed mole (*Scapanus latimanus*), deer mouse (*Peromyscus maniculatus*), western gray squirrel, striped skunk, and raccoon. Snags and burned hollows in redwood trees provide important habitat features for common and special-status bats.

COASTAL SCRUB

Coastal scrub is a limited habitat type within the Study Area that would not be impacted by Alternative 3. Coastal scrub is typified by low- to moderate-sized woody shrubs, with mesophilic leaves and small diameter flexible branches. These shrubs are often relatively short-lived with a shallow root structure and typically occur on hillslopes in shallow, well-drained soils. Due to marine influence, soils tend to be higher in concentration in salts than more inland areas. Coastal scrub may persist as a stable climax community in areas with cool, mesic microclimates and persistent fog; but often, as with the Study Area, the coastal scrub represents an intermediate seral state (transitional habitat) between pioneer grassland communities and oak woodlands and mixed evergreen forests. Growth habits of dominant shrubs range from shrubby to arboreal. Within the Study Area, this habitat type corresponds to a phase of northern coastal scrub habitat type (Holland 1986) and to the *Baccharis pilularis* Alliance (32.060.00; G5/S5) *of* Sawyer et al. (2009) and CDFW (2026d). Poison oak and California blackberry are sub-dominant in this assemblage.

The coastal scrub habitat type covers approximately 0.61 acres in two distinct locations within or near the Study Area. Just outside the Study Area, one occurrence is a relatively mature patch of coastal scrub dominated by coyote brush and poison oak on the embankment between the Old Landfill and the City of Watsonville Landfill upslope to the south. Other common associates include native California coffeeberry (*Frangula californica*), but most of the associated understory vegetation consists of weedy, opportunistic species including brome grasses, wild oats (*Avena barbata*), poison hemlock, stinging nettle, wild radish (*Raphanus sativus*), and field mustard (*Hirschfeldia incana*). Another occurrence is a disturbed, early successional assemblage of coastal scrub on a steep embankment bordering the west side of Buena Vista Drive near the active landfill entrance, intergrading with ruderal (mixed herbs) and willow riparian forest habitat. Coyote brush is dominant at this location with non-native grasses and poison hemlock also prevalent.

The coastal scrub provides habitat for a range of wildlife species, offering varied food sources, cover from predators, and shelter. The coastal scrub habitats are within proximity to the sloughs, riparian and woodland habitats, as well as open areas such as ruderal and non-native grasslands. Habitat mosaics and reliable water sources increase the habitat value of these coastal scrub habitats for wildlife.

Numerous bird species were observed utilizing the coastal scrub, such as: wrentit, various goldfinch species (*Spinus* sp.), California towhee (*Melozone crissalis*), Anna's hummingbird (*Calypte anna*), and other species listed in **Appendix G2.4.**

Coastal scrub is a preferred habitat for small mammals, such as brush rabbit (*Sylvilagus bachmani*); and skunks may use the coastal scrub for cover. Pacific gopher snake and Coast Range fence lizard were also observed in this habitat.

DEVELOPED/LANDSCAPED

Developed and landscaped areas include paved roadways (Buena Vista Drive and Harkins Slough Road, and internal roads at the landfill and on the combined facilities site), compacted dirt or gravel access roads, buildings, fencing, and other infrastructure including greenhouses, offices, and storage buildings for the existing but abandoned agricultural facilities on the combined facilities site.

Developed habitats support opportunistic bird species such as American crow *(Corvus brachyrhynchos*), western gull (*Larus occidentalis*), barn swallow (*Hirundo rustica*), and house finch (*Haemorhous mexicanus*), as well as common mammal species such as skunk, opossum, raccoon, and squirrels.

NON-NATIVE (EUCALYPTUS) FOREST

Non-native (eucalyptus) forest comprises an assortment of planted blue gum eucalyptus (*Eucalyptus globulus*), and red ironbark (*Eucalyptus sideroxylon*), as well as other opportunistic or planted non-native tree species. This forest type corresponds to *Eucalyptus* spp.–*Ailanthus altissima*–*Robinia pseudoacacia* Semi-Natural Alliance (79.100.00) of Sawyer et al. (2009) and CDFW (2026d). Eucalyptus species are able to rapidly grow from seed or re-sprout following disturbance (cutting, fire, etc.) to an existing tree. Understory vegetation is often sparse due to litter accumulation and allelopathic effects of oils found in eucalyptus leaf and root exudates. Blue gum eucalyptus trees are an exotic species and rated as "moderately invasive" by the California Invasive Plant Council (Cal-IPC 2026).

The non-native forest habitat type includes a contiguous grove of blue gum eucalyptus at the northwestern corner of the Study Area. This mature, even-aged stand supports an understory of ruderal grassland with dense leaf and bark litter.

Red ironbark occurs west of the combined facilities site, as a planted hedgerow along the southern edge of the western upper grassland terrace and north of a steep slope above Harkins Slough Road. This species is less common than blue gum in Santa Cruz County and is not classified as invasive by the Cal-IPC. The understory of the red ironbark is comprised of non-native annual and perennial grasses and species common to the understory of nearby oak woodlands including cleavers, coyote brush, poison oak, and California blackberry. Several (7) red ironbark are located north of the Harkins Slough Road Drainage and would be removed as part of restoration of this drainage feature.

Eucalyptus and other non-native trees within the Study Area provide foraging, roosting, and nesting habitat for birds such as Anna's hummingbird, house finch, and chestnut-backed chickadee.

MIXED EVERGREEN FOREST

Mixed evergreen forest is a naturalized "semi-natural" forest type that does not conform to vegetation alliances described by Sawyer et al. (2009) or CDFW (2026d) and represents an urbanized phase of the mixed evergreen forest type of Holland (1986). Mixed evergreen forest occupies a small and fragmented extent of the Study Area, limited to an isolated stand at the intersection of Buena Vista Drive and Harkins Slough Road. This habitat type is dominated by an overstory of mature trees and arboreal shrubs including: coast redwood, coast live oak, Pacific willow (*Salix lasiandra ssp. lasiandra*), black cottonwood (*Populus trichocarpa*), coffeeberry, and coyote brush.

Although comprised primarily of native species, this habitat patch appears to be semi-ornamental or a remnant naturalized area that is now isolated and highly fragmented from similar forested habitat. In particular, coast redwoods are not common in this area and unlikely to have established naturally at this location. Furthermore, the source of hydrology that facilitated Pacific willow establishment may not be contemporary.

The small patch of mixed evergreen forest in the Study Area provides roosting, foraging, and nesting habitat for birds (see avian species section below), and may support a range of common mammal species such as skunk, raccoon, and western gray squirrel. This habitat type may also provide upland or refuge habitat for amphibians such as chorus frog (*Pseudacris sierra*).

MIXED WILLOW RIPARIAN SCRUB AND FOREST AND MIXED BROADLEAVED RIPARIAN FOREST

Mixed willow riparian scrub and forest primarily occurs along the Buena Vista Drive Tributary, along the eastern extent of Channelized Gallighan Slough, and in several discrete locations along the Harkins Slough Road Drainage. Mixed willow riparian vegetation largely corresponds to the Central Coast arroyo willow riparian forest habitat type of Holland (1986), although the assemblage is not recognized north of Monterey County, and the *Salix lasiolepis* Alliance (61.201.00) and Association (61.201.01) and *Salix lasiandra* [=*S. lucida*] Alliance of Sawyer et al. (2009) and CDFW (2026d). Arborescent, tree-sized arroyo willow (*Salix lasiolepis*), shrubby arroyo willow, and Pacific willow (*Salix lasiandra*) dominate this riparian forest habitat type. The arborescent to arboreal canopy is typically dense and often impenetrable, although openings of various sizes occur locally and support patches of herbaceous vegetation. Mixed willow riparian scrub is shorter in stature and lacking understory vegetation and occurs in proximity to the stream channel (along the embankments) such as along Harkins Slough Road Drainage. The native, woody vine forms of California blackberry and poison oak are prevalent in the understory where prolonged soil saturation and/or inundation is less persistent.

Mixed broadleaved riparian forest is present along Channelized Gallighan Slough, where willows, creek dogwood (*Cornus sericea* spp. *sericea*), black cottonwood, coast live oak, and blue elderberry (*Sambucus mexicana*) are common associates. This area closely corresponds to the description of the *Populus trichocarpa* Alliance (61.120.00) and *Populus trichocarpa-Salix* spp. Association (61.120.06) of Sawyer et al. (2009) and CDFW (2026d). The arborescent to arboreal canopy is typically dense and often impenetrable, although openings of various sizes occur locally and support patches of herbaceous vegetation. The native, woody vine forms of California blackberry and poison oak are prevalent in the understory where prolonged soil saturation and/or inundation is less persistent.

The riparian vegetation supports a suite of wildlife species, including insects, amphibians, birds, and mammals. Sierran chorus frog is known to occur in these habitats, as well as non-native American bullfrog (*Lithobates catesbeiana*). Migratory and resident bird species—including song sparrow, Wilson's warbler (*Cardellina pusilla*), western flycatcher (*Empidonax difficilis*), and spotted towhee (*Pipilo maculatus*)—utilize the riparian habitat adjacent to the sloughs and within the Alternative 3 project area (**Appendix G2.4**). Riparian habitats provide a dense multi-tiered canopy with diverse foraging, roosting, sheltering, and/or nesting habitat for birds and are important stopover sites for migratory bird species. Riparian vegetation provides cover from predators and insulating properties that shelter wildlife species from the sun and prevailing weather patterns. The San Francisco dusky-footed woodrat regularly builds its houses within riparian areas, and foliage-roosting bat species may roost in these habitats and hunt over the adjacent aquatic habitats.

The riparian vegetation also buffers the adjacent aquatic habitat contributing shade, food, and sources of nutrients to the sloughs and for aquatic wildlife species. Structurally, downed trees and willow mats create microhabitats that are important for birds, amphibians, and aquatic insects.

NON-NATIVE GRASSLAND

Within the Study Area, the non-native grassland habitat type corresponds to the *Avena* spp.–*Bromus* spp. (42.027.00; GNA/SNA) and *Phalaris aquatica–Phalaris arundinacea* (42.051.00) Semi-natural Herbaceous Alliance of Sawyer et al. (2009) and CDFW (2026d) and to a phase of the non-native grassland type described by Holland (1986). Non-native grasslands are undergoing colonization of coyote brush, a native woody shrub; however, the distribution and density of coyote brush on the property is diffuse and not indicative of coastal scrub habitat. Non-native grasslands may represent an early successional stage following cessation of ongoing management (e.g., grazing, mowing, etc.) and, other than colonizing coyote brush, are comprised almost entirely of invasive and/or non-native grasses and forbs.

Non-native grassland occurs on nearly level terraces to moderate hillslopes throughout the majority of the Study Area. Despite the occurrence of coastal prairie habitat on the upper western terrace, cessation of historic land use practices on and near the site such as grazing and mowing have resulted in the steady conversion of coastal prairie to non-native grassland. Non-native grasslands are comprised primarily of weedy, grass and forb species of Eurasian origin. Dominant species observed within the non-native grassland habitat type included: wild oats, Harding grass, soft chess (*Bromus hordeaceus*), ripgut brome (*Bromus diandrus*), rattail sixweeks grass (*Festuca myuros*), Italian ryegrass (*Festuca perennis*), common barley (*Hordeum murinum ssp. leporinum*), black mustard (*Brassica nigra*), field mustard, wild radish, English plantain (*Plantago lanceolata*), sheep sorrel (*Rumex acetosella*), poison hemlock, and small aggregations of coyote brush. It is important to note that in more mesic coastal sites, non-native grassland often contains a higher percentage of perennial grass species than more interior locations. In particular, Harding grass (*Phalaris aquatica*) and velvet grass (*Holcus lanatus*) are widespread and locally abundant—in some instances, forming dense, monospecific stands. A large percentage of plant species identified within this habitat type are listed as invasive weeds with "moderate to high ecological impacts" by the California Invasive Plant Council (Cal-IPC 2026), including: poison hemlock, jubata grass (*Cortaderia jubata*), wild oats, thistles, wild radish, and mustards. Under conditions where the subsurface soil and native seedbank have not been significantly altered by tilling/disking for agriculture or grading, it may be possible to revert non-native grassland to coastal terrace prairie by applying various management and restoration techniques including, but not limited to, managed grazing, mowing, prescribed fire, herbicides, and/or seeding and planting of native species. However, these restoration strategies have demonstrated varied success.

Wildlife species that are expected to occur in non-native grassland are similar to those described under Coastal Terrace Prairie above.

PALUSTRINE[4] EMERGENT[5] WETLAND (SEASONAL WETLAND AND FRESHWATER EMERGENT MARSH)

Wetlands are those areas that are transitional between aquatic and terrestrial systems, where surface water is at a depth and duration sufficient to promote the development of hydric soils and a preponderance of hydrophytic wetland vegetation.[6]

[4] Palustrine refers to non-tidal freshwater wetlands not influenced by the ocean.

[5] Emergent means that most of the vegetation consists of herbaceous plants rooted in the soil but extending above the water surface.

[6] Hydrophytic plants (also called hydrophytes) are plants that grow in or on water or in soil that is saturated with water for most or all of the growing season.

Seasonal wetlands are characterized by shallow depressional topography with inundation and/or saturation only occurring during the rainy season. These features are typically dominated by annual and perennial grasses and forbs, many of which may occur in both wetland and upland habitats (i.e., facultative [FAC][7] species). Moreover, seasonal wetlands are "problematic" in that they typically support hydrophytes and wetland hydrology during the growing season but often support upland species and may lack direct hydrologic indicators (i.e., inundation, saturation) during drier parts of the year.

One seasonal irrigation ditch wetland, associated with an unmaintained, aggraded north-south irrigation ditch, is positioned in the low-lying terrace on the central portion of the combined facilities site, downslope from the flat, highly modified terrace supporting the abandoned greenhouses. This irrigation ditch was originally designed as an agricultural tailwater[8] and stormwater conveyance feature to direct runoff from the greenhouse area into Harkins Slough Road Drainage (see also Environmental Restoration and Enhancement Features - Alternative 3 Combined Facilities on Adjacent Property). Corrugated conveyance pipes direct runoff down the steep slope from the greenhouses into the ditch. Over time, the ditch itself has incised somewhat below the elevation of the outfall culvert into the east-west ditch connecting into the Harkins Slough Road Drainage. Subsequent accumulation of nutrient-rich, silty clay sediments has flattened a section of the ditch, which now supports emergent wetland vegetation dominated by California bulrush (*Schoenoplectus californicus*; OBL), narrowleaved cattail (*Typha angustifolia*; OBL), common rush (FACW), pennyroyal (*Mentha pulegium*; OBL), and poison hemlock (FACW). No willows or other riparian vegetation were associated with this feature. The irrigation ditch was intended to flow through a culvert under a moderately steep west-facing hillslope carrying the runoff to another perpendicular (east–west) ditch that subsequently directs the flow into Harkins Slough Road Drainage. This culvert is no longer positioned to allow water from the irrigation ditch to flow through the culvert except during larger storm events.

Freshwater emergent marsh is present immediately south of the main Landfill entrance, bordering the Buena Vista Drive Tributary. This feature is dominated by willows and cattails, with watercress (*Nasturtium officinale*; OBL), water parsley (*Oenanthe sarmentosa*; OBL), cutleaf waterparsnip (*Berula erecta*; OBL), and goldenrod (*Euthamia occidentalis*; FACW) also common along the margin of Buena Vista Drive Tributary extending laterally to the southwest.

Freshwater emergent marsh is also situated along the fringe of Harkins Slough in the easternmost portion of the Study Area within the Wildlife Refuge. While this feature is within the Study Area and contributes to the overall ecological complexity of the area, no impacts to this feature would result from Alternative 3. This feature is dominated by broadleaved cattail (*Typha latifolia*; OBL), with California bulrush, curly dock (*Rumex crispus*; FAC), and common cocklebur (*Xanthium orientale*; FAC) also common along the shallow, gently sloped fringe of Harkins Slough.

In addition, freshwater marsh is associated with the outlet of Channelized Gallighan Slough into the bottomland mixed willow riparian forest of upper Gallighan Slough. While this feature is within the Study Area and contributes to the overall ecological complexity of the area, no impacts to this feature would result from Alternative 3. The emergent marsh vegetation observed at this location occurs in braided alluvial soil/sediments beneath a dense willow canopy overstory, and within a concrete spring-box containing dotted smartweed (*Persicaria punctata*; OBL), small-fruited bulrush

[7] A facultative (FAC) plant species is a plant that is equally likely to be found in wetlands and upland habitats.

[8] Agricultural tailwater is applied irrigation water or rainfall that is not infiltrated, evaporated, or retained by the plant, and instead flows off the field via surface drainage pathways and into conveyances like service ditches and canals.

(*Scirpus microcarpus*; OBL), stinging nettle, broadleaved cattail (OBL), California blackberry (FAC), velvet grass (*Holcus lanatus*; FAC), and duckweed (*Lemna minor*; OBL).

One seasonal wetland seep was identified within the greater Study Area on a moderately steep hillslope immediately east of Buena Vista Drive. While this feature is within the Study Area and contributes to the overall ecological complexity of the area, no impacts to this feature would result from Alternative 3. The wetland seep is situated near the toe of the slope where groundwater intercepts the ground surface, but this feature also receives seasonal hydrology from an incised, erosional gully/rill which directs surface runoff from the adjacent terrace supporting non-native grassland and coastal terrace prairie habitats. This feature was dominated by hydrophytic grasses and forbs including velvet grass (*Holcus lanatus*; FAC), dense sedge (*Carex densa*; FACW), Italian ryegrass (FAC), curly dock (FAC), rabbitfoot grass (*Polypogon monspeliensis*; FACW), stinging nettle (*Urtica dioica*), Fuller's teasel (*Dipsacus fullonum*; FAC), poison hemlock (*Conium maculatum*; FACW), and common rush (*Juncus patens*; FACW).

During the rainy season, the seasonal wetlands and freshwater marsh habitats may provide hydration points, refuge, or breeding habitat for amphibian species such as chorus frog and California red-legged frog (CRLF) (*Rana draytonii*). Freshwater marsh habitat within the Study Area provides both foraging and nesting habitat for numerous bird species such as song sparrow, common yellowthroat (*Geothlypis trichas*), red-winged blackbird (*Agelaius phoeniceus*), and Anna's hummingbird (**Appendix G2.4**).

RIVERINE

Riverine (aquatic) habitat is composed of natural and anthropogenic open bodies of flowing water (lotic systems). Riverine habitat is largely defined as unvegetated portions of these waterways, which intergrade with riparian forest and palustrine emergent wetlands (described above) and support a dense overstory of broadleaved evergreen trees and/or emergent wetland vegetation. Within the Study Area, riverine features include the Harkins Slough Road Drainage, the Buena Vista Drive Tributary, and Channelized Gallighan Slough (**Figure 6.4-1 and Figures 6.4-1a–d**). The Study Area also supports several ephemeral to seasonal drainage features that ultimately convey stormwater into Gallighan Slough and the larger Watsonville Slough system (**Figure 3.4-1 and Figure 3.4-2b and d**).

The Harkins Slough Road Drainage originates in the north-central portion of the Study Area on the relatively flat terrace supporting the commercial plant nursery. This seasonal to perennial feature flows southward through belowground pipes and culverts before daylighting in a narrow, linear, incised drainage bordering the north side of Harkins Slough Road. The aboveground riverine stretch of the drainage flows westward along Harkins Slough Road to Buena Vista Drive, where it turns 90 degrees to the south, passing under Harkins Slough Road via a culvert, to flow south along the frontage of the Landfill in a concrete-lined ditch.

The perennial Buena Vista Drive Tributary that flows along Buena Vista Drive originates in terraced and sloped agricultural fields north and northwest of the Study Area and flows generally southward first on the west side of Buena Vista Drive, then crossing under the road at the previous entrance to the Landfill to flow along the Landfill frontage to its confluence with Channelized Gallighan Slough. The concrete ditch that conveys flows from Harkins Slough Road Drainage along the Landfill frontage also drains into the Buena Vista Drive Tributary at the previous Landfill entrance, via a culvert under the driveway.

Channelized Gallighan Slough is positioned within a relatively broad arroyo bisecting the Active Landfill to the north and the Old Landfill to the south. Channelized Gallighan Slough is a narrow, perennial stream, lined with dense mixed broadleaved riparian forest above the culvert under the internal roadway to the Old Landfill and, downstream of the culvert, with dense mixed willow riparian forest on the north side of the stream. The south side of the drainage is bounded by an unpaved maintenance road that restricts the formation of a riparian corridor. Invasive weeds including poison hemlock, veldt grass, and wild radish are present on both embankments downstream of the culvert, with ruderal vegetation continuing above the top of bank on the south side. As Channelized Gallighan Slough enters the main body of Gallighan Slough, agricultural sediments have accumulated in an alluvial plain that supports a dense mixed willow riparian forest and freshwater emergent marsh.

These flashy drainages and tributaries carry elevated flow volumes immediately following storm events and continue to flow during summer months in part due to irrigation runoff (agricultural tailwater) from adjacent agricultural fields.

As noted above, several other dry to ephemeral to seasonal ditches were identified within the Study Area. The linear east-west ditch mentioned above extends along the property boundary between the two properties north of the Landfill to the confluence with the Harkins Slough Road Drainage. The east-west ditch flows only during and immediately following precipitation; or previously, when there was tailwater from the agricultural operations within the greenhouses, and the culvert was better maintained to direct flow from the north-south ditch.

A shallower ditch extends across the central portion of the low-lying terrace supporting ruderal grassland dominated by Harding grass and ultimately connects to the Harkins Slough Road Drainage, via a pipe presumed to be buried along the existing driveway from Harkins Slough Road. This feature has never been observed to support standing or flowing water, and it appears to be relictual and associated with past agricultural operations. While some hydrophytic plants including common rush and California blackberry (FAC) were observed scattered throughout the ditch, the feature was dominated by upland vegetation and did not support hydric soils or evidence of wetland hydrology.

Together with the riparian habitat and open spaces that border them, aquatic features offer important habitat values to wildlife species, providing water, food sources, shade, and cover. Aquatic habitats in the area moderate the Mediterranean climate of the region, allowing wildlife to adjust to seasonal and climatic fluctuations. Aquatic habitats support aquatic species such as freshwater sculpins (*Cottus* sp.) and amphibians such as the Sierran chorus frog.

RUDERAL (GRASSLAND, MIXED HERBACEOUS, AND SCRUB)

Ruderal[9] habitats are not described in the vegetation classification systems by Holland (1986), Sawyer et al. (2009), or CDFW (2026d), but contain elements of the non-native grassland and coastal scrub habitat types. Within the Study Area, ruderal communities consist of highly disturbed, weedy areas immediately adjacent to roads and other developed or disturbed areas. In the absence of ongoing disturbance, ruderal habitat in the Study Area might ultimately transition to grassland, coastal scrub, or woodland habitats. However, due to the proximity to roads, agricultural activities, and other repeated and ongoing disturbances, ruderal areas tend to persist over time, and succession to other natural communities is limited to nonexistent.

[9] Ruderal describes plants or plant communities that colonize disturbed or damaged environments — such as roadsides, construction sites, burned areas, or abandoned lots.

Ruderal Grassland

Ruderal grassland occurs on the nearly level terraces to very steep hillslopes throughout the majority of the Study Area in areas previously supporting or adjacent to active and recently closed landfill activities, and on the low-lying terrace in the combined facilities site. These areas currently undergo repeated, ongoing disturbance including grading, mowing, and other landscape manipulation and likely would transition to woody habitat types if undisturbed. In contrast to non-native grassland (described above), several of these areas were artificially formed above buried refuse and were not grassland communities prior to disturbance. The vegetation assemblage of ruderal grassland is dominated by aggressive, opportunistic species including wild oats, brome grasses, Harding grass, poison hemlock, bindweed (*Convolvulus arvensis*), Bermuda grass (*Cynodon dactylon*), and reed fescue.

Ruderal Mixed Herbs

Areas dominated by ruderal mixed herbs are situated primarily along the margins of existing roads, buildings, and equipment storage areas and comprise thickets of non-native Himalayan blackberry (*Rubus armeniacus*), wild radish, cutleaf plantain (*Plantago coronopus*), purple sandspurry (*Spergularia rubra*), burclover (*Medicago polymorpha*), dog fennel (*Anthemis cotula*), Jersey cudweed (*Pseudognaphalium luteoalbum*), narrowleaf clover (*Trifolium angustifolium*), and filaree (*Erodium botrys*).

Ruderal Scrub

Ruderal scrub occurs as a patch of vegetation growing on the former site of disposed organic waste from tomato and cut flower production prior to discontinuation of agricultural activities on the property. This area is dominated by a nearly monospecific, even-aged stand of coyote brush interspersed with invasive weeds including poison hemlock and Eurasian grasses and forbs including Harding grass, ripgut brome, and wild oats. This area also supports 3 solitary oaks, each of which is approximately 20 years old and less than 14" DBH. During periods of agricultural production on the site, the disposed organic waste was periodically spread/flattened, and naturalized vegetation was regularly mowed. Therefore, this area did not previously support native coastal scrub or forested habitats, as evidenced by aerial photographs of the site acquired from USCB and Google Earth extending from 1948 to the present.

SOLITARY TREES (COAST LIVE OAK, MONTEREY CYPRESS)

Solitary, isolated trees are scattered throughout the property, mostly immediately adjacent to developed areas or along the southern margin of the property. A total of eighteen (18) coast live oak and one (1) Monterey cypress were identified in the Study Area. These trees are healthy but disjunct from intact forest and woodland communities within and adjacent to the site. These trees are not associated with sensitive habitats and are of insufficient size to be considered "Significant Trees" under the County of Santa Cruz Significant Tree Ordinance (SCCC Chapter 16.34).

Individual trees within the Study Area provide habitat for a variety of native birds, small mammals, and insects.

Floristic Inventory

The biologist recorded a total of 153 species of vascular plants within the Study Area. A complete list of vascular plants encountered during the site visits is presented in **Appendix G1.3.** Sixty (39

percent) of these plant species are native, while the remaining 93 (61 percent) of these plant species are non-native or naturalized to the Study Area. Of these non-native species, 44 (29 percent) are classified as invasive by the California Invasive Plant Council (Cal-IPC 2026), indicating extensive historical and contemporary disturbance to the Study Area.

Special-Status Plant Species

No special-status plant species were observed from 2022 through 2026 within the Study Area during focused, phenologically timed rare plant surveys; and no sensitive plant species are expected to occur within the Study Area, including the Alternative 3 project area. Therefore, no additional surveys or further consideration of sensitive plant species are recommended.

Santa Cruz tarplant (*Holocarpha macradenia*; federal threatened [FT]/state endangered [SE]/California Rare Plant Rank [CRPR] 1B.1) and robust spineflower (*Chorizanthe robusta var. robusta*; FE/CRPR 1B.1) were considered to have "moderate" potential for occurrence due to the observed biotic (e.g., habitat types, dominant plant species) and abiotic (e.g., soils, precipitation, elevation) conditions of the Study Area, and based on extant occurrences in relative proximity. To ensure surveys for these target rare plants were performed during the blooming period, nearby reference sites for both species were visited to confirm suitable phenology for identification. These species were not identified during field surveys and are not expected to occur due to the confirmed absence of suitable habitat during floristic surveys of the Study Area. Additional information about these species is included in **Appendix G1.2**.

Sensitive Wildlife Species

A total of 23 sensitive wildlife species were present or may occur within or near the Study Area for Alternative 3 (**Appendix G2.1** and **Appendix G2.2**). During the field surveys, 13 sensitive wildlife species were observed within or near the Study Area. An additional nine species are known to occur within the area, and/or potential habitat is present within the Study Area. These species are listed below and discussed in greater detail in Section 6.4.4, Project Impact Analysis. Species narratives for sensitive wildlife species known or with potential to occur are included in **Appendix G2.2**. Information regarding species that were considered and subsequently eliminated from consideration is included in **Appendix G2.3** and **Appendix G3.2**.

The following species were observed during field surveys:

- Monarch butterfly (*Danaus plexippus*)
- California red-legged frog (*Rana draytonii*)
- Northwestern pond turtle (*Actinemys marmorata*)
- Allen's hummingbird (*Selasphorus sasin*)
- Bald eagle (*Haliaeetus leucocephalus*)
- California gull (*Larus californicus*)
- California thrasher (*Toxostoma redivivum*)
- Lawrence's goldfinch (*Spinus lawrencei*)
- Nuttall's woodpecker (*Picoides nuttallii*)
- Oak titmouse (*Baeolophus inornatus*)

- Western gull (*Larus occidentalis*)
- Wrentit (*Chamaea fasciata*)
- San Francisco dusky-footed woodrat (*Neotoma fuscipes annectens*)

Individual western monarch butterflies (*Danaus plexippus*) were observed during field surveys; however, suitable autumnal or winter roost habitat is not present within the Study Area, as discussed further in Section 6.4.4.

The following species have been observed in or near the Study Area (eBird 2026), or suitable habitat is present within or near the Study Area:

- Bullock's oriole (*Icterus bullockii*)
- Crotch's bumble bee (*Bombus crotchii*)
- Golden eagle (*Aquila chrysaetos*)
- Grasshopper sparrow (*Ammodramus savannarum*)
- Olive-sided flycatcher (*Contopus cooperi*)
- Western burrowing owl (*Athene cunicularia*)
- White-tailed kite (*Elanus leucurus*)
- Yellow warbler (*Setophaga petechia*)
- Long-legged myotis (*Myotis volans*)
- Western red bat (*Lasiurus frantzii*)

Potential impacts to these species are analyzed in Section 6.4.4 below.

Wildlife Corridors

Providing functional habitat connectivity between natural areas is essential to sustaining healthy wildlife populations, allowing for the continued dispersal of native plant and animal species, and thus is a consideration in the California Environmental Quality Act (CEQA) analysis.

Corridors for wildlife movement (also called dispersal corridors, wildlife corridors, or landscape linkages) are features whose primary function is to connect at least two isolated habitat areas (Bond 2003). A basic description of the functions of corridors is as follows:

> Corridors provide avenues along which (1) wide ranging animals can travel, migrate, and meet mates... (2) plants can propagate... (3) genetic interchange can occur... (4) populations can respond to environmental change... [and] (5) locally extirpated populations can be replaced from other areas (Beier and Loe 1992).

In the interface between open spaces and developed areas, corridors can provide links between different types of habitat areas, including (but not limited to) core habitat areas, supportive natural landscapes or habitat patches, and linear habitats.

CORE HABITATS

Core habitat areas are undeveloped areas or open spaces that support the viability of rare plant or animal populations or consist of exemplary natural communities. Core habitat areas in the vicinity of the Study Area are located northeast of the developed and agricultural footprint of the City of

Watsonville in the Santa Cruz Mountains, and south of the Study Area including the Elkhorn Slough Reserve, Kirby Park, Elkhorn Slough State Marine Reserve, and Moss Landing Wildlife Area (SCCW 2014; Spencer et al. 2010).

HABITAT PATCHES

Supportive natural landscapes or habitat patches provide plants and wildlife with the minimum resources necessary for reproduction. Additionally, for wildlife, these landscapes provide opportunities for foraging, refuge, and shelter; and may serve as stepping stones to connect native species with other habitat patches or core habitats. Habitat patches may lack the scale (size), richness, and structural complexity that core habitats possess. The Ellicott Slough Unit and Harkins Slough Unit of the Wildlife Refuge would be considered habitat patches in the vicinity of the Study Area. Harkins Slough, Gallighan Slough, the sloughs to the north and east, and the undeveloped portions of the adjacent lands north of the landfill would also be considered habitat patches. The oak woodland along Harkins Slough Road and east of the combined facilities site provides stepping stones between the Wildlife Refuge, the upper grassland terrace west of the combined facilities site, and the riparian corridor of Buena Vista Drive Tributary. Coyote scat and black-tailed deer scat were observed in the southeast portion of the combined facilities site (i.e., northeast corner of the County-owned portion of the site), near the existing outdoor storage area north of Harkins Slough Road as well as on the western grassland terrace (west of the combined facilities site).

LINEAR HABITATS

Creeks, drainages, and associated riparian habitats are considered linear habitats. Linear habitats in agricultural or developed landscapes provide habitat for native plants, canopy cover, opportunities for foraging, refuge from predators, as well as the opportunity to disperse (Beier and Loe 1992). Linear habitats within or near the Study Area include the Harkins Slough Road Drainage, Buena Vista Drive Tributary, Channelized Gallighan Slough, and the Old Landfill Drainage. In addition, the SCBRL right-of-way, while not a riparian corridor, also serves as a linear habitat just outside of the Study Area to the south.

WILDLIFE MOVEMENT WITHIN THE STUDY AREA AND LARGER REGIONAL CONTEXT

Providing functional connectivity between habitat patches and linear habitats is essential to sustaining healthy wildlife populations and allowing for the continued dispersal of native plant and wildlife species amidst increasing fragmentation of natural landscapes. The habitat patches and linear habitats within and near the Study Area provide opportunities for plant dispersal and wildlife movement. While these areas are fragmented by busy roads, agricultural fields, and development (all of which are considered partially permeable to impermeable barriers to movement), retaining and enhancing existing connectivity is important to preserving wildlife corridor functions.

Despite the disturbed and fragmented nature of the Study Area, the biologists observed the following native wildlife species during the site visits: monarch butterfly (and numerous other insects), coast range fence lizard, gopher snake, numerous common and sensitive avian species (**Appendix G2.4**), bats, brush rabbit, San Francisco dusky-footed woodrat, Sierran chorus frog, CRLF, sculpin, three-spine stickleback, and scat from coyote and black-tailed deer. Additionally, a number of other wildlife species (such as fox, raccoon, bobcat, opossum, and skunk) are likely to occur within the Study Area.

6.4.2 Regulatory Setting

Federal, state, regional, and local regulations have been enacted to provide for the protection and management of sensitive biological resources and water resources. Those pertinent to Alternative 3 are listed below and summarized in Section 3.3.2.

Federal

- Federal Endangered Species Act (ESA) of 1973 (Title 16 US Code, § 1531 et seq., as amended);
- Migratory Bird Treaty Act of 1918 (MBTA) (Title 16 United States Code, §§ 703–712 as amended; 50 CFR § 21; and 50 CFR § 13) and by California Fish and Game Code [CFGC] provisions that support the act;
- US Fish and Wildlife Service Birds of Conservation Concern (USFWS 2021) [Public Law 100–653 (102 Statute 3825)]
- Bald and Golden Eagle Protection Act of 1940 (16 USC 668–668d, 54 Stat. 250) as amended
- Executive Order 13112 Invasive Species (64 FR 6183, 1999)
- Federal Clean Water Act, Sections 401 and 404 (40 CFR 230.3, 40 CFR 120.2, and 33 CFR 328.3) and the corresponding definitions of wetlands (40 CFR 230.3, and CE 33 CFR 328.3)
- Protection of Wetlands Executive Order 11990 (42 FR 26961, 3 CFR, 1977 Comp., p. 121)

State

- California Environmental Quality Act
- California Endangered Species Act (CESA)
- California Native Plant Protection Act (CFGC §§ 1900–1913, amended 2023)
- California Native Plant Society Inventory (CNPS 2026)
- CDFW Species of Special Concern (CDFW 2026e)
- California Fish and Game Code (CFGC) (§ 3503, § 3503.5, (§§ 86; 2000; 2002; 2014; 3000–3012; 4150 and several sections under Title 14 of California Code of Regulations (CCR) (14 CCR § 472)
- California Fully Protected Species (CFGC §§ 3511 [birds], 4700 [mammals], 5050 [reptiles and amphibians], and 5515 [fish])
- Western Bat Working Group (2017)
- CDFW Sensitive Natural Communities (rank of S1–S3) (CDFW 2026d)
- Lake and Streambed Alteration Agreement (CFGC Sections 1600–1617)
- Porter-Cologne Water Quality Act (California Water Code, Division 7, § 13000 et seq. 1969 as amended 2025)
- CDFW Wetlands Resources Policy (California Fish and Game Commission 2005)
- California Wetland Conservation Policy (RWQCB 1993)
- California Coastal Act of 1976 (PRC §§ 30000–30900) and Coastal Zone Management Act of 1972 (16 USC §§ 1451–1466)

Local

- 2024 Santa Cruz County General Plan/Local Coastal Program
- County of Santa Cruz Sensitive Habitat Protection Ordinance (SCCC Chapter 16.32)
- County of Santa Cruz Riparian Corridor and Wetlands Protection Ordinance (SCCC Chapter 16.30)
- County of Santa Cruz Significant Trees Protection Ordinance (SCCC Chapter 16.34)
- County of Santa Cruz Tree Removal Policy

6.4.3 Methodology and Significance Thresholds

Methodology

This section describes the potential environmental impacts of Alternative 3 relevant to biological resources. The impact analysis is based on an assessment of baseline conditions for the Alternative 3 project area. The methodology for identifying the existing biological resources within and adjacent to the Alternative 3 project area is described above in Section 6.4.1, Existing Conditions.

Significance Thresholds

As stated in the Chapter 6 introduction, the significance thresholds used in this analysis are based on Appendix G of the CEQA Guidelines, which provides a sample Initial Study checklist that includes a number of factual inquiries related to the subject of biological resources and other environmental topics. Thus, the letters and thresholds presented below correspond with the questions in the Appendix G Initial Study checklist.

For purposes of this EIR and consistent with the analysis for the Proposed Project, a significant impact would occur if implementation of the Project would result in any of the following conditions:

A. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS

B. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the CDFW or USFWS

C. Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means

D. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites

E. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance

F. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan (NCCP), or other approved local, regional, or state habitat conservation plan

Regarding Threshold F, there is no applicable adopted Habitat Conservation Plan, NCCP, or other approved local, regional, or state Habitat Conservation Plan. Therefore, there would be no impact, and this topic is not addressed further in this EIR.

6.4.4 Project Impact Analysis

For each impact, the discussion provides an overview that indicates which project components contribute to the potential impact, the potential occurrence for the specific resource being analyzed, and then if the potential impact is from construction and/or operation of Alternative 3. The overall conclusion or significance determination is presented at the end of the discussion, as well as in parentheses at the end of the numbered impact statement.

As described in Section 5.2.3, Alternative 3 (Combined Facility on Adjacent Property) in Chapter 5, Alternative 3 includes the following components:

1. Transfer Station
2. Organics Diversion Facility
3. Recycling Center
4. Scale House
5. General Plan/Local Coastal Program Land Use Designation and Zoning Map Amendments

Additionally, Landfill Closure and Revegetation, including the Environmental Enhancement and Restoration Features, would be implemented as described in Sections 2.4 and 5.2.3; and the potential impacts of those features are considered in the evaluation below.

Threshold A:	Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.

Special-Status Plants and Sensitive Wildlife Species

Botany

No special-status plant species were identified within the Study Area. Focused surveys were conducted for special-status species considered to have potential for occurrence within the Alternative 3 Study Area. No impacts to special-status plant species are anticipated to result from Alternative 3. Impacts to developed and ruderal areas associated with the development of solid waste transfer stations and organics diversion facilities, reorientation of a seasonal irrigation ditch wetland to accommodate proposed stormwater basins and wetlands, as well as temporary impacts for habitat restoration within non-native grassland, coast live oak woodland, and mixed willow riparian are not expected to impact sensitive plant species. Additional information on potential special-status plant species is presented in **Appendix G1.1** and **Appendix G1.2**. A list of all vascular plant species observed during floristic surveys of the Study Area is provided in **Appendix G1.3**.

Wildlife

Table 6.4-3 lists sensitive wildlife species that are present or have potential to occur within the Study Area. Potential impacts to these species and their habitats are discussed in the sections below.

Table 6.4-3. Sensitive Wildlife Species with Potential to Occur Within or Near the Study Area

Crotch's bumble bee	Monarch butterfly
California red-legged frog	Northwestern pond turtle
Allen's hummingbird	Bald eagle
California gull	California thrasher
Golden eagle	Grasshopper sparrow
Lawrence's goldfinch	Nuttall's woodpecker
Oak titmouse	Olive-sided flycatcher
Western burrowing owl	Western gull
White-tailed kite	Wrentit
Yellow warbler	Nesting birds
San Francisco dusky-footed woodrat	Long-legged myotis
Western red bat	Roosting bats

Birds of prey, other common bird species, and bat species are also likely to utilize the Alternative 3 Study Area for breeding and roosting, respectively, and these activities are protected by federal and/or state laws. An overview of these species and potential impacts is described below. Additional information on sensitive wildlife species is presented in **Appendix G2.1** – **Appendix G2.4**. Avoidance, minimization, and mitigation measures are identified below for the protection of these species and/or their habitat. These measures will reduce the potential impacts to a less than significant level.

Impact BIO-1 ALTERNATIVE 3 CONSTRUCTION MAY RESULT IN IMPACTS TO CROTCH'S BUMBLE BEE, IF PRESENT. (LESS THAN SIGNIFICANT IMPACT WITH MITIGATION)

Overview

Alternative 3 may have an adverse impact on Crotch's bumble bee and active nests, if present, through destruction of active nests and displacement of foraging habitat. Crotch's bumble bee is a candidate for listing as endangered under CESA and has a NatureServe (2026) rarity rank of S2 (state imperiled). Candidates for listing under CESA receive the same protections as listed species.

Alternative 3 components that could result in or contribute to this potential impact include the combined facilities on the north side of Harkins Slough Road and Landfill Closure on the south side.

Occurrence Potential

Coastal terrace prairie, non-native grassland, ruderal habitats, and coastal scrub habitats within the Study Area provide suitable potential habitat for this species although nesting habitat (small mammal burrows or thatch), nectar, and pollen sources are limited. The Crotch's bumble bee was not observed during field surveys of the Study Area; however, reconnaissance surveys for this species do not preclude presence.

Santa Cruz County is considered to be within the current occupied range of Crotch's bumble bee. One recent record (2025) documents an occurrence in the Pleasure Point community of unincorporated Santa Cruz County, approximately 9 miles northwest of the Alternative 3 project area (Xerces Society et al. 2026). Additionally, historical records document the species at Watsonville Airport (1994), approximately 1.5 miles northeast of the project area, and at Sunset

State Beach (1995), approximately 2 miles southwest of the project area (CNDDB 2026b,c). This species is presently understudied due to its recent candidacy for listing under CESA; therefore, it may occur in additional locations throughout the County.

CONSTRUCTION

Ruderal grassland, ruderal mixed herbs, ruderal scrub, and non-native grassland within the larger Alternative 3 project area may support Crotch's bumble bee. Approximately 29.12 acres of ruderal habitat and approximately 0.07 acres of non-native grassland would be impacted by Alternative 3 construction. Coastal terrace prairie located on the upper northwest terrace within the Study Area provides high-quality habitat for this species, but will not be impacted by Alternative 3. Limited coastal scrub within the Study Area would also not be impacted by Alternative 3.

Suitable non-native and ruderal grassland within the Alternative 3 project area occurs on the Landfill. Ruderal scrub habitat is located on the east side of the combined facilities site in a discrete area where greenhouse spoils were dumped within the surrounding non-native grassland. These areas provide marginal habitat for Crotch's bumble bee due to their disturbed nature, lack of developed thatch, limited small mammal burrows, and lack of diversity in flowering plants for nectar and pollen.

Large portions of the existing ruderal grassland (on the capped portions of the active landfill) would largely remain as is. Alternative 3 would impact ruderal grassland in areas to be capped during closure.

In the unlikely event that Crotch's bumble bees are detected during pre-construction surveys, consultation with CDFW would be initiated, and additional protective measures may be required. If impacts cannot be avoided, an Incidental Take Permit would be required.

In summary, potential impacts to individual Crotch's bumble bees, active nests (if present), and potential habitat may result from capping and closing the Active Landfill; and clearing, grubbing, and grading the combined facilities. The latter would include the creation of the stormwater basins/wetlands through the reorientation and expansion of the unmaintained north-south irrigation ditch and seasonal irrigation ditch wetland. As currently designed, the capped Landfill would provide only marginal habitat for this species, post-closure, due to the shallow soil depth of the cap, which is unlikely to produce extensive thatch (for nesting) or abundant blooming plant species (for nectar and pollen forage). In addition, small mammal burrows on top of the Landfill cap will be discouraged and managed; therefore, nesting habitat would be further limited. Overall, these potential impacts would be reduced by conducting environmental awareness training and pre-construction surveys, implementing construction buffers, and restoring habitat.

Due to the marginal habitat within the Alternative 3 project area and undetermined presence of this species, these potential impacts are considered **Less than Significant with Mitigation** (Mitigation Measures BIO-1a, BIO-1b, BIO-1c, BIO-1d, BIO-8e), as identified in the measures below.

Mitigation Measure BIO-1a: Conduct Environmental Training Prior to Construction

The County or their construction contractor will be responsible for hiring a qualified USFWS/CDFW-approved biologist (agency-approved biologist [10]) to conduct an environmental training session for all construction personnel regarding the sensitive wildlife species that are known or have potential to occur in or near the project area. This mitigation measure applies to all project components.

The environmental training will cover the following topics:

- Description, identification, and photograph of sensitive species (Crotch's bumble bee, California red-legged frog, northwestern pond turtle, sensitive bird species and other nesting birds, San Francisco dusky-footed woodrat, sensitive bats and other roosting bats);
- Natural history information;
- Protective measures and best management practices to be implemented to protect sensitive wildlife species and their habitat; and
- The importance of avoiding impacts to sensitive species and the procedures to follow if individuals are encountered, alive or dead, including contacting the USFWS/CDFW-approved biologist.

Printed hand-outs summarizing key project permit conditions and sensitive biological resources (with photographs) will be provided. All construction personnel will receive the training prior to beginning work. Any new crew members that join after work has been initiated will also receive the training prior to beginning work. A sign-in sheet will document completion of the training.

Mitigation Measure BIO-1b: Schedule Construction to Avoid Impacts to Sensitive Biological Resources

Whenever feasible, the County or their contractor will schedule construction to avoid impacts to sensitive biological resources including sensitive habitats, aquatic and riparian habitats, and sensitive wildlife species. The following table lists the preferred construction windows to avoid and minimize impacts to biological resources, as well as a brief overview of required best management practices to implement during construction activities.

[10] Agency-Approved Biologist = A minimum of thirty days prior to Project initiation, biologists contracted to provide biological monitoring services for the Project are typically required to submit in writing or by email their qualifications for approval to U.S. Fish and Wildlife Service (USFWS) and/or the California Department of Fish and Wildlife (CDFW), as applicable. Required qualifications will vary depending on the species. These agency-approved biologists will conduct any required species-specific surveys, provide worker's environmental awareness training, and handle and relocate wildlife in accordance with permit conditions and agency requirements.

Table 6.4-4. Recommended Construction Timing to Avoid/Minimize Impacts to Sensitive Biological Resources

Biological Resource	Relevant Habitat Type	Preferred Period of Avoidance	Preferred Construction Window	Resource/Life Events/Functions/ Values to be Protected	Required Best Management Practices
Aquatic/adjacent riparian	-	Rainy season, approximately October 15–April 15[1]	April 16–October 14	Water quality, vegetation, stable banks and slopes	Silt fencing Dewatering, diversion/bypass, If needed Confine Project footprint
Oak woodland	-	Rainy season, approximately October 15–April 15	April 16–October 14	Trees and dripline of canopy, stable slopes, soils, and understory	Silt fencing Confine Project footprint
Crotch's bumble bee	Non-Native Grassland/ Ruderal Habitats	-	-	Individual bees, nest sites, foraging habitat	Pre-construction survey during April–June period preceding construction
California red-legged frog	Buena Vista Drive Tributary Harkins Slough Road Drainage Channelized Gallighan Slough Irrigation Ditch and Wetland Adjacent Riparian Adjacent Uplands	Rainy season, approximately October 15–April 15	April 16–October 14	Individual frogs, aquatic and upland habitat quality, movement and dispersal	Pre-construction survey Biological monitoring
Northwestern pond turtle	Channelized Gallighan Slough Adjacent Uplands	N/A	N/A	Individual turtles, movement/basking in aquatic habitat, nesting in adjacent upland habitat (May–July)	Pre-construction survey Biological monitoring
Bird species	All	February 1–August 31	September 1–January 31	Adults, nests, eggs, and young, nesting activities	Breeding bird surveys February 1–August 31
Bat species	Trees, Buildings, Culverts	November 1–February 15 and May 1–August 31	September 1–October 31	Individual bats, roosting, especially maternity roosts and winter hibernacula	Pre-construction Acoustic/emergence survey All times
San Francisco dusky-footed woodrat	Oak Woodland Riparian	October 1–July 31	August 1–September 30	Individual woodrats, woodrat houses, especially during breeding and rearing	Pre-construction survey All times
Tree/vegetation removal	All	October 15–August 31	September 1–October 14 September 1–October 1	All	-

Notes:

i While this time period aligns with the typical rainy season in coastal Santa Cruz County, agencies such as the Regional Board use other rainy season time periods (October 1 – May 31) that may further restrict Program implementation or require filing a Request for an Early Start or Extended Work Period, if aquatic features requiring agency permits are present.

Mitigation Measure BIO-1c: Conduct Pre-construction Surveys and Implement Buffers for Crotch's Bumble Bee

For project construction activities to be initiated in non-native grassland or ruderal habitats during the peak of the active colony period (April–June), the County or their construction contractor will be responsible for hiring a qualified biologist to conduct a pre-construction survey for nesting and foraging bumble bees to avoid take of individuals or destruction of nests. Surveys will be conducted during the peak of the active colony period immediately preceding the project start date.

- Surveys will occur prior to beginning construction activities and will include all work, staging, and access areas and a buffer radius of 100 feet within suitable grassland habitat.
- Surveys will occur when temperatures are at or above 60 degrees Fahrenheit and at or below 90 degrees Fahrenheit on sunny or partially sunny days when wind speeds are below 8 miles per hour. Surveys will begin no earlier than 2 hours after sunrise and no later than 3 hours before sunset.
- Crotch's bumble bee nests will be given a buffer of 50 feet in which no project activities will occur. The qualified biologist will develop a plan with CDFW to prevent the take of the nest or any individual within the project area, or an Incidental Take Permit will be required.

Mitigation Measure BIO-1d: Restore and Promote Crotch's Bumble Bee Habitat

Where feasible, the County will promote suitable habitat for Crotch's bumble bee through restoration activities, such as planting of native grasses that produce and accumulate thatch, native nectar and pollen-producing plants, and placement of downed logs. The restoration activities can be incorporated into temporary impact areas and the planned wildlife movement corridor to be located across the southern portion of the closed landfill (as shown on **Figures 2-4 and 5-13**, Environmental Enhancement and Restoration Features).

Mitigation Measure BIO-8e: Prepare and Implement a Habitat Mitigation Plan for Permanent Impacts to Sensitive Habitats, Including Aquatic Features, for Alternative 3

Refer to the description of Mitigation Measure BIO-8e for Impact BIO-8 below.

Impact BIO-2 ALTERNATIVE 3 CONSTRUCTION AND OPERATION WOULD NOT RESULT IN IMPACTS TO ROOSTING MONARCH BUTTERFLIES. (LESS THAN SIGNIFICANT IMPACT)

Overview

While individual monarch butterflies were observed, Alternative 3 is unlikely to have an adverse impact on this species or its autumnal or winter roost habitat. The monarch is proposed for listing as threatened under the federal ESA (USFWS 2024). Alternative 3 is not within proposed designated habitat for the monarch butterfly (USFWS 2024).

Occurrence Potential

The biologists observed several individual western monarch butterflies during the November 2022 and 2025 site visits, flying within the Study Area; however, no autumnal or winter roosting butterflies were observed within the eucalyptus stands in or near the Study Area. The stand of eucalyptus trees located in the northwest corner of the Study Area provides marginal potential autumnal or winter roost habitat. The grove is located over 2.0 miles from the ocean (greater than

the typical distance of within 1.5 miles). The trees within the stand provide roosting substrate with a number of lateral branches and a southern aspect. This grove will not be impacted by construction of Alternative 3. Nearby grassland and coyote brush scrub support some nectary vegetation.

The closest known monarch winter roost site is Manresa State Beach (Xerces Society 2026), approximately 2.2 miles west of the Study Area.

Therefore, no impacts to autumnal or winter roost habitat are anticipated. The impact would be **Less than Significant**. No mitigation is required.

Impact BIO-3 Alternative 3 construction and operation may result in impacts to California red-legged frog. (Less than Significant Impact with Mitigation)

Overview

Alternative 3 may result in adverse impacts to CRLF through construction-related harassment, injury, mortality, or temporary habitat destruction. The CRLF is listed as threatened under the federal ESA (USFWS 1996) and is a California SSC (Thompson et al. 2016; CDFW 2026d). The Project area falls within designated critical habitat for CRLF (USFWS 2010).

All the Alternative 3 components could result in or contribute to this potential impact; however, the likelihood of project-related impacts from Alternative 3 is lower than the Proposed Project because the combined facilities site is located further from known occurrence locations and suitable potential aquatic habitats.

Occurrence Potential

CRLFs may occur within and near the Study Area (**Table 6.4-5**, **Table 6.4-6**, and **Figures 6.4-1 and 6.4-1a–d**) and may move through the Alternative 3 project area between aquatic features and/or take refuge in upland habitats.

In July 2023, biologists observed an individual CRLF in Channelized Gallighan Slough at the southern extent of the Study Area, south of the main entrance to the landfill. Several additional occurrence records are from nearby locations, including two road-killed CRLF observed in 2014, one on Buena Vista Drive near the main landfill entrance and one on San Andreas Road approximately 1 mile west of the Study Area (Westphal 2018). Additionally, a CRLF was observed by EcoSystems West and Kittleson Environmental Consulting (KEC 2023b) between 2021 and 2024 in a drop structure along the SCBRL, approximately 0.6 miles west of the main landfill entrance.

The closest known breeding habitat for CRLF is approximately 0.5 miles northwest of the Study Area in a small pond (Whiskey Hill Road Pond), located on private property off Whiskey Hill Road (Biosearch 2025). Adult CRLF may move through the Alternative 3 project area between aquatic features, and juveniles may disperse into the Alternative 3 project area from this breeding pond.

Buena Vista Pond, located within the Ellicott Slough Unit of the Wildlife Refuge, also supports breeding and lies just over 1 mile northwest of the Study Area. Additional breeding locations include West Struve Slough, approximately 1 mile east of the Study Area, which is a historical breeding site proposed for enhancement, and Ellicott Pond, located approximately 1.5 miles northwest of the Study Area within the Ellicott Slough Unit of the Wildlife Refuge.

The Study Area contains potential breeding habitat for CRLF, although degraded by the presence of non-native bullfrogs (*Lithobates catesbeianus*). The Study Area also provides aquatic non-breeding, movement, dispersal, and upland habitats.

Channelized Gallighan Slough, where the individual frog was observed, provides potential breeding habitat and non-breeding habitat (degraded by bullfrogs). This feature, along with the associated riparian habitat, also provides refuge, movement, and dispersal habitat for CRLF.

The Buena Vista Drive Tributary and associated riparian provide marginal aquatic non-breeding habitat, as well as refuge and movement habitat for CRLF. Because of the high groundwater table and dry-season agricultural runoff, the area remains wet or moist year-round. This drainage does not provide suitable aquatic breeding habitat due to channel aggradation (deposition of sediments) and a lack of ponded water of sufficient depth and hydroperiod to support successful metamorphosis. (On the central coast, CRLF generally require ponded water into late summer/early fall for successful metamorphosis.) The drainage provides marginal habitat for CRLF because of its position as a narrow linear strip between the Buena Vista Landfill, active agricultural fields, and Buena Vista Drive, a heavily trafficked road with vehicles traveling at high speeds. No CRLF have been observed in this feature.

Harkins Slough Road Drainage provides marginal aquatic non-breeding, refuge, movement or dispersal habitat. Agricultural tailwater from the adjacent commercial nursery results in this drainage sustaining at least a trickle of water year-round; however, the channel is incised, lacks cover and food sources, and is positioned adjacent to Harkins Slough Road, considered a semi-permeable barrier to movement. In addition, this drainage is not strategically positioned between occupied aquatic features. The irrigation ditch and associated seasonal irrigation ditch wetland located within the combined facilities site provide similar marginal habitat. No CRLF were observed in these features during the day and night surveys conducted over several years.

Within the Study Area, non-native grassland and in some locations ruderal grassland habitat contain small mammal burrows that provide refuge for CRLF. Woodland habitats, with understory vegetation and leaf litter, provide other refuge opportunities for CRLF. This potential upland habitat is fragmented by the active landfill, agricultural fields, and roadways; nevertheless, CRLF may utilize this habitat for dispersal from breeding ponds or movement between aquatic features.

Outside of the Study Area, additional features provide potential aquatic habitat for CRLF. These include two perennial ponds located just northeast of the Study Area on private property, and Harkins Slough located immediately east of the Study Area; however, Harkins Slough supports both non-native (bullfrogs and centrarchid fish) and native (avian species) CRLF predators (e.g., herons).

Table 6.4-5. California Red-Legged Frog Occurrence Records near the Alternative 3 Project Area

Date	Feature	Distance/Location from Project Area	Notes	References
July 2023	Channelized Gallighan Slough	Within Study Area	ESW biologists observed an individual CRLF in Channelized Gallighan Slough during unrelated surveys in 2023; bullfrogs present.	
Fall 2014	Buena Vista Drive	Within Study Area	Road-killed adult after rain event.	Westphal 2018
2021–2024	SCBRL Drop Structure	0.6 mile west	ESW biologists and KEC observed an individual frog in drop structure over multiple years during unrelated surveys.	KEC 2023b
Fall 2014	San Andreas Road	1.1 miles west	Road-killed adult after rain event.	Westphal 2018

Table 6.4-6. Known and Potential California Red-Legged Frog Aquatic Breeding Habitat near the Alternative 3 Project Area

Date	Feature	Distance/Location from Project Area	Known/Potential	Notes	References
NA	Channelized Gallighan Slough	Within Study Area	Potential	Bullfrogs present.	
NA	Gallighan Slough	Within Study Area	Potential	Bullfrogs present.	
2025	Whiskey Hill Road Pond	0.6 miles northwest	Known	Pond on private property off Whiskey Hill Road.	Biosearch 2025
2006	West Struve Slough	1 mile east	Known (historical)	Bullfrogs present; proposed for enhancement.	CNDDB 2026b,c
2025	Buena Vista Pond	1.1 miles northwest	Known	Pond on Ellicott Slough Ecological Preserve.	Biosearch 2025
2025	Ellicott Pond	1.5 miles northwest	Known	Pond on Ellicott Slough Ecological Preserve.	Biosearch 2025

Construction

Alternative 3 construction activities (including the Environmental Enhancement and Habitat Restoration Features described below) would include vegetation removal, grubbing, grading, trenching, concrete pouring, introduction of materials, and other activities that result in ground disturbance and could impact CRLF, if present. These activities could result in "take" of CRLF, including harassment (flushing CRLF from the work area), injury, or mortality. Equipment, automobiles, materials, or debris could crush or bury CRLF. Noise, vibrations, and increased human presence could cause CRLF to move from the work area (expending energy reserves and making them vulnerable to predation). Materials or chemicals could enter CRLF habitat through accidental spills, fueling, or maintenance of equipment. Alternative 3 would temporarily degrade habitat conditions through removal of native vegetation that provides cover and refuge and influences microhabitat conditions and may result in establishment of non-native invasive species following construction. Alternative 3 may temporarily degrade water quality within and downstream of the Alternative 3 project area through the introduction of sediments and other materials.

Culvert Modification and Culvert Replacement. The Culvert Modification with Small Wildlife Crossing at the Main Entrance, along with the Culvert Replacement under the Internal Roadway to the Old Landfill (described in Section 2.4 under "Environmental Enhancement and Restoration Features" and shown on **Figure 2-4**), would occur within potential CRLF aquatic non-breeding habitat of the Buena Vista Drive Tributary and the marginal potential breeding habitat of Channelized Gallighan Slough. Dewatering and installation of a diversion or bypass, excavation, grading, concrete pouring, and/or installation of the replacement culvert could result in harassment, injury, or mortality of CRLF, if present, during construction.

Two other drainage improvements would occur as part of a separate project (the County's Buena Vista Drive Rehabilitation Project): 1) stabilizing the Buena Vista Drive Tributary along the Landfill frontage to reduce channel incision and remove agricultural sediment, and 2) replacing the culvert and adding a wildlife crossing under Buena Vista Drive from the outlet from the step-down pools across from the main Landfill entrance to increase capacity and allow CRLF to safely cross Buena Vista Drive. In conjunction, these improvements and project-related improvements restore and enhance the overall conditions of the drainages and associated riparian corridors. The entrance locations referenced are shown on **Figure 1-3**.

In conjunction with these other improvements, upsizing the culvert under the road to the Old Landfill (or installing a bridge) would ultimately improve ecological and hydrologic conditions in Channelized Gallighan Slough, as well as in Buena Vista Drive Tributary, by maintaining sediment transport competence and reducing aggradation of the stream channels, thereby extending the return interval for maintenance and reducing frequent flood conditions near the current main Landfill entrance. Specifically, reducing sediment deposition in the channels would maintain a more stable bed, bank, and ordinary high-water mark while improving overall ecological conditions of the streams by supporting open-water riverine conditions and an associated diverse riparian habitat. The upsized culvert or bridge would restore functional riverine habitat and reduce or eliminate the conversion to instream freshwater marsh features which have established on the agricultural sediments.

The instream freshwater marsh that has developed within the Buena Vista Drive Tributary is associated with the following negative ecological effects:

- shorter hydroperiod;
- lack of running water, pools, or riffles;
- poor water quality (e.g., turbidity, less dissolved oxygen);

- loss of temperature gradients (that support species diversity);
- absent or degraded habitat for invertebrates (which are the basis of the food chain for fish and amphibians); and
- diminished hydrologic capacity of the stream, exacerbating flood risk.

The larger capacity culvert or bridge would reduce or eliminate this conversion of habitat from riverine to instream freshwater marsh. Extensive freshwater marsh habitat would remain at the confluence with Gallighan Slough and in off-channel locations along the streams, resulting in aquatic habitat heterogeneity.

The culvert modification would accommodate small wildlife passage, including CRLF, under most hydrologic conditions. In addition, Wildlife Directional Features at Key Locations (directional fencing), which is part of Alternative 3 (described in Section 2.4, under Environmental Enhancement and Restoration Features), would direct CRLF and other wildlife to the wildlife crossing under Buena Vista Drive. A stable riverine channel with perennial or near-perennial flows, mature riparian vegetation, and wildlife crossings to reduce vehicle strikes would provide improved habitat conditions for CRLF in the drainages.

Restoration of Harkins Slough Road Drainage/Reorientation and Expansion of Existing Irrigation Ditch Wetland. Alternative 3 includes the Restoration of the Harkins Slough Road Drainage located along the north side of Harkins Slough Road (described in Section 2.4 under "Environmental Enhancement and Habitat Restoration Features" and shown on **Figure 2-4**). Alternative 3 also includes the Reorientation and Expansion of an Existing Irrigation Ditch Wetland and irrigation ditch to capture and convey storm water runoff into new storm water basins and wetlands (described in Section 5.2.3 under "Environmental Enhancement and Habitat Restoration Features" and shown in **Figure 5-13**). No CRLF have been observed in these features during day and night survey efforts over multiple years. The drainage and irrigation ditch and associated wetland provide marginal aquatic non-breeding, dispersal, movement, and refuge habitat. If present, CRLF may be impacted by restoration activities; however, the modifications to these features will improve potential CRLF habitat in these features.

Re-Establishment of Open Drainage along North-South Roadway. Alternative 3 includes re-establishing an open drainage along the west side of the north-south roadway in the combined facilities site and removing the buried pipe (described in Section 5.2.3 under "Environmental Enhancement and Habitat Restoration Features" and shown in **Figure 5-13**). This feature would capture runoff from areas to the north and west, and the west bank would be planted with suitable native vegetation to shade the drainage and provide cover for wildlife. This drainage would enhance the existing modified landscape through the provision of an aboveground aquatic feature and associated native vegetation, providing a hydration point and refuge for CRLF, if present, and other wildlife.

Combined Facilities/Final Landfill Closure. Construction of the combined facilities and final landfill closure activities may result in harassment, injury, or mortality of CRLF, if present in these upland habitats.

Construction-related impacts to CRLF and its habitat would be avoided or minimized through protective measures such as construction worker training, pre-construction surveys, seasonal constraints on work within the drainage and associated riparian, and biological monitoring during ground disturbance activities. Therefore, the impact would be **Less than Significant with Mitigation** (BIO-1a, BIO-1b, BIO-3, BIO-8e).

It is anticipated that USFWS will issue a Biological Opinion (BO) and Incidental Take Permit that will allow for handling and relocating CRLF. To avoid unlawful "take" of CRLF, during project permitting under Section 404 of the CWA, it is anticipated that the USACE will initiate formal consultation with USFWS. The biotic assessment that was prepared for Alternative 3 (ESW 2026) will be provided to USFWS at that time. It is anticipated that USFWS will generate a BO for the Project under Section 7 of the ESA; or utilize the programmatic BO between the Corps and USFWS, if the Project meets the criteria for this permitting

mechanism. The BO will describe protective measures and conditions for Alternative 3, and likely include the conditions for a USFWS-approved biologist to handle and relocate CRLF that move into the work areas. With the approval of USFWS, the biologist will identify relocation sites for CRLF. The BO will also address project operation and associated potential impacts.

Operation

Operation of the combined facilities and associated vehicle and truck traffic may result in mortality of CRLF, if present in operational areas and on roads. Operations will be restricted to daytime use, thus reducing the likelihood of CRLF take, since CRLF are more likely to move at night. The establishment of the wildlife movement corridors, wildlife crossing, and directional fencing included as Alternative 3 components would further reduce operational impacts (refer to Section 5.2.3 under "Environmental Enhancement and Habitat Restoration Features" and shown in **Figure 5-13**). Therefore, operational impacts would be **Less than Significant**.

In summary, Alternative 3 construction and operation may result in impacts to CRLF. Specifically, construction activities such as vegetation removal, grading, and culvert replacement could result in harassment, injury, mortality, or temporary habitat disturbance to CRLF within designated critical habitat. As stated above, the impacts would be avoided or minimized through protective measures such as construction worker training, pre-construction surveys, seasonal constraints on work within the drainage and associated riparian, and biological monitoring during ground disturbance activities and with Environmental Enhancement and Habitat Restoration Features for potential operational impacts. Therefore, the impact would be **Less than Significant with Mitigation** (BIO-1a, BIO-1b, BIO-3, BIO-8e).

Mitigation Measure BIO-1a: Conduct Environmental Training prior to Construction

Refer to the description of Mitigation Measure BIO-1a for Impact BIO-1 above.

Mitigation Measure BIO-1b: Schedule Construction to Avoid Impacts to Sensitive Biological Resources

Refer to the description of Mitigation Measure BIO-1b for Impact BIO-1 above.

Mitigation Measure BIO-3: Implement Protective Measures and Biological Monitoring for California Red-Legged Frog and Northwestern Pond Turtle

During project construction activities, the County or their construction contractor, in coordination with an agency-approved biologist, will employ the following protective measures and biological monitoring for sensitive wildlife species, the California red-legged frog (CRLF) and northwestern pond turtle (NWPT).

- Prior to initiation of construction activities, an agency-approved biologist will identify and/or clearly mark in the field all areas to be avoided and/or protected. No construction activities will be conducted within these areas.
- Prior to initiation of construction activities, an agency-approved biologist with experience in the identification of all life stages of CRLF (egg masses, tadpoles, juveniles, and adults) and NWPT (nests, juveniles, adults) will perform a pre-construction survey. The survey will occur no more than 48 hours before construction activities start.
- An agency-approved biologist will be present during all work within aquatic features, adjacent riparian habitat, and initial activities involving vegetation removal, clearing, grubbing, trenching, or earth movement (in all habitat types). If the qualified biological monitor detects any life stage of CRLF or NWPT in the project area during construction, work will cease immediately; and with the

authorization of USFWS via the Biological Opinion, the qualified biologist will capture and relocate the animal to a previously identified agency-approved relocation habitat.

- Construction activities in or near known or potential habitat or designated Critical Habitat will take place during the dry season between May 1 and October 15 (refer to **Mitigation Measures BIO-1a** and **BIO-1b**) or until the first rain of the season, especially vegetation removal, soil disturbance, and work in or near aquatic features. Avoid working at night or during rain events when special-status amphibians and mammals are generally more active. Consult weather forecasts from the National Weather Service at least 72 hours prior to performing work.
- The agency-approved biologist or trained construction monitor will check under all equipment for wildlife before use. If any special-status wildlife is observed under equipment or within the work area, the agency-approved biologist will be permitted to handle and relocate it.
- An agency-approved biologist will permanently remove any individuals of exotic species (such as bullfrogs, crayfish, and centrarchid fishes) from the project area to the maximum extent possible. The biologist will be responsible for ensuring his or her activities are in compliance with the California Fish and Game Code.
- To ensure that diseases are not conveyed between work sites, the agency-approved biologist(s) or biological monitor(s) will adhere to Recommended Equipment Decontamination Procedures outlined in Appendix B of the Revised Guidance on Site Assessments and Field Surveys for the California Red-Legged Frog (USFWS 2005).[11]
- At the end of each workday, excavations shall be secured with a cover, or a ramp installed to prevent wildlife entrapment.
- All trenches, pipes, culverts or similar structures shall be inspected for animals prior to burying, capping, moving, or filling.
- To minimize vehicle strikes of CRLF and NWPT, restrict parking to daytime hours, if feasible.

Mitigation Measure BIO-8e: Prepare and Implement a Habitat Mitigation Plan for Permanent Impacts to Sensitive Habitats, Including Aquatic Features, for Alternative 3

Refer to the description of Mitigation Measure BIO-8e for Impact BIO-8 below.

Impact BIO-4 ALTERNATIVE 3 CONSTRUCTION AND OPERATION MAY RESULT IN IMPACTS TO NORTHWESTERN POND TURTLE. (LESS THAN SIGNIFICANT IMPACT WITH MITIGATION)

Overview

Alternative 3 may result in impacts to NWPT, if present in the Alternative 3 project area. The NWPT is proposed for listing as threatened under the federal ESA (USFWS 2023) and is a CDFW SSC (CDFW 2026e; Thomson et al. 2016).

Project components that could result in or contribute to this potential impact include Final Landfill Closure and the Environmental Enhancement and Habitat Restoration Features in Channelized Gallighan

[11] U.S. Fish and Wildlife Service (USFWS). 2005. Revised Guidance on Site Assessments and Field Surveys for the California Red-legged Frog. Prepared August 2005. https://www.fws.gov/sites/default/files/documents/guidance-on-site-assessments-and-field-surveys-for-california-red-legged-frog.pdf.

Slough. However, the likelihood of project-related impacts from construction of the combined facilities is lower than the Proposed Project because the site is located further from known occurrence locations and suitable potential aquatic habitats.

Occurrence Potential

The NWPT is known to occur near the Study Area (**Figure 3.4-3**). During 2024 field surveys, biologists observed two NWPT in the wastewater treatment ponds for the adjacent Buena Vista Migrant Center (farmworker housing and childcare facility), located approximately 400 feet southwest of the southeast corner of the Study Area. In addition, seven turtles were observed in Gallighan Slough approximately 0.25 miles from the Old Landfill, 0.25 miles downstream of Channelized Gallighan Slough within the Study Area, and 0.3 miles from the southeastern corner of the Study Area (KEC 2024). Abundant suitable aquatic, upland, movement, and nesting habitat is present near these known occurrence locations, although bullfrogs and red-eared sliders (*Trachemys scripta elegans*) degrade habitat.

Within the Study Area, Channelized Gallighan Slough provides marginal potential aquatic habitat. The drainage is narrow, incised, and lacks basking habitat; however, it is possible that NWPT could occur within the drainage due to the proximity to known occurrences immediately downstream. Mixed willow riparian and ruderal grasslands near Channelized Gallighan Slough provide potential nesting habitat; however, higher quality nesting habitat is available within 150 feet of the wastewater treatment ponds outlet to Gallighan Slough, very near to where the turtles were observed. Nevertheless, the Alternative 3 project area is within seasonal movement, migration, and dispersal distances, so there is potential for NWPT occurrence.

Construction

Project construction activities may result in impacts to NWPT, if present in the Alternative 3 project area.

Construction activities including vegetation removal, grubbing, grading, trenching, concrete pouring, equipment and vehicle access and operation, introduction of materials, and other activities that result in ground disturbance could impact NWPT. These activities could result in injury or mortality of NWPT. Equipment, automobiles, materials, or debris could crush or bury individuals. Materials or chemicals could enter NWPT habitat through accidental spills, fueling, or maintenance of equipment. Alternative 3 may temporarily degrade water quality within and downstream of the Alternative 3 project area through the introduction of sediments and other materials.

These impacts would be avoided or minimized through protective measures such as pre-construction surveys, seasonal constraints on work within the drainage and associated riparian, and biological monitoring during ground disturbance activities. During construction, erosion and sediment control measures would be installed and maintained to reduce sediment and chemical-laden runoff introductions. Therefore, the impact would be **Less than Significant with Mitigation** (Mitigation Measures BIO-1a, BIO-1b, BIO-3, BIO-8e).

Operation

Project operation would shift increased traffic (including large trucks) to the combined facilities site, which is further from Channelized Gallighan Slough and a beneficial impact to NWPT. In addition, potential impacts would be avoided or minimized by directional fencing that would be installed (Wildlife Directional Features at Key Locations described in Section 2.4 under Environmental Enhancement and Habitat Restoration Features). Therefore, the impact would be **Less than Significant**.

In summary, Alternative 3 could result in construction impacts to NWPT, if present. Specifically, construction activities such as vegetation removal, grading, and work within or adjacent to aquatic features could result in injury, mortality, or temporary habitat disturbance to NWPT, if present. However, these impacts would be avoided or reduced to a less than significant level by implementing the following NWPT protective measures. Therefore, the impact would be **Less than Significant with Mitigation** (Mitigation Measures BIO-1a, BIO-1b, BIO-3, BIO-8e).

Mitigation Measure BIO-1a: Conduct Environmental Training prior to Construction

Refer to the description of Mitigation Measure BIO-1b for Impact BIO-1 above.

Mitigation Measure BIO-1b: Schedule Construction to Avoid Impacts to Sensitive Biological Resources

Refer to the description of Mitigation Measure BIO-1b for Impact BIO-1 above.

Mitigation Measure BIO-3: Implement Protective Measures and Biological Monitoring for California Red-Legged Frog and Northwestern Pond Turtle

Refer to the description of Mitigation Measure BIO-3 for Impact BIO-3 above.

Mitigation Measure BIO-8e: Prepare and Implement a Habitat Mitigation Plan for Permanent Impacts to Sensitive Habitats, Including Aquatic Features, for Alternative 3

Refer to the description of Mitigation Measure BIO-8e for Impact BIO-8 below.

Impact BIO-5 PROJECT CONSTRUCTION AND OPERATION MAY RESULT IN IMPACTS TO AVIAN SPECIES, THEIR HABITATS, AND NESTING ACTIVITIES. (LESS THAN SIGNIFICANT IMPACT WITH MITIGATION)

Overview

Alternative 3 would reduce foraging, roosting, and nesting habitat for avian species; and may result in disturbance or disruption of nesting activities.

All individual birds of prey (i.e., hawks and owls), other native birds, and their occupied nests are protected by the federal Migratory Bird Treaty Act (MBTA). Any disturbance that causes direct injury, death, nest abandonment, or forced fledging of migratory birds is restricted under the MBTA. Any removal of active nests during the breeding season or any disturbance that results in the abandonment of nestlings is considered a "take" of the species under federal law.

In addition, CFGC protects the active nests and eggs of birds from take, possession, or needless destruction (CFGC section 3503), and prohibits the take, possession, or destruction of birds of prey (orders Falconiformes and Strigiformes) and their eggs and nests (CFGC section 3503.5).

Sensitive bird species receive additional protections, primarily for nesting activities, with some species (such as fully protected species) receiving additional protection for wintering and foraging activities. Suitable potential nesting habitat for sensitive bird species, raptors, and other common avian species is present within the Alternative 3 Study Area.

All the Alternative 3 components could result in or contribute to this potential impact.

Occurrence Potential

The following sensitive bird species were observed during surveys or have potential to occur based on availability of suitable nesting habitat or, in limited cases, wintering habitat.

Allen's hummingbird (*Selasphorus sasin*). The Allen's hummingbird is a USFWS BCC. Allen's hummingbirds were observed in the eucalyptus trees along Harkins Slough Road and, just outside of the Study Area, in the oak woodland south of Old Landfill. The Allen's hummingbird may utilize a wide variety of vegetated areas within the Study Area, especially the riparian habitat along Buena Vista Drive and Channelized Gallighan Slough.

Bald eagle (*Haliaeetus leucocephalus*). The bald eagle is listed as endangered under CESA, fully protected by CDFW; and its nest sites are protected by the Bald and Golden Eagle Protection Act year-round. The biologists observed bald eagles during 2024 field surveys; and the pair, active nest, and young were observed during 2023 surveys, approximately 0.25 miles south of the Study Area at a known nest site. Although nearby, bald eagles are likely to prefer foraging over the sloughs rather than over the grassland within the Study Area, and are likely to prefer the larger trees outside the Study Area as nesting habitat.

Bullock's oriole (*Icterus bullockii*). The Bullock's oriole is a USFWS BCC. This species was observed near Harkins Slough in 2026 (eBird 2026). Riparian habitat within the Study Area provides suitable nesting habitat.

California gull (*Larus californicus*). The California gull is a USFWS BCC. This species commonly forages within the Landfill boundary and nearby at Harkins Slough (eBird 2026). Although nesting is uncommon within the County, rooftops within the Study Area provide a suitable substrate.

California thrasher (*Toxostoma redivivum*). The California thrasher is a USFWS BCC. This species was observed in scrub habitat just beyond the southern extent of the Study Area along the SCBRL southwest of the Old Landfill. Suitable scrub habitat for foraging, roosting, and nesting exists along the margins of the Study Area. This species has also been documented near Gallighan Slough and Harkins Slough (eBird 2026).

Golden eagle (*Aquila chrysaetos*). The golden eagle is a CDFW fully protected species and listed as S3 (Vulnerable) by NatureServe (2026). eBird (2026) documents numerous occurrences of this species, including one pair, near the Study Area along Harkins Slough and Gallighan Slough. The Study Area provides marginal hunting habitat due to the disturbed and fragmented quality of non-native and ruderal grassland, limited small mammal burrows, and active Landfill operations. Currently, only one nesting pair is known from Santa Cruz County, at Henry Cowell Redwoods State Park. This species is more likely to nest in the foothills northeast or southeast of the City of Watsonville.

Grasshopper sparrow (*Ammodramus savannarum*). The grasshopper sparrow is a CDFW SSC and listed as S3 (Vulnerable) by NatureServe (2026). There is one recent (2022) record for this species at the Landfill; however, occurrences in the immediate area are rare and mostly outside of breeding season. Other observations are from Harkins Slough and Struve Slough (eBird 2026). The grasshopper sparrow may inhabit the grassland habitats of the Study Area, with the upper grassland terrace in the northwest of the Study Area providing the best habitat.

Lawrence's goldfinch (*Spinus lawrencei*). The Lawrence's goldfinch is a CDFW SSC and listed as S3S4 (Vulnerable/Apparently Secure) by NatureServe (2026). An individual Lawrence's goldfinch was observed during 2018 surveys roosting in coyote brush and grassland habitat within the Combined Facilities Project site. Coastal scrub, oak woodland, and grassland habitats provide foraging, roosting, and nesting habitat. Nesting on the central coast is erratic, and nest sites closer to the sloughs may be preferable to this species. This species is also known from Harkins Slough and Struve Slough (eBird 2026).

Northern yellow warbler (*Setophaga aestiva*). The northern yellow warbler is a CDFW SSC and listed as S3 (Vulnerable) by NatureServe (2026). eBird (2026) documents recent (2024 and 2026) observations during nesting season along Harkins Slough, and in 2022 along the SCBRL southwest of the Old Landfill. This species has been documented breeding in riparian vegetation along Harkins Slough and the Pajaro River (eBird 2026). The riparian habitats within the Study Area provide potential foraging, roosting, and nesting habitat.

Nuttall's woodpecker (*Picoides nuttallii*). The Nuttall's woodpecker is a USFWS BCC. Field surveys detected Nuttall's woodpecker vocalizing along Channelized Gallighan Slough near the main entrance to the Landfill. Oak woodland and riparian habitats within the Study Area provide foraging and nesting habitat for this species.

Oak titmouse (*Baeolophus inornatus*). The oak titmouse is a USFWS BCC. This species was observed during 2018 and 2024 surveys within oak woodland and riparian habitats. Oak woodland and other woodlands with cavities and hollows provide foraging, roosting, and nesting habitat.

Olive-sided flycatcher (*Contopus cooperi*). The olive-sided flycatcher is a CDFW SSC and a USFWS BCC. eBird (2026) documents few observations from the immediate vicinity from along the SCBRL southwest of the Old Landfill (2014), near the corner of San Andreas Road and Buena Vista Drive (2017), and from Rancho Road (2018). Forested areas, including non-native eucalyptus groves, within the Study Area may provide potential nesting habitat for this species.

Western burrowing owl (*Athene cunicularia*). The western burrowing owl is a candidate for listing as endangered under CESA, a CDFW SSC, listed as S2 (Imperiled) by NatureServe (2026), and a USFWS BCC. Recent winter or migrant sightings of individuals are from Watsonville Slough Farm (2025) 0.5 miles southeast, the confluence of Watsonville Slough and Struve Slough along the SCBRL (2021 and 2024), and the Pajaro Valley High School open space (2018–2019) (eBird 2026). There have been no nesting records in Santa Cruz County since 1987, and nesting is considered to be extirpated (Center for Biological Diversity [CBD] et al. 2003; Townsend and Lenihan 2007; Trulio et al. 2018). Native (coastal terrace prairie) and non-native grassland within the Study Area provides potential wintering or migrant habitat.

Western gull (*Larus occidentalis*). The western gull is a USFWS BCC. This species commonly forages within the Landfill boundary and nearby at Harkins Slough (eBird 2026). Rooftops within the Study Area provide suitable nesting habitat.

White-tailed kite (*Elanus leucurus*). The white-tailed kite is a CDFW fully protected species. eBird documents (2026) numerous recent sightings from Harkins Slough (2018–2026) and two sightings from Gallighan Slough (2021 and 2025), including juveniles. Tree stands within and adjacent to the Study Area provide potential nesting habitat. Grasslands with small mammals provide foraging habitat.

Wrentit (*Chamaea fasciata*). The wrentit is a USFWS BCC. During 2023 and 2024 field surveys, wrentits were observed in the oak woodland in the northeast corner of the Study Area and, just outside of the Study Area, in the coastal scrub, willow forest, and oak woodland habitats along the SCBRL south of the Old Landfill. Open scrub, woodland, and forest habitats provide potential foraging, roosting, and nesting habitat for this species.

Other nesting avian species. The biologists recorded breeding activity (nest building, eggs in nest, young in nest, feeding young in and out of nest, and/or fledglings) of the following birds during 2023, 2024, and 2026 field surveys: black phoebe, bushtit, hooded oriole, killdeer, lesser goldfinch, orange-crowned warbler, purple finch, house finch, and red-tailed hawk. **Appendix G2.4** lists bird species observed during the field surveys and their associated habitats. A comprehensive breeding bird survey was not conducted because nest sites for most avian species are dynamic, and nest locations vary from year to year, but

incidental observations of breeding activity are noted in **Appendix G2.4**. Nesting habitat with sufficient nearby food sources is present within the Study Area for numerous common nesting bird species.

The biologists observed a juvenile red-tailed hawk foraging over the Alternative 3 project area in September 2018, and they observed and heard begging fledgling red-tailed hawks in July 2024 and May 2026. A red-tailed hawk nest is located in the stand of eucalyptus trees near the northwest corner of the Study Area, near the existing driveway from Buena Vista Drive to the combined facilities site. Observations over multiple years indicate nest fidelity to this site.

Bushtits and black phoebes were engaged in nest building during the 2018 field visits. During the June 2018 survey, a female killdeer was protecting an active nest with four eggs at the edge of the grassland along the east–west driveway to the combined facilities site. A pair of hooded orioles was also observed making multiple visits carrying food to a location within the oak woodland, likely to a nest with young. A house finch was visiting an active nest of unknown status in the rafters of the shed at the main Landfill entrance during the May 2024 survey, and multiple old nests were also visible in the vicinity. Lesser goldfinch, orange-crowned warbler, and purple finch were observed feeding fledglings during 2018 surveys, and begging song sparrow fledglings were heard in July 2024.

Both sensitive and common avian species (such as those species listed in **Appendix G2.4**) are likely to utilize the habitats of the Study Area and the surrounding area for nesting activities, including coastal terrace prairie, non-native and ruderal grassland, coastal scrub, oak woodland, non-native forest, riparian, and wetland habitats. Opportunistic and ground-nesting species may also utilize equipment and buildings, ruderal habitat, debris piles, and even gravel (killdeer) as nest substrates.

Construction

Project construction would result in permanent impacts to approximately 6.6 acres of non-native grassland, ruderal habitats (within the combined facilities site), solitary trees, riparian, wetland, and riverine habitats. Approximately 18 solitary trees would be removed to facilitate construction of the combined facilities (17 coast live oaks and 1 non-native Monterey cypress) and 21 trees for Restoration of Harkins Slough Road Drainage (12 willows, 8 ironbark trees, and 1 coast live oak). Displacement of these habitats would reduce foraging, roosting, and nesting habitat for birds in the vicinity; however, these impacts are substantially less than the tree removal that would be necessary for the Proposed Project. Solitary trees proposed for removal are depicted in **Figure 6.4-1b.**

Final Landfill Closure would result in the creation of additional non-native and ruderal grassland, as it is converted from the active landfill, which would provide habitat for some species (e.g., meadowlark [*Sturnella neglecta*], killdeer, savannah sparrow [*Passerculus sandwichensis*], and song sparrow).

Construction-related activities which occur during the avian breeding season (February 1 to August 31) may disrupt breeding activities, cause nest abandonment or failure, premature fledging, or directly harm or cause mortality to nesting birds, eggs, and young located within the Alternative 3 project area and surroundings.

Tree and vegetation removal, grubbing, grading, and earth movement may directly impact active nests present in trees, shrubs, grasslands, or on the ground. Construction activities, including grubbing, grading, earth moving, excavation, equipment and vehicle operation and access will generate increased dust, noise, and vibrational and visual disturbances. These activities may disrupt sensitive and common bird species nesting within or adjacent to the Alternative 3 project area.

Operation

Operation of the combined facilities would bring increased human activity, traffic, trash, noise, dust, vibrations, and the introduction of other potential pollutants to the combined facilities site, some of which currently consists of ruderal grassland and scrub habitats. Because the facilities would be located immediately adjacent to the Wildlife Refuge, as well as habitat patches to the east and west, they would also degrade the adjacent habitat.

Additionally, the combined facilities would introduce lighting to the combined facilities site, which could negatively impact birds (and other wildlife species). Potential impacts from lighting include, but are not limited to: interrupting sleep patterns of diurnal animals such as many bird species; serving as an attractant to insects (and in turn birds), thereby drawing them to human-occupied areas and making them more susceptible to predation; deterring nesting birds and wildlife movement from lighted areas; and reducing available habitat. However, because visitor access would be limited to daylight hours, lighting would be utilized only where necessary for function and safety. As described in Section 5.2.3, exterior site lighting would be kept to a minimum to what is required for safety and operational needs during normal operating hours from 7:00 am to 5:00 pm. All lighting would be affixed to structures or on standards not exceeding the structure height, and the lighting would be directed downward and away from adjacent land. Lighting may include motion sensor site lighting, which would be limited to areas where needed for security (e.g., office and scale house area) and would be avoided in other areas.

In summary, Alternative 3 may result in construction and operation impacts to avian species, their habitats, and nesting activities. Specifically, construction activities such as tree and vegetation removal, grubbing, grading, and general site disturbance would result in loss of foraging and nesting habitat, could cause nest abandonment, or could cause direct injury or mortality to nesting birds protected under federal and state law (the MBTA and CFGC). Operation activities, such as increased traffic and lighting, could degrade habitat and disrupt nesting or foraging behavior for sensitive and common avian species. However, these impacts would be reduced to a less than significant level by avoiding vegetation removal during breeding bird season or conducting nesting bird surveys, conducting surveys for wintering sensitive bird species, scheduling construction to avoid sensitive biological resources, conducting environmental training, and mitigating for permanent impacts to sensitive habitats including aquatic features. Therefore, the impact would be **Less than Significant with Mitigation** (Mitigation Measures BIO-1a, BIO-1b, BIO-5a, BIO-5b, and BIO-8e).

Mitigation Measure BIO-1a: Conduct Environmental Training prior to Construction

Refer to the description of Mitigation Measure BIO-1b for Impact BIO-1 above.

Mitigation Measure BIO-1b: Schedule Construction to Avoid Impacts to Sensitive Biological Resources

Refer to the description of Mitigation Measure BIO-1b for Impact BIO-1 above.

Mitigation Measure BIO-5a: Avoid Vegetation Removal During Breeding Bird Season or Conduct Nesting Bird Surveys

The County or their construction contractor will schedule construction to avoid vegetation removal during breeding bird season or conduct pre-construction nesting bird surveys. Typically, the avian breeding season occurs between February 1 and August 31 (see the Recommended Construction Timing to Avoid/Minimize Impacts to Sensitive Biological Resources table in Mitigation Measure BIO-1b) with some species (e.g., hummingbirds and owls) nesting outside of this period. If feasible, perform vegetation

removal activities outside of breeding bird season (ideally between September 1 and October 15) to avoid direct harm or mortality to potential nesting bird species and other sensitive biological resources.

For all construction activities initiated during the breeding bird season, or if construction activities lapse for a period of one week or more during breeding bird season, an agency-approved biologist will conduct a breeding bird survey for nesting birds, including raptors. Surveys will be conducted within 7 days, prior to beginning construction activities and will include all work, staging, access areas, and minimum survey radii surrounding the work area as follows:

- 250 feet for non-raptors;
- 500 feet for small raptors such as accipiters; and
- 1,000 feet for larger raptors such as buteos.

The survey will include potential habitat for raptors, sensitive and common nesting avian species and will include trees, other vegetation and suitable habitat (buildings, equipment, ruderal areas, brush piles, gravel, rocks) for ground-nesting and opportunistic species (e.g., house finch, California towhee, dark-eyed junco, and/or killdeer). The following measures will be implemented based on the survey results.

- If no nesting sensitive or common avian species are observed during breeding bird surveys no additional measures would be required.
- If common nesting birds are observed within or adjacent to the project area, postpone activities until young have fledged to avoid direct harm or mortality of nesting birds and/or establish buffers appropriate to the species, such as protective buffers recommended in PG&E et al. (2015). The size of the buffer would also depend on the location of the nest relative to the project area, construction activities proposed for this location, and other specific conditions (e.g., equipment operation).
- Sensitive bird species, if nesting in or near the project area, will be given special consideration and may require additional protective measures as determined through consultation with the relevant agency (USFWS or CDFW), such as protective buffers recommended in PG&E et al. (2015):
    - Bald eagle, golden eagle: 2,640 feet;
    - White-tailed kite, and other raptors: 300 feet;
    - California gull and western gull: 150 feet;
    - California thrasher, Bullock's oriole, grasshopper sparrow, Lawrence's goldfinch, yellow warbler, wrentit: 75 feet; and
    - Allen's hummingbird, oak titmouse, olive-sided flycatcher, Nuttall's woodpecker: 50 feet
- An agency-approved biologist will monitor active nest sites for construction-related disturbances and adjust protective buffers as necessary to prevent disruption of nesting activities.
- No construction activity shall be allowed in the buffer until the biologist determines that the nest is no longer active, or unless monitoring determines that a smaller buffer will protect the active nest. The buffer may be reduced if the biologist monitors the construction activities and determines that no disturbance to the active nest is occurring.
- If an active nest is identified in or adjacent to the construction zone after construction has started, the above measures will be implemented to ensure construction is not causing disturbance to the nest.

Mitigation Measure BIO-5b: Conduct Surveys for Wintering Sensitive Bird Species

The County or their construction contractor will ensure a qualified biologist conducts surveys for wintering sensitive bird species. The following measures will be implemented to protect wintering sensitive bird species, if present:

- If any work is performed during the burrowing owl wintering period (November–March), conduct a survey for these species. The survey will be conducted by a qualified biologist and include the Project area and suitable habitat within 490 feet.
- If burrowing owls are detected, injury and mortality of individuals, and destruction of occupied habitat will be avoided, as follows:
  - avoid destruction of fossorial mammal burrows during construction;
  - place visible markers near occupied burrows and fence off suitable habitat;
  - avoid direct destruction of burrows, and
  - include the burrowing owl in the environmental training for construction personnel (**Mitigation Measure BIO-1a**).

Mitigation Measure BIO-8e: Prepare and Implement a Habitat Mitigation Plan for Permanent Impacts to Sensitive Habitats, Including Aquatic Features, for Alternative 3

Refer to the description of Mitigation Measure BIO-8e for Impact BIO-8 below.

Impact BIO-6 Alternative 3 construction and operation may result in impacts to bat species, their habitats, and roosting activities. (Less than Significant Impact with Mitigation)

Overview

Alternative 3 may impact roosting bat habitat and bats occupying trees slated for removal, buildings proposed for demolition, and culverts within or near the Alternative 3 project area. The CFGC (Sections 86; 2000; 2002; 2014; 3000–3012; 4150) and several sections under Title 14 of CCR protect non-listed bat species and their roosting habitat, including individual roosts and maternity colonies (14 CCR Section 472). Sensitive roosting bat species (such as western red bat listed as CDFW SSC and High Priority by WBWG), if present, may receive additional protections, such as larger buffers from maternity roost sites.

Project components that could result in or contribute to this potential impact include the combined facilities and Environmental Enhancement and Habitat Restoration.

Occurrence Potential

The riparian forest, oak woodland, and non-native forest in and near the Alternative 3 project area provide potential bat roosting habitat. The western red bat may roost within the foliage of the riparian habitat within or adjacent to the project area, along Channelized Gallighan Slough, and along the Buena Vista Drive Tributary. Bats may utilize culverts, buildings, and other infrastructure within the Study Area for roosting.

During July 2024 surveys, bats of unknown species were observed flying out of the culvert that conveys Channelized Gallighan Slough under the internal road to the Old Landfill. Bats may also utilize the non-native trees within the Study Area. The oak woodland along Harkins Slough Road and within the northeastern portion of the Study Area includes large, mature oak trees that possess bat roost features

such as cavities and peeling bark. No oak woodland would be directly impacted by Alternative 3. The non-native trees along the landfill boundary provide marginal bat roost habitat because they exist as a linear strip of trees and are positioned between the roadway and the landfill; however, the landfill provides an abundant source of insects, so bats may elect to use these trees for roosting. Non-native forest is present along the edges of the upper grassland terrace in the northwest portion of the Study Area; these trees also provide potential roosting habitat but would not be removed for Alternative 3.

The buildings proposed for demolition at the combined facilities site (including sheds, greenhouses, and other buildings and infrastructure) also provide suitable roosting habitat.

Common bat species such as California myotis, Yuma myotis, and big brown bat may roost in the buildings and culverts, and utilize the cracks, crevices, and foliage in mature oak trees or other non-native trees for roosting.

The typical breeding season for bats is from May to September. Depending on the species, female bats congregate in small or large numbers to form maternity colonies to give birth and rear their young over the spring/summer season, while males roost separately as individuals or in small bachelor groups. Juvenile bats begin flying in the summer and fall to forage and prepare for migration. Maternity roosts may be present within or near the Alternative 3 project area. Also depending on the species, males and females communally roost during the fall to breed before and during migration or hibernate through the winter season (H.T. Harvey & Associates 2021). Winter hibernacula may also be present in or near the Alternative 3 project area.

Construction

During construction, tree removal or work in or adjacent to oak woodland, riparian forest, or non-native trees may impact roosting bats, if present. If roosting bats are present in trees proposed for pruning, limbing, or removal, direct harm or mortality of bats may occur. Noise, vibrations, dust, and other disturbances associated with construction activities may disrupt roosting bats, including maternity roosts and winter hibernacula, if present.

Demolition of buildings at the combined facilities site, as well as culvert replacement under the road to the Old Landfill, may also impact roosting bats, including maternity roosts or winter hibernacula.

Approximately 18 trees would be removed to facilitate construction of the combined facilities (17 solitary coast live oaks and 1 non-native Monterey cypress) and 21 trees for the restoration of Harkins Slough Road Drainage. Displacement of these trees would reduce roosting habitat for bats in the vicinity; however, these impacts are substantially less than the tree removal that would be necessary for the Proposed Project. Solitary trees proposed for removal are depicted in **Figure 6.4-1b.**

Displacement of these habitats would minimally reduce foraging and roosting for bats in the vicinity and increase fragmentation; however, the wildlife movement corridor proposed along Harkins Slough Road would reduce this impact.

Operation

Operation of the combined facilities would introduce lighting, which could negatively impact bats (and other wildlife species). Potential impacts from lighting include but are not limited to serving as an attractant to insects (and in turn bats), thereby drawing them to human-occupied areas and making them more susceptible to predation and reducing available habitat. However, because visitor access would be limited to daylight hours, lighting would be utilized only where necessary for function and safety.

In summary, Alternative 3 construction and operation could impact bat species, their habitats, and roosting activities. Specifically, activities such as tree removal, building demolition, and work and operation near potential roosting sites could result in injury, mortality, or disturbance to roosting bats, including maternity roosts and winter hibernacula, if present. However, these impacts would be reduced to a less than significant level by scheduling tree removal to avoid bat maternity roosts and winter hibernacula, conducting pre-construction surveys and implementing protective measures for bat roosts, scheduling construction to avoid sensitive biological resources, conducting environmental training, and mitigating for permanent impacts to sensitive habitats. Therefore, the impact would be Less than Significant with Mitigation (Mitigation Measures BIO-1a, BIO-1b, BIO-6, and BIO-8e).

Mitigation Measure BIO-1a: Conduct Environmental Training prior to Construction

Refer to the description of Mitigation Measure BIO-1b for Impact BIO-1 above.

Mitigation Measure BIO-1b: Schedule Construction to Avoid Impacts to Sensitive Biological Resources

Refer to the description of Mitigation Measure BIO-1b for Impact BIO-1 above.

Mitigation Measure BIO-6: Schedule Tree Removal to Avoid Bat Maternity Roosts and Winter Hibernacula and/or Conduct Pre-Construction Surveys and Implement Protective Measures for Bat Roosts

If feasible, the County or their construction contractor will conduct limbing/tree removal operations between September 15 and November 1 to avoid bat maternity roosts and winter hibernacula. During all months, prior to limbing/tree removal, the County or their construction contractor shall ensure a qualified biologist conducts a pre-construction survey for bats to determine if crevice or foliage-roosting bats are present, as follows:

- A qualified biologist shall determine if bats are utilizing the area for roosting. For any buildings, culverts, or trees/snags that could provide roosting space for cavity or foliage-roosting bats, potential bat roost features shall be thoroughly evaluated to determine if bats are present. Visual inspection and/or acoustic surveys shall be utilized as initial techniques. If roosting bats are found, the biologist shall develop and implement acceptable passive exclusion methods in coordination with or based on CDFW recommendations. Exclusion shall take place during the appropriate windows (September 1 and November 1) to avoid harming bat maternity roosts and/or winter hibernacula. (Authorization from CDFW is required to evict winter hibernacula for bats).
- If established maternity colonies are found, in coordination with CDFW, a buffer shall be established around the colony to protect pre-volant young from construction disturbances until the young can fly; or implement other measures acceptable to CDFW.
- If a building or tree is determined not to be an active roost site for roosting bats, proceed with work immediately. For trees to be limbed or removed, proceed as follows:
    - If foliage-roosting bats are determined to be present (e.g., hoary bat or western red bat), limbs shall be lowered, inspected for bats by a bat biologist, and chipped immediately or moved to a dump site. Alternatively, limbs may be lowered and left on the ground until the following day, when they can be chipped or moved to a dump site. No logs or tree sections shall be dropped on downed limbs or limb piles that have not been in place since the previous day.
    - If the tree is not limbed or removed within four days of the survey, the survey efforts shall be repeated.

Mitigation Measure BIO-8e: Prepare and Implement a Habitat Mitigation Plan for Permanent Impacts to Sensitive Habitats, Including Aquatic Features, for Alternative 3

Refer to the description of Mitigation Measure BIO-8e for Impact BIO-8 below.

Impact BIO-7 Alternative 3 construction may result in impacts to San Francisco dusky-footed woodrat houses, individuals, or young. (Less than Significant Impact with Mitigation)

Overview

Alternative 3 may impact San Francisco dusky-footed woodrat individuals and houses during construction. The San Francisco dusky-footed woodrat is listed as S2/S3 by NatureServe (2026) and is considered under CEQA (CNDDB 2026a). In 2026, the San Francisco dusky-footed woodrat was removed from the list of CDFW SSC.

Alternative 3 components that could result in or contribute to this potential impact include the combined facilities and the Environmental Enhancement and Habitat Restoration.

Occurrence Potential

During the 2018, 2023, 2024, 2025, and 2026 surveys, numerous San Francisco dusky-footed woodrat houses were observed within oak woodland, eucalyptus forest, and riparian vegetation habitat types, especially those on the margins with grassland habitat, where edge habitats or ecotones exist.

Construction

Tree and vegetation removal may directly impact woodrat stick houses. Destruction of houses may result in injury or mortality of adults and/or dependent young or loss of food caches and shelter. Removal of trees and/or vegetation adjacent to woodrat houses may result in changes to microclimate conditions, reduce insulation and expose woodrats to weather (sun, wind, cold), expose woodrats to predators, and reduce or eliminate available food sources and foraging habitat. Construction may directly impact woodrat individuals if present within the work area.

Potential impacts would be reduced to a less than significant level by conducting pre-construction surveys, scheduling construction to avoid sensitive biological resources, conducting environmental training, and mitigating for permanent impacts to sensitive habitats. Therefore, the impact would be **Less than Significant with Mitigation** (Mitigation Measures BIO-1a, BIO-1b, BIO-7, BIO-8e).

Mitigation Measure BIO-1a: Conduct Environmental Training prior to Construction

Refer to the description of Mitigation Measure BIO-1b for Impact BIO-1 above.

Mitigation Measure BIO-1b: Schedule Construction to Avoid Impacts to Sensitive Biological Resources

Refer to the description of Mitigation Measure BIO-1b for Impact BIO-1 above.

Mitigation Measure BIO-7: Conduct Pre-Construction Surveys and Flag Woodrat Nests

Prior to construction, the County or their construction contractor will ensure a qualified biologist conducts a pre-construction survey for San Francisco dusky-footed woodrat houses and clearly flags all houses within the Project area and immediate surroundings, as follows.

- The agency-approved biologist will determine, to the extent feasible, whether the houses are active or inactive [e.g., freshly chewed (green) vegetation is visible on the house, at least some entrances are clear and free of cobwebs, fresh sticks are piled on the top of the house, the house is not composed entirely of old dry sticks and has a flattened shape (has collapsed over time)]. If this determination cannot be made, the house will be presumed to be active.
- If an active woodrat house is found during surveys, it will be protected during construction with flagging or silt fencing between the work area and the house.
- The construction contractor will avoid woodrat houses to the extent feasible by installing a buffer with silt fencing or other material that shall prohibit encroachment. If this buffer and avoidance is not feasible, the agency-approved biologist shall allow encroachment into the buffer, but preserve microhabitat conditions such as shade, cover and adjacent food sources.
- If avoidance of woodrat houses is not possible, the agency-approved biologist will dismantle woodrat houses, capturing woodrats if feasible, or allowing woodrats to flee. The biologist will preserve sticks, food caches, and nesting materials separately. The materials will be relocated to the nearest unoccupied suitable habitat. The relocation site will mimic the original house site in terms of vegetation and environmental conditions, if feasible. The agency-approved biologist will create an artificial shelter using a pine box as a base, installing food and nesting materials inside the shelter, and piling sticks on top. An effort will be made to protect the opening from predators. A scent trail will be left from the original house site to the artificial shelter, if needed. If feasible, relocation will occur during the appropriate time of year (August 1–September 30) to avoid impacting dependent young that may be present within the stick house.

Mitigation Measure BIO-8e: Prepare and Implement a Habitat Mitigation Plan for Permanent Impacts to Sensitive Habitats, Including Aquatic Features, for Alternative 3

Refer to the description of Mitigation Measure BIO-8e for Impact BIO-8 below.

Threshold B:	Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.

Sensitive Habitats

Alternative 3 would result in limited impacts to sensitive habitats, as defined by CDFW (2026d), the 2024 County General Plan/LCP, the Sensitive Habitat Protection Ordinance (SCCC Section 16.32), and the Riparian Corridor and Wetlands Protection Ordinance (SCCC Section 16.30). Within the Study Area, four sensitive habitats (mixed broadleaf riparian, willow riparian forest, palustrine emergent wetlands, and riverine) may be impacted (**Figure 6.4-1 and Figures 6.4-1a–d**). Aquatic features (wetlands and riverine) are discussed below under Threshold C in the Wetlands/Other Waters section (**Impact BIO-10**).

The Study Area also includes habitats that support sensitive wildlife species (such as CRLF [aquatic, upland, movement, and dispersal habitat], NWPT, San Francisco dusky-footed woodrat, and sensitive bird species), and areas of high biological diversity, such as edge habitats. Edge habitats occur between coast live oak woodland and forest, coast redwood (naturalized), non-native forest, native coastal terrace prairie, and non-native/ruderal grassland habitats on the combined facilities property. These are also considered sensitive habitats (SCCC 16.32.040).

Figure 6.4-1 and **Figures 6.4-1a–d** depict the extent of sensitive habitats, including wetlands and non-wetland "other waters" in the Study Area. **Table 6.4-7** details regulatory authority over these sensitive habitats, focusing on areas that may incur direct and indirect impacts as a result of Alternative 3, including the Environmental Enhancement and Habitat Restoration Features. Descriptions of wildlife species that may utilize the sensitive habitats listed below are provided in Section 6.4.1 above.

Table 6.4-7. Sensitive Habitats and Regulatory Authority Considered Under CEQA

Habitat Type	CEQA	CCC ESHA	County of Santa Cruz Sensitive Habitat	CDFW Sensitive Natural Community	CWA Sections 401 and 404	Porter-Cologne Water Quality Control Act
Blackberry Bramble	X	X	X	X		
Coastal Terrace Prairie	X	X	X	X		
Coast Live Oak Woodland and Forest	X	X	X			
Mixed Broadleaved and Mixed Willow Riparian Forest/Scrub	X	X	X	X		X
Palustrine Emergent Wetland	X	X	X	X	X	X
Riverine (Aquatic)	X	X	X		X	X
Special-Status Plants and Wildlife	X	X	X			

CEQA = California Environmental Quality Act
CCC = California Coastal Commission
CDFW = California Department of Fish and Wildlife
ESHA = Environmentally Sensitive Habitat Areas

Table 6.4-8 and **Figures 6.4-1a–d** present anticipated impacts to sensitive habitats associated with Alternative 3 by habitat type, limited to a seasonal irrigation ditch wetland. Construction and operation may adversely affect other sensitive habitats including upland habitat for CRLF, edge habitats, and areas of high biological diversity.

Additional beneficial effects would be associated with the Environmental Enhancement and Habitat Restoration Features (**Table 6.4-9** and **Figures 5-13a–b**). These features would temporarily impact coast live oak woodland (with no tree removal), riparian forest (discussed below), and aquatic habitats (discussed under Threshold C below). **Table 6.4-9** shows acreages of restoration areas within sensitive habitat types, while **Table 6.4-10** lists restoration areas by the Restoration and Enhancement Feature.

The combined facilities have been sited and redesigned to avoid and minimize impacts to sensitive habitat and ESHA (coast live oak woodland and forest, Harkins Slough Road Drainage, and the seasonal irrigation ditch wetland). Avoidance and minimization measures are recommended for the protection of these habitats.

Alternative 3 includes the on-site restoration and enhancement of sensitive habitats, as described in Section 5.2.3 under Environmental Enhancement and Habitat Restoration Features, as well as Mitigation Measure BIO-8e below. These project components compensate for the minimal impacts to sensitive habitats and ESHA, as required by the Sensitive Habitat Protection Ordinance (Section 16.32.090). These features have been designed to minimize impacts to sensitive habitats and ESHA, and would enhance and restore riverine, riparian, and wetland habitats to improve ecological conditions of the Study Area overall.

Impacts to sensitive habitats are likely to require exceptions to the Sensitive Habitat Protection Ordinance (SCCC Chapter 16.32) and Riparian Corridor and Wetlands Protection Ordinance (SCCC

Chapter 16.30). Impacts to riparian forests are also likely to require permits from CDFW (Lake and Streambed Alteration Agreement) and the Regional Board (Water Quality Certification). Also refer to the Regulatory Setting (Sections 3.4.2 and 6.4.2) and Threshold E below.

Table 6.4-8. Temporary and Permanent Project Impacts to Sensitive Habitat Types for Alternative 3

Habitat Type Project Element	Permanent Impacts	Temporary Impacts
Coastal Terrace Prairie	**0**	**0**
Coast Live Oak Woodland	**0**	**0**
Coastal Scrub	**0**	**0**
Mixed Broadleaf Riparian	**0**	**0**
Mixed Willow Riparian	**0**	**0**
Riverine	**0**	**0**
Seasonal Wetland (Irrigation Ditch Wetland)	**0.02**	**0**
Total Sensitive Habitats Impacts	**0.02**	**0**

Table 6.4-9. Proposed Restoration Areas within Sensitive Habitats for Alternative 3

Habitat Type Project Element	
Coast Live Oak Woodland Harkins Slough Road Drainage Restoration	**0.04**
Mixed Broadleaf Riparian Internal Roadway to Old Landfill Culvert Replacement	**0.015**
Mixed Willow Riparian	**0.073**
Harkins Slough Road Drainage Restoration	0.045
Landfill Entrance Culvert Modification	0.002
Internal Roadway to Old Landfill Culvert Replacement	0.026
Freshwater Emergent Marsh Landfill Entrance Culvert Modification	**0.003**
Seasonal Wetland Irrigation Ditch Wetland – Reorientation and Expansion	**Undetermined**
Riverine	**0.077**
Harkins Slough Road Drainage Restoration	0.055
Buena Vista Drive Tributary – Landfill Entrance Culvert Modification	0.013
Channelized Gallighan Slough – Internal Roadway to Old Landfill Culvert Replacement	0.013
Open Drainage along North-South Roadway – Re-establishment	Undetermined
Total Restoration Areas	**0.168 + Undetermined**

Table 6.4-110. Alternative 3 Enhancement and Restoration Features and Associated Restoration Areas within Sensitive Habitats

Restoration and Enhancement Feature Sensitive Habitat Type	
Landfill Entrance Culvert Modification	
Freshwater Emergent Marsh	0.003
Mixed Willow Riparian	0.002
Buena Vista Drive Tributary (Riverine Culvert)	0.013
Total Restoration Area	**0.018**
Internal Roadway to Old Landfill Culvert Replacement	
Mixed Broadleaf Riparian	0.015
Mixed Willow Riparian	0.026
Channelized Gallighan Slough (Riverine and Riverine Culvert)	0.013
Total Restoration Area	**0.054**
Harkins Slough Road Drainage Restoration	
Mixed Willow Riparian	0.045
Harkins Slough Road Drainage (Riverine)	0.055
Coast Live Oak Woodland/Coastal Scrub	Undetermined
Total Restoration Area	**0.100 + Undetermined**
Reorientation and Expansion of Existing Irrigation Ditch Wetland	
Seasonal Wetland	Undetermined
Riparian/Coastal Scrub	Undetermined
Total Restoration Area	**Undetermined**
Re-establishment of Open Drainage along North-South Roadway	
Riverine	Undetermined
Riparian/Coastal Scrub	Undetermined

Impact BIO-8 ALTERNATIVE 3 CONSTRUCTION AND OPERATION WOULD RESULT IN MINIMAL IMPACTS TO COAST LIVE OAK WOODLAND AND FOREST. (LESS THAN SIGNIFICANT IMPACT WITH MITIGATION)

Overview

Coast live oak woodland and forest habitats are present within the Study Area but would not be directly impacted by implementation of Alternative 3; minimal indirect impacts may occur as a result of construction. In addition, minimal temporary impacts to coast live oak woodland understory would occur as a result of the Harkins Slough Road Drainage Restoration. Coast live oak woodlands and forests are considered ESHA by the County of Santa Cruz LCP (Santa Cruz County 2024) and a sensitive habitat pursuant to the County of Santa Cruz Sensitive Habitat Ordinance (SCCC Chapter 16.32). This habitat type is also considered "Especially Valuable Habitat" (EVH) by the CCC based on the "special role" of this habitat to support a diversity of wildlife species, as well as its aesthetic and carbon sequestration values (PRC Section 30107.5). In addition, coast live oak forest in immediate proximity to the Wildlife Refuge has the additional importance of contributing to contiguous habitat area and creating a vegetative

barrier between the Wildlife Refuge and Harkins Slough Road. Coast live oak woodland and forest habitat within the Study Area expands and buffers the overall ecological values of the refuge.

All trees occurring within this sensitive habitat type, regardless of species, are also considered "significant" by the County of Santa Cruz (SCCC Chapter 16.32) (also refer to Local Policies and Ordinances section under Threshold E below).

Occurrence

Coast live oak woodland and forest habitats in the Alternative 3 Study Area are limited in their extent, occurring along Harkins Slough Road (**Figure 6.4-1b**). The trees along Harkins Slough Road appear to be less than 40 years old based on the size of the trees and a review of historical aerial photographs of the area (Google Earth 2026; UCSB Library Geospatial Collection 2026). These trees were likely planted or allowed to establish naturally following expansion of the landfill and previous realignment of Harkins Slough Road in the late 1980s. Although the coast live oak woodland and forest habitats situated within the Study Area are relatively young, they are near or contiguous with the dense, mature coast live oak forest within the Wildlife Refuge that extends downslope (eastward) to Harkins Slough. The less mature trees serve to buffer this intact habitat, contributing to overall habitat value.

Construction

No Alternative 3 components would directly impact coast live oak woodland. However, the combined facilities site is located immediately adjacent to this sensitive habitat type, and protective measures are described below to minimize temporary or indirect impacts (Mitigation Measures BIO-8a and BIO-8b). In addition, Restoration of the Harkins Slough Road Drainage would temporarily impact 0.04 acres of coast live oak woodland understory.

Additional mitigation measures for impacts to other sensitive habitats (below) are also included here (Mitigation Measures BIO-8c and BIO-8e).

Therefore, the impact would be **Less than Significant with Mitigation** (Mitigation Measures BIO-8a, BIO-8b, BIO-8c, BIO-8e)**.**

Mitigation Measure BIO-8a: Implement Measures to Protect Sensitive and Native Habitats during Construction

The County, in coordination with their construction contractor and agency-approved biologists, will implement the following measures to protect sensitive and native habitats during construction.

- Follow all conservation regulations, policies, and principles in Chapter 5 Conservation and Open Space of the General Plan and LCP (2024). For wildlife habitats and sensitive communities, including wetlands, follow applicable regulations from Chapter 16.30 and 16.32 of the Environmental and Resource Protection section of County of Santa Cruz Municipal Code, wherever feasible. Obtain exceptions to these regulations, as applicable.
- Avoid and reduce impacts to sensitive and native habitats. The construction footprint will be minimized.
- Stage equipment in ruderal and/or developed areas.
- Confine construction activities and operation of equipment and vehicles, including site access and parking, to designated staging, access, and work areas.
- Except as necessary for project implementation, avoid grubbing and construction within 100 feet of the edge of aquatic features (wetlands and other waters), including Harkins Slough Road Drainage,

Buena Vista Drive Tributary, Channelized Gallighan Slough, and freshwater emergent marsh (by the main landfill entrance). Where work occurs within 100 feet of aquatic features, secondary containment measures (e.g. visqueen sheeting and/or drip pans under staged equipment and for maintenance) will be employed.

- Prior to initiation of construction activities, an agency-approved biologist will identify all areas to be avoided and/or protected and will mark sensitive habitats in the field.
- Minimize removal and disturbance of native vegetation, and implement the following when disturbance to native vegetation is required:
  - Limbing of native trees and cutting (above the ground) of shrubs will be favored in lieu of removal. Stumps of native vegetation will be retained to allow for re-sprouting following Project completion where vegetation will not interfere with the Project features.
  - Maintain native understory plants to the extent feasible. Do not grub within sensitive habitat types unless no other alternative exists.
  - Preserve native edge habitats wherever feasible, such as boundaries between coast live oak woodland/forest and grassland, and transitions between riparian and wetland vegetation. The County, in coordination with their construction contractor and an agency-approved biologist, will remove invasive non-native plants from the work area as designated by Cal-IPC (2026) as having "high" potential for "severe ecological impacts on physical processes, plant and animal communities, and vegetation structure."

Mitigation Measure BIO-8b: Implement Best Management Practices During Construction

The County, in coordination with their construction contractor, will implement the following best management practices during construction.

- Prior to staging equipment on-site, clean all equipment caked with mud, soil, or debris from off-site sources or previous Project sites to avoid introducing or spreading invasive exotic plant species. All equipment used on the premises will be cleaned prior to leaving the area for future projects.
- Refueling and/or maintenance of vehicles and equipment will be performed in designated staging areas. Workers will be informed of the importance of preventing spills and of the appropriate measures to take should a spill occur. Follow all state and federal laws pertaining to hazardous material handling and management.
- Position all stationary equipment such as motors, pumps, generators, and/or compressors over drip pans. Store vehicles and equipment in designated staging area. Position parked equipment over drip pans or absorbent material.
- All construction vehicles and equipment will be checked daily for fuel, oil, and hydraulic fluid leaks or other problems that could result in spills of toxic materials.
- Prohibit smoking.
- During construction, all food trash that may attract predators into the work area will be properly contained and removed from the work site on a daily basis. Construction debris and trash should also be properly contained and removed from the work site on a regular basis.

Mitigation Measure BIO-8c: Stabilize and Restore Temporary Impact Areas

The County and/or their construction contractor, in coordination with an agency-approved biologist, will stabilize and restore sensitive and native habitat areas that are temporarily impacted by construction activities, as described below.

- During construction, stabilize all exposed or disturbed areas within the construction area. Install erosion control measures such as silt fences, weed-free straw bales, plywood, straw wattles, water check bars, and broadcast weed-free straw wherever silt laden water has the potential to leave the work site and enter the nearby drainages. Modify, repair, and/or replace erosion control measures as needed.
- During construction, to minimize the risk of entangling and strangling wildlife, erosion control materials containing synthetic (e.g., plastic or nylon) monofilament netting will not be used, and any geo-textile material or filter fabric used will not contain any petroleum-based products. Geotextiles, fiber rolls, and other erosion control measures will be made of loose-weave mesh, such as jute or coconut (coir) fiber.
- At the end of construction activities, restore habitat contours to their original (or agency-approved) configuration in all sensitive habitats or adjacent areas (Proposed Project: **Figures 3.4-1** and **3.4-2;** Alternative 3: **Figure 6.4-1**) that have been temporarily disturbed by activities associated with the construction.
- At the end of construction activities, where temporary impacts to sensitive and native habitats occur, revegetate as needed with native seed mix or locally sourced native plantings. Revegetate all disturbed areas. An agency-approved biologist will determine a palette/seed mix suitable to the location. Adjacent non-native grasslands and ruderal habitats may also be planted with native vegetation, preserving edge effects, where appropriate.

Mitigation Measure BIO-8e: Prepare and Implement a Habitat Mitigation Plan for Permanent Impacts to Sensitive Habitats, Including Aquatic Features, for Alternative 3

The County, in coordination with qualified biologists, will prepare and implement a Habitat Mitigation Plan (HMP), as outlined below, to mitigate for permanent impacts to sensitive habitats and ESHA, including aquatic features. This plan will compensate for impacts to wetlands (Reorientation and Expansion of Existing Irrigation Ditch Wetland), as well as riparian and riverine habitat (Harkins Slough Road Drainage Restoration). In addition, the HMP will provide additional recommendations for implementation and monitoring of the Environmental Enhancement and Restoration Features. The HMP will mitigate for impacts to sensitive wildlife species, if present (Crotch's bumble bee, California red-legged frog, northwestern pond turtle, avian and bat species, San Francisco dusky-footed woodrat), habitat for these species, and wildlife movement through the restoration and enhancement of potential habitat. The Habitat Mitigation Plan (HMP) will be prepared by a qualified biologist prior to submission of permit applications in coordination with the relevant resource agencies (County Environmental Planning Division, the CCC, CDFW, RWQCB, USACE, and/or USFWS) and approved prior to initiation of construction. The conceptual framework for the HMP is below.

- The detailed HMP will include the following:
    - Description of the Project elements including acreage of temporary and permanent impacts to sensitive habitats, including coast live oak woodland and riverine habitat (Harkins Slough Road Drainage) and the number of significant trees removed for the project.

- Description of Environmental Enhancement and Restoration Features including acreage of restoration areas within sensitive habitat types and tree removal, if required.
- Goals of compensatory mitigation project including types and areas of habitat to be created, restored, and/or enhanced, and mitigation ratios (created/restored/enhanced: impacted). At a minimum, the Project will not result in a reduction in area of sensitive habitats, ESHA, wetlands, or riparian corridors.
- Ratio and species composition for significant tree mitigation as determined in coordination with the County Environmental Planning Division, CCC, California Regional Water Quality Control Board (Regional Board), and California Department of Fish and Wildlife (CDFW) for tree removal in mixed willow riparian habitat.
- In-kind restoration and/or enhancement of riverine habitat onsite from impacts to wetlands (Reorientation and Expansion of Existing Irrigation Ditch Wetland) and riparian and riverine habitat (Harkins Slough Road Drainage).
- Location and acreage of mitigation areas, and tree replacement planting, including size and ownership status.
- Detailed construction and planting techniques.
- Description and design of habitat requirements for special-status wildlife, including California red-legged frog and northwestern pond turtle.
- Strategies for protecting the habitat values of the larger Watsonville Sloughs ecosystem, including wildlife movement.
- Maintenance activities during the monitoring period, including replanting native vegetation and weed removal, that will not result in take of special-status plant and wildlife species.
- Performance standards and specific success criteria, quantitative and qualitative monitoring and reporting, documenting ability to meet or surpass success criteria.
- Adaptive management strategies to ensure long-term viability of mitigation areas.

- The following Environmental Enhancement and Habitat Restoration Features, included as part of Alternative 3, will be developed by qualified biologists in coordination with County engineers and implemented on-site as both in-kind and out-of-kind mitigation.
  - **Wildlife Movement Corridor between Gallighan Slough and Harkins Slough**. Establish a Wildlife Movement Corridor between Gallighan Slough and Harkins Slough on the southern portion of the landfill after closure, by establishing shallow-rooted native perennial vegetation (see **Appendix G4**),[12] including suffrutescents,[13] shrubs, and vine plantings that will not compromise the landfill cap, to facilitate refuge and cover opportunities for wildlife moving across the area. The landfill cap will have a minimum of 24 inches (30–36 inches is preferred) of vegetative

[12] A 20-year study demonstrated that the roots of shallow rooted scrub vegetation grow laterally when the roots reach the barrier membrane layer of the landfill cap and do not penetrate through the membrane into the foundation layer or into the waste below the cap (Holl and McStay 2014).

[13] A suffrutescent plant has a woody lower portion at the base of its stems that persists year to year, while the upper softer growth is herbaceous (non-woody). See also Appendix G4 for a planting palette of shallow-rooted shrubs, perennial herbs, and vines proposed for the landfill cap.

layer/topsoil to allow for shrub plantings. Place downed logs on flatter portions of the corridor, and any appropriate areas of the already closed landfill to provide additional shelter for wildlife.

- **Culvert Modification with Small Wildlife Crossing at Main Entrance**. Modify the culvert under the main entrance to the landfill to add a ledge within the culvert to facilitate safe passage of CRLF and other small wildlife species under most hydrologic conditions.
- **Culvert Replacement under the Internal Roadway to the Old Landfill**. Replace the existing culvert with a larger structure (e.g., a larger culvert with a natural streambed or a clear-span bridge) designed to reduce the hydraulic constriction, associated flooding, and sedimentation upstream within Channelized Gallighan Slough and the Buena Vista Drive Tributary.
- **Wildlife Directional Features at Key Locations**. Construct wildlife directional features such as angled fencing to direct wildlife away from high operational activity areas, including transfer stations and internal roadways toward Channelized Gallighan Slough, the Wildlife Movement Corridor, and the culvert with wildlife passage.
- **Restoration of Harkins Slough Road Drainage**. Rehabilitate the Harkins Slough Road Drainage through re-grading the elevation profile of the channel to repair existing incision, accommodate storm flows and transport sediment effectively. Remove red ironbark trees adjacent to the drainage and plant with suitable native riparian plant species including willows, creek dogwood, elderberry, and (above the break in bank) coast live oaks.
- **Re-establishment of Open Drainage along North-South Roadway.** Re-establish an open drainage along the west side of the north-south roadway and remove the buried pipe that currently conveys stormwater into the Harkins Slough Road Drainage to the south. This feature will capture runoff from areas to the north and west, and the west bank will be planted with suitable native vegetation to shade the drainage and provide cover for wildlife. Because the ravine that previously contained the drainage was filled and the existing elevation is 10-30 feet higher than the historical ravine, the re-established open drainage is not intended to re-create historical conditions.
- **Reorientation and Expansion of Existing Irrigation Ditch Wetland.** Reorient and expand the seasonal irrigation ditch wetland and irrigation ditch that runs along the east side of the low-lying terrace to establish new stormwater detention basins and wetlands. While designed to receive additional run-off from new impervious surfaces (an analogous purpose to the existing irrigation ditch), the basins/wetlands will provide enhanced ecosystems services through their larger capacity and connectivity to the proposed Wildlife Movement Corridor (see below). The basins/wetlands will be positioned outside of the southwest corner of the new facilities such that they will be accessible to wildlife moving along the southern perimeter of the Combined Facilities site. These basins will be maintained initially during project construction; and shortly afterwards, portions of the features will be planted with native wetland vegetation and other suitable native plant species (i.e. on the upland embankments). The basins/wetlands will be designed to flow into the Harkins Slough Road Drainage through drop structures and/or outlet structures.
- **Wildlife Movement Corridor between USFWS Refuge and Undeveloped Open Space to the West.** Preserve and enhance a wildlife movement corridor along the southern perimeter of the Combined Facilities, to provide connectivity between the USFWS Refuge to the east and undeveloped land and habitats patches to the west. The corridor includes 100 feet along the frontage of Harkins Slough Road, including existing coast live oak woodland. Other suitable native vegetation will be planted to provide cover and refuge along the corridor.

- **Culvert and Fencing Designed for Wildlife Movement Within and Around the Combined Facilities Site.** Several new stormwater culverts will be installed for stormwater management at the Combined Facilities site. A culvert under the new driveway from Harkins Slough Road will be flat bottom to facilitate amphibian movement. Additionally, the stormwater basins/wetlands will be located outside the facility fencing, and wildlife- friendly fencing will be installed around the ponds to allow wildlife movement, while discouraging humans and vehicles from entering the basins.

Impact BIO-9 ALTERNATIVE 3 CONSTRUCTION WOULD RESULT IN MINIMAL IMPACTS TO RIPARIAN FOREST. (LESS THAN SIGNIFICANT IMPACT WITH MITIGATION)

Overview

Alternative 3 construction of the Environmental Enhancement and Habitat Restoration Features would result in minimal impacts to riparian scrub and forest habitats (**Table 6.4-9 and Table 6.4-10**). Riparian scrublands and forests are considered sensitive habitats and ESHA by the County of Santa Cruz LCP, Sensitive Habitat Ordinance (SCCC Chapter 16.30), and Riparian Corridor and Wetlands Protection Ordinance (SCCC Chapter 16.32). These riparian scrublands and forests are also regulated as one- or two-parameter wetland habitats under the California Coastal Act when dominated by arroyo willow, red willow, Pacific willow, and/or black cottonwood; all three of which are designated as hydrophytic with a FAC-FACW[14] wetland indicator status. Riparian and woody wetland communities are considered sensitive habitats due to their value to wildlife, water quality, limited distribution, and decreasing acreages statewide. Riparian vegetation is critical for wildlife habitat and movement, flood protection, stream bank stabilization, erosion control, and water quality related to nutrient and sediment filtration by riparian vegetation.

Impacts to riparian forests require a Riparian and Wetland Exception permit from the County of Santa Cruz. Moreover, riparian forests dominated by hydrophytic vegetation (e.g., willows) are regulated under the Coastal Act and County of Santa Cruz LCP as wetlands, and approved impacts to these features are limited to resource-dependent uses (PRC Section 30240) or an exception is required, as described under the Sensitive Habitat Impact Section above and in Section 3.4.2, Regulatory Setting. Impacts to riparian forests are also likely to require permits from CDFW (Lake and Streambed Alteration Agreement) and the Regional Water Quality Control Board.

The Environmental Enhancement and Habitat Restoration Features that could result in this potential impact include: Culvert Modification with Small Wildlife Crossing at Main Entrance, Culvert Replacement under the Internal Roadway to the Old Landfill, and the Restoration of Harkins Slough Road Drainage.

Occurrence

Within the Study Area, mixed broadleaved riparian forest and willow riparian scrub and forest habitats occur along the margins of the Harkins Slough Road Drainage, the Buena Vista Drive Tributary, and Channelized Gallighan Slough, providing habitat and movement corridors for a variety of common and special-status wildlife species (**Figure 6.4-1a–b**). This habitat type's rich ecological values for wildlife are described in Section 6.4.1 above.

[14] A FAC plant species is a plant that occurs in wetlands (34-66%) and also in upland habitats (34-66%). A FACW plant species is a plant that usually occurs in wetlands (67–99 percent) and occasionally in upland habitats (1–33 percent).

Construction

Construction of the Alternative 3 combined facilities would not result in impacts to riparian habitats. Temporary disturbance of riparian scrub and forest habitats is anticipated from the Environmental Enhancement and Habitat Restoration Features, including: Culvert Modification with Small Wildlife Crossing at the Main Entrance (Buena Vista Drive Tributary), Culvert Replacement under the Internal Roadway to the Old Landfill (Channelized Gallighan Slough), and Restoration of Harkins Slough Road Drainage.

These activities may disturb up to 0.09 acres of riparian scrub and forest vegetation from trimming and limbing of willows and other broadleaved trees to allow access for equipment and construction personnel and the transplantation of up to 12 willows along the Harkins Slough Road Drainage. **Table 6.4-7** lists impacts by each location.

Impacts to riparian vegetation would temporarily disrupt and displace habitat functions and values, including insulating, buffering, and filtering the drainages, and the provision of wildlife shelter and refuge, nesting substrate, and foraging opportunities. These impacts are expected to be small in scale and short in duration. It is anticipated that all temporary impacts to riparian habitat will be fully restored to preconstruction conditions within one year of completing related project activities.

These impacts to riparian forest would be reduced to a less than significant level by replacing, restoring and/or enhancing riparian vegetation within the disturbed areas (on site) and by implementing protective measures while working in or near these sensitive habitats. Therefore, the impact would be **Less than Significant with Mitigation** (Mitigation Measures BIO-8a, BIO-8b, BIO-8c, BIO-8e, BIO-9a, BIO-9b).

Mitigation Measure BIO-8a: Implement Measures to Protect Sensitive and Native Habitats during Construction

Refer to the description of Mitigation Measure BIO-8a for Impact BIO-8 above.

Mitigation Measure BIO-8b: Implement Best Management Practices During Construction

Refer to the description of Mitigation Measure BIO-8b for Impact BIO-8 above.

Mitigation Measure BIO-8c: Stabilize and Restore Temporary Habitat Impact Areas

Refer to the description of Mitigation Measure BIO-8c for Impact BIO-8 above.

Mitigation Measure BIO-8e: Prepare and Implement a Habitat Mitigation Plan for Permanent Impacts to Sensitive Habitats, Including Aquatic Features, for Alternative 3

Refer to the description of Mitigation Measure BIO-8e for Impact BIO-8 above.

Mitigation Measure BIO-9a: Replace, Restore and/or Enhance with In-Kind Riparian Vegetation on Site

Following project construction, the County will mitigate for temporary impacts to mixed willow riparian scrub and forest and mixed broadleaved riparian forest on site, as necessary at the main landfill entrance (Buena Vista Drive Tributary), where the internal roadway to the Old Landfill crosses Channelized Gallighan Slough, and along Harkins Slough Road Drainage, through in-kind replacement, restoration, and/or enhancement at a ratio to be determined in coordination with the relevant resource agencies (County, CCC, Regional Board, and CDFW).

In addition, the County in coordination with qualified biologists will plant suitable native trees and understory plants (including mixed willow riparian scrub and forest, mixed broadleaved riparian forest, and coast live oak woodland) where suitable space is available, such as along Harkins Slough Road Drainage.

Mitigation Measure BIO-9b: Transplant Willows to Restore Riparian Areas

During construction activities at the Harkins Slough Road Drainage, the County or their contractor will excavate willow roots, cover with moistened burlap, and set aside during construction. Following construction activities in this area, the willow roots will be replanted along the newly contoured embankment on the north side of the embankment (away from Harkins Slough Road).

Impact BIO-10 ALTERNATIVE 3 CONSTRUCTION WOULD RESULT IN IMPACTS TO OTHER ENVIRONMENTALLY SENSITIVE HABITAT AREAS. (LESS THAN SIGNIFICANT IMPACT WITH MITIGATION)

ESHA also include CRLF and NWPT habitat, edge habitats, and areas of high biodiversity. Construction activities would temporarily disrupt these ESHAs.

Alternative 3 components that could result in or contribute to this potential impact include the Environmental Enhancement and Habitat Restoration Features identified above under riparian habitat.

California Red-Legged Frog and Northwestern Pond Turtle Habitat

Aquatic, upland/refuge, movement, and dispersal habitat for CRLF and aquatic, movement, dispersal, and nesting habitat for NWPT include the sensitive habitats (described for Impacts BIO-8 and BIO-9 above), aquatic habitats (described for Impacts BIO-11 and BIO-12 below), and ruderal/non-native grassland, willow forest (non-riparian), and non-native forest habitats (described above in Section 6.4.1) where these habitats are located in direct lines between aquatic features for CRLF (**Figures 3.4-2a–e** and **Figure 3.4-3** in Section 3.4) or where located adjacent to aquatic features for NWPT.

The impacts to known and potential CRLF habitat and the required mitigation are described in discussion for Impact BIO-3 above, and the impacts to potential NWPT habitat and the required mitigation are described in the discussion for Impact BIO-4 above. In addition, protection of sensitive habitats, and implementation of Environmental Enhancement and Habitat Restoration Features would result in protection of and improvements to CRLF and NWPT habitat.

Edge Habitats/Areas of High Biological Diversity

Within the Study Area, edge habitats (or ecotones) are present between coast live oak woodland and forest and non-native and ruderal grassland habitats immediately south, east, and west of the Combined Facilities Project site. In addition, edges between wetland or riparian habitats and upland habitats are present along the Harkins Slough Road Drainage, along the Buena Vista Drive Tributary, along Channelized Gallighan Slough, and along the seasonal irrigation ditch wetland within the low-lying terrace. Edge habitats typically support high biological diversity due to increased resource availability and physiognomic (habitat structure) heterogeneity.

Construction activities such as vegetation removal, grubbing, and grading would temporarily degrade edge habitat and areas of high biological diversity, and reduce available refuge and foraging habitat for wildlife. Alternative 3 would preserve and enhance most edge habitats and areas of high biological diversity through avoidance (south, east, and west of the combined facilities site) and enhancement and restoration along the riparian corridors and the other Environmental Enhancement and Habitat Restoration Features (Wildlife Movement Corridors, Re-establishment of Open Drainage along North-South Roadway, and Reorientation and Expansion of Existing Irrigation Ditch Wetland).

These impacts would be reduced to a less than significant level by implementing habitat protection and restoration measures. Therefore, the impact would be **Less than Significant with Mitigation** (Mitigation Measures BIO-8a, BIO-8b, BIO-8c, BIO-8e, BIO-9a, BIO-9b).

Mitigation Measure BIO-8a: Implement Measures to Protect Sensitive and Native Habitats during Construction

Refer to the description of Mitigation Measure BIO-8a for Impact BIO-8 above.

Mitigation Measure BIO-8b: Implement Best Management Practices During Construction

Refer to the description of Mitigation Measure BIO-8b for Impact BIO-8 above.

Mitigation Measure BIO-8c: Stabilize and Restore Temporary Habitat Impact Areas

Refer to the description of Mitigation Measure BIO-8c for Impact BIO-8 above.

Mitigation Measure BIO-8e: Prepare and Implement a Habitat Mitigation Plan for Permanent Impacts to Sensitive Habitats, Including Aquatic Features, for Alternative 3

Refer to the description of Mitigation Measure BIO-8e for Impact BIO-8 above.

Mitigation Measure BIO-9a: Replace, Restore and/or Enhance with In-Kind Riparian Vegetation on Site

Refer to the description of Mitigation Measure BIO-9a for Impact BIO-9 above.

Mitigation Measure BIO-9b: Transplant Willows to Restore Riparian Areas

Refer to the description of Mitigation Measure BIO-9b for Impact BIO-9 above.

Threshold C:	Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.

Wetlands/Other Waters

Alternative 3 would impact aquatic habitats, including both minimal impacts from the combined facilities and the Environmental Enhancement and Habitat Restoration Features, which would have a beneficial effect overall (**Table 6.4-11; see also Tables 6.4-7, 6.4-8, 6.4-9, and 6.4-10**). Three aquatic habitat types (riverine, freshwater marsh, and seasonal wetland) are present within the Study Area and would be affected by the project (**Figure 6.4-1, Figures 6.4-1a–d**).

Table 6.4-11. Temporary Alternative 3 Impacts and Restoration Areas Acreages within Aquatic Habitat Types

Habitat Type*[1]	Impacts (Acres)	Restoration Area Acreage (Acres)
Riverine (Aquatic)	0	0.077
Freshwater Emergent Marsh	0	0.003
Seasonal Irrigation Ditch Wetland	0.02	Undetermined
Total	0.02	0.11

Impacts to federally protected aquatic resources would require permits from the Regional Board (CWA Section 401 Water Quality Certification) and USACE (CWA Section 404 Nationwide Permit). In addition, impacts to aquatic resources are likely to require permits, approvals, and exceptions from the County and CDFW. Also refer to the Regulatory Setting (Sections 3.4.2 and 6.4.2) above and Threshold E below.

IMPACT BIO-11 ALTERNATIVE 3 CONSTRUCTION WOULD RESULT IN MINIMAL IMPACTS TO WETLANDS. (LESS THAN SIGNIFICANT IMPACT WITH MITIGATION)

Overview

Several potential jurisdictional palustrine emergent wetlands meeting all three wetland parameters (i.e., hydrophytic vegetation, hydric soils, wetland hydrology) were identified within the Study Area (**Figure 6.4-1 and Figures 6.4-1a–d**). Alternative 3 would result in impacts to the seasonal irrigation ditch wetland positioned within the combined facilities site and the freshwater marsh downstream (southwest) of the Main Landfill Entrance (**Tables 6.4-7, 8, 9, 10, and 11**).

Alternative 3 components that would result in this potential impact include: combined facilities, the stormwater basins/wetlands (Reorientation and Expansion of the Existing Irrigation Ditch Wetland), and Culvert Modification with Small Wildlife Crossing at Main Landfill Entrance.

Occurrence

Two palustrine emergent wetlands fall within the Alternative 3 project area. A freshwater marsh associated with the Buena Vista Drive Tributary is present immediately downstream of the culvert under the Main Entrance to the Landfill (**Figure 6.4-1**). A seasonal irrigation ditch wetland associated with an existing irrigation ditch is present within the low-lying terrace in the combined facilities site. These areas were determined to support a preponderance of hydrophytic vegetation, evidence of hydric soils, and wetland hydrology as required by USACE and CCC wetland delineation guidelines. The freshwater marsh feature at the Main Landfill Entrance has direct surface water connectivity to Gallighan Slough and ultimately the Pacific Ocean, a Traditional Navigable Water (TNW). The seasonal irrigation ditch wetland does not support direct surface water connectivity to tributaries that enter a TNW, except during high flow events during and immediately after periods of moderate to heavy precipitation, and therefore is not subject to USACE jurisdiction under the CWA. This wetland would be subject to jurisdiction and permitting requirements by the Regional Board under Porter-Cologne and the County, under the Coastal Act.

The small 0.01-acre freshwater marsh is situated immediately downstream (southwest) of the Main Landfill Entrance (**Figure 6.4-1 and 2-4a-b**) and borders the Buena Vista Drive Tributary downstream of the existing box culvert beneath the Main Landfill Entrance driveway. The freshwater marsh supports dense emergent hydrophytes including cutleaf water parsnip (OBL), cattails (OBL), marsh pennywort (*Hydrocotyle ranunculoides*; OBL), green dock (*Rumex conglomeratus*; FACW), and western goldenrod (FACW). This feature exhibits direct surface water connectivity to the Buena Vista Drive Tributary, and the confluence with Channelized Gallighan Slough is approximately 225 feet downstream of the wetland. The marsh is positioned adjacent to the mixed riparian vegetation along the drainage and contributes to overall species richness, and edge habitat qualities.

The existing 0.2-acre seasonal irrigation ditch wetland is situated within a north-south irrigation ditch along the east side of the low-lying terrace in the central portion of the combined facilities site. The irrigation ditch and seasonal irrigation ditch wetland are associated with the abandoned greenhouse facilities upslope to the east. Corrugated pipes carried runoff from the greenhouses directly into the ditch feature. The wetland has formed in nutrient-rich sediments within the incised ditch. This feature is dominated by a mix of native and non-native hydrophytic vegetation including California bulrush,

narrowleaved cattail, common rush, pennyroyal, and poison hemlock. No willows or other riparian vegetation were associated with this feature. The irrigation ditch was intended to flow through the culvert under a moderately steep west-facing hillslope to carry runoff to the perpendicular (east-west) ditch that subsequently directs the flow into Harkins Slough Road Drainage. The culvert inlet from the north-south irrigation ditch is now above the elevation of the seasonal irrigation ditch wetland, allowing water from the irrigation ditch to flow through the culvert only during larger storm events. This incision of the irrigation ditch below the culvert inlet likely contributed to the formation of the seasonal irrigation ditch wetland sometime in the past.

The landscape position and microtopography (concave) of the seasonal irrigation ditch wetland provide some benefits (i.e., ecosystem services) to water quality, contaminant sequestration, and nutrient cycling of surface water runoff entering the Harkins Slough Road Drainage and ultimately the Watsonville Sloughs via the east-west ditch. The feature also provides a seasonal hydration point as well as some habitat heterogeneity (with additional available food sources) for wildlife moving along the open space.

Impacts

Direct impacts to wetlands would result from functional improvements and restoration. Environmental Enhancement and Habitat Restoration Features include the Culvert Modification with Small Wildlife Crossing at Main Landfill Entrance and the construction of stormwater basins/wetlands through the Reorientation and Expansion of the Existing Irrigation Ditch Wetland on the combined facilities site. These impacts would largely be considered beneficial, increasing wildlife habitat value, improving water quality, and improving the functions and values of these features overall.

The small 0.02-acre freshwater marsh situated immediately downstream of the existing box culvert beneath the main landfill entrance driveway would be impacted by culvert modification, including approximately 0.004 acres of temporary impacts. The culvert design would incorporate a flat-bottom culvert with an elevated ledge along one side that allows for passage of small wildlife species under most hydrologic conditions. Additional information on restoration of Buena Vista Drive Tributary is provided in the discussion for Impact BIO-12 below.

Construction of the combined facilities includes the expansion of stormwater conveyance and collection infrastructure through the development of stormwater basins/wetlands. Construction of these features includes temporary impacts to the existing irrigation ditch and associated 0.02-acre seasonal irrigation ditch wetland, which would be reoriented and expanded. The new stormwater basins/wetlands would be positioned outside of the combined facilities fence and within the Wildlife Movement Corridor (**Figure 5-12d**). This position serves multiple functions. The combined facilities would be concentrated to the north, and the stormwater features would be positioned downgradient and south of the development to receive runoff including from new impervious surfaces, thereby continuing to serve an analogous purpose to the current irrigation ditch. In addition, the new clay-lined basins/wetlands would be larger, structurally more complex, and accessible to wildlife using the Wildlife Movement Corridor along Harkins Slough Road. At least one of the two basins would be planted with native wetland vegetation, providing potential habitat for birds and aquatic wildlife, including amphibians. The embankments would also be planted with suitable native vegetation.

In summary, the Culvert Modification with Small Wildlife Crossing at Main Entrance and the Reorientation and Expansion of the Existing Irrigation Ditch Wetland on the combined facilities site would result in temporary impacts to wetland vegetation and function. However, the impacts would be reduced to a less than significant level by the benefits associated with expansion of the features,

restoration, and by implementing habitat protection and restoration measures. Therefore, the impact would be **Less than Significant with Mitigation** (Mitigation Measures BIO-8a, BIO-8b, BIO-8c, BIO-8e).

Mitigation Measure BIO-8a: Implement Measures to Protect Sensitive and Native Habitats during Construction

Refer to the description of Mitigation Measure BIO-8a for Impact BIO-8 above.

Mitigation Measure BIO-8b: Implement Best Management Practices During Construction

Refer to the description of Mitigation Measure BIO-8b for Impact BIO-8 above.

Mitigation Measure BIO-8c: Stabilize and Restore Temporary Habitat Impact Areas

Refer to the description of Mitigation Measure BIO-8c for Impact BIO-8 above.

Mitigation Measure BIO-8e: Prepare and Implement a Habitat Mitigation Plan for Permanent Impacts to Sensitive Habitats, Including Aquatic Features, for Alternative 3

Refer to the description of Mitigation Measure BIO-8e for Impact BIO-8 above.

IMPACT BIO-12 ALTERNATIVE 3 CONSTRUCTION WOULD RESULT IN MINIMAL IMPACTS TO RIVERINE HABITATS. (LESS THAN SIGNIFICANT IMPACT WITH MITIGATION)

Overview

Restoration areas associated with Environmental Enhancement and Habitat Restoration Features would occur within the riverine habitat of the Buena Vista Drive Tributary, Channelized Gallighan Slough, and Harkins Slough Road Drainage (**Tables 6.4-7, 8, 9, 10, and 11**).

Project components that could result in or contribute to this potential impact include Culvert Modification with Small Wildlife Crossing at Main Entrance, Culvert Replacement under Internal Roadway to Old Landfill, and Restoration of Harkins Slough Road Drainage.

Occurrence

Riverine features include the seasonal to perennial Harkins Slough Road Drainage, situated along Harkins Slough Road, the Buena Vista Drive Tributary, which runs along the western frontage of the Landfill, and Channelized Gallighan Slough, which bisects the Landfill from the Old Landfill. In addition, several ephemeral drainage ditches were identified within the combined facilities site, including a north-south irrigation ditch positioned along the east side of the low-lying terrace, and an east-west ditch extending from the base of a west-facing slope to the confluence with the Harkins Slough Road Drainage (**Figure 6.4-1 and Figures 6.4-1a–d**). These ephemeral ditch features are not subject to USACE jurisdiction under the federal CWA but are subject to regulation and statutory protections by the Regional Board under the Porter-Cologne Water Quality Control Act.

The Buena Vista Drive Tributary is an aquatic feature that has been modified by anthropogenic influences (i.e., caused by human activity), largely agriculture, for at least 100 years (UCSB Library Geospatial Collection 2026). Archival photographs show this feature as a finger of Gallighan Slough that originates in terraced and sloped agricultural fields northwest of the Study Area and flows generally southward until its confluence with Channelized Gallighan Slough. Historically, the headwaters of the Harkins Slough Road Drainage originated north of Harkins Slough Road and cut through what is now the

northern module of the active landfill to join the Buena Vista Drive Tributary. In 1986, to accommodate Landfill development and expansion, Harkins Slough Road was realigned, and the headwaters of the drainage (north of Harkins Slough Road) were filled (Emcon 1985). Between approximately 10 and 30 feet of fill were deposited into the ravine that supported the Harkins Slough Road Drainage (Geosyntec 2026). The drainage was redirected into a buried pipe, which daylights just north of Harkins Slough Road.

Both the Buena Vista Drive Tributary and Harkins Slough Road Drainage have incised and aggraded reaches, frequently filling with sediments originating in nearby agricultural fields. Near the main landfill entrance, the Buena Vista Drive Tributary often supports dynamic freshwater marsh vegetation on the sediments in the channel. In the recent past, following storm events, these drainages have been mechanically cleared for road safety and landfill access, and the channels recontoured.

Currently, the Buena Vista Drive Tributary supports a narrow channel filled with agricultural sediments bordered by freshwater emergent marsh and mixed willow riparian vegetation, including: small-fruited bulrush (*Scirpus microcarpus*; OBL), American brooklime (*Veronica americana;* OBL), cutleaf water parsley (OBL), watercress (OBL), dotted smartweed (OBL), willowherb (*Epilobium ciliatum* ssp. *watsonii*; FACW), silverweed cinquefoil (*Potentilla anserina* ssp. *californica*; OBL), California blackberry (FAC), creek dogwood (FACW), and willows (*Salix* spp.; FACW).

Currently, the Harkins Slough Road Drainage still originates on a terrace supporting the plant nursery north of the Study Area, then passes through the combined facilities site. The drainage is contained in a belowground pipe before daylighting in the narrow linear drainage bordering the north side of Harkins Slough Road. This narrow, incised feature flows westward to Buena Vista Drive, where it turns 90 degrees to the south, flowing through a culvert under Harkins Slough Road, and continuing south in a cement-lined ditch along the Landfill frontage. Under the former Landfill entrance, a culvert conveys flows to the confluence with the Buena Vista Drive Tributary.

Channelized Gallighan Slough is positioned within a relatively broad arroyo bisecting the Active Landfill to the north and the Old Landfill to the south. Channelized Gallighan Slough flows to Gallighan Slough at the southern boundary of the Study Area, supporting dense broadleaved riparian habitat near the confluence with Buena Vista Drive Tributary and transitioning to mixed willow riparian southeast of the internal roadway to the Old Landfill. Although the channel is relatively narrow and bounded by the active Landfill and the Old Landfill, the drainage and its associated riparian corridor represent one of the more intact and complex habitat types within the Study Area.

Together, the drainages within the Study Area support riparian and emergent wetland vegetation and contribute to on-site habitat complexity and hydrologic connectivity. These flashy drainages carry elevated flow volumes immediately following storm events and during summer months due to irrigation runoff (tailwater) from adjacent agricultural fields.

Impacts

Disturbance of riverine features would result from the Alternative 3 Environmental Enhancement and Habitat Restoration Features, including Culvert Modification with Small Wildlife Crossing at Main Entrance, Culvert Replacement under the Internal Roadway to the Old Landfill, and Restoration of Harkins Slough Road Drainage.

Potential impacts to the drainages may result from dewatering and installation of a diversion or bypass. Impacts to riverine habitat may also occur from the introduction of sediment or construction materials, potential unanticipated releases of equipment fuel, hydraulic fluid, or other potentially hazardous substances used in construction equipment.

The Culvert Modification with Small Wildlife Crossing at Main Entrance would result in 0.013 acres of temporary impacts to riverine portions of the Buena Vista Drive Tributary, almost entirely within the culvert. The existing culvert beneath the main landfill entrance would be modified to contain an elevated ledge along one side that allows for passage of small wildlife species under most hydrologic conditions. The wildlife crossing would be a beneficial impact that would serve as out-of-kind mitigation (**Figure 2-4**).

The Culvert Replacement under the Internal Roadway to the Old Landfill (in Channelized Gallighan Slough) would temporarily impact 0.013 acres of riverine habitat, within the culverted portion of the drainage. The existing culvert would be replaced with a larger structure (e.g., a larger culvert with a natural streambed or a clear-span bridge) designed to reduce the hydraulic constriction, associated flooding, and sedimentation upstream within Channelized Gallighan Slough and the Buena Vista Drive Tributary.

Replacing and upsizing the culvert under the road to the Old Landfill would ultimately improve ecological and hydrologic conditions in Channelized Gallighan Slough, as well as in the Buena Vista Drive Tributary, by maintaining sediment transport competence and reducing aggradation of the stream channels, thereby extending the return interval for maintenance and reducing frequent flood conditions near the main landfill entrance. Specifically, reducing sediment deposition in the channels would maintain a more stable bed, bank, and ordinary high-water mark while improving overall ecological conditions of the streams by supporting open-water riverine conditions and an associated diverse riparian habitat. The upsized culvert or bridge would restore functional riverine habitat and reduce or eliminate the conversion to instream freshwater marsh features which have established on the agricultural sediments.

The instream freshwater marsh that has developed within the Buena Vista Drive Tributary is associated with the following negative ecological effects:

- Shorter hydroperiod;
- Lack of running water, pools, or riffles;
- Poor water quality (e.g., turbidity, less dissolved oxygen);
- Loss of temperature gradients (that support species diversity);
- Absent or degraded habitat for invertebrates (which are the basis of the food chain for fish and amphibians); and
- Diminished hydrologic capacity of the stream, exacerbating flood risk.

The larger capacity culvert or bridge would reduce or eliminate this conversion of habitat from riverine to instream freshwater marsh. Extensive freshwater marsh habitat would remain at the confluence with Gallighan Slough and in off-channel locations along the streams, resulting in aquatic habitat heterogeneity.

Restoration of Harkins Slough Road Drainage would occur following construction of the combined facilities and would result in disturbance of approximately 0.051 acres (**Figures 2-4 and 5-13**). Restoration of approximately 800 linear feet of the drainage would result in beneficial effects including stabilizing the bed and bank to prevent future erosion, incision, and further undermining of the roadbed. In addition, the recontoured drainage would accommodate increased stormwater runoff from new impervious surfaces at the combined facilities. The restoration would include the removal of invasive weeds and establishment of native riparian and wetland vegetation, where appropriate. Because this feature borders the roadway by less than 5 feet, riparian vegetation would be replanted on the upslope (north) embankment/hillslope bordering the drainage. Coastal scrub and/or coast live oak woodland would be planted on the slope above to the north, where space allows.

As a separate project (Buena Vista Drive Rehabilitation Project), the County is planning two other improvements: 1) stabilizing the Buena Vista Drive Tributary along the Landfill frontage to reduce channel incision and remove agricultural sediment, and 2) replacing the culvert and adding a wildlife crossing under Buena Vista Drive from the outlet from the step-down pools across from the main Landfill entrance to increase capacity and allow CRLF to safely cross Buena Vista Drive. In conjunction, these improvements and project-related improvements restore and enhance the overall conditions of the drainages and associated riparian corridors.

In summary, Alternative 3 construction (including the Environmental Enhancement and Habitat Restoration Features) could result in minimal disturbance to riverine vegetation, substrate, and wildlife habitat from culvert modification and replacement, drainage restoration, excavation, and grading. However, these impacts would be reduced to a less than significant level by the restoration benefits and by implementing habitat protection and restoration measures. Therefore, the impact would be **Less than Significant with Mitigation** (Mitigation Measures BIO-8a, BIO-8b, BIO-8c, BIO-8e).

Mitigation Measure BIO-8a: Implement Measures to Protect Sensitive and Native Habitats during Construction

Refer to the description of Mitigation Measure BIO-8a for Impact BIO-8 above.

Mitigation Measure BIO-8b: Implement Best Management Practices During Construction

Refer to the description of Mitigation Measure BIO-8b for Impact BIO-8 above.

Mitigation Measure BIO-8c: Stabilize and Restore Temporary Habitat Impact Areas

Refer to the description of Mitigation Measure BIO-8c for Impact BIO-8 above.

Mitigation Measure BIO-8e: Prepare and Implement a Habitat Mitigation Plan for Permanent Impacts to Sensitive Habitats, Including Aquatic Features, for Alternative 3

Refer to the description of Mitigation Measure BIO-8e for Impact BIO-8 above.

Threshold D:	Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors or impede the use of native wildlife nursery sites.

IMPACT BIO-13 ALTERNATIVE 3 CONSTRUCTION WOULD RESULT IN IMPACTS TO WILDLIFE MOVEMENT. (LESS THAN SIGNIFICANT IMPACT WITH MITIGATION)

Overview

Alternative 3 would impact wildlife movement during construction and through the development of open space that currently provides opportunities for wildlife movement, dispersal, and refuge. Providing functional habitat connectivity between natural areas is essential to sustaining healthy wildlife populations, allowing for the continued dispersal of native plant and animal species.

Alternative 3 components that could result in or contribute to this potential impact include the combined facilities.

Occurrence

Existing wildlife movement habitat is described above in Section **6.4.1** under Wildlife Corridors. Wildlife moving through the Study Area and surrounding area is likely to use the drainages and the sloughs that provide water, foraging resources, shelter, and cover. A number of native wildlife species were observed within these habitats. In addition, the oak woodlands within the Alternative 3 Study Area, including the combined facilities site (specifically the 2-acre County-owned portion on the north side of Harkins Slough Road), and on the adjacent Wildlife Refuge, provide stepping stones between the Wildlife Refuge, the western upland terrace of the adjacent property to the north of the landfill (west of the combined facilities site), and the riparian corridor of the Buena Vista Drive Tributary. Coyote and black-tailed deer scat was observed on the area proposed for the combined facilities and along Harkins Slough Road. These areas are considered habitat patches or linear habitats that facilitate wildlife movement between different natural landscapes.

The habitat patches and linear habitats within and near the Study Area provide opportunities for plant dispersal and wildlife movement. These areas are fragmented by busy roads, agricultural fields, and development, which are considered partially permeable to impermeable barriers to movement.

Despite the disturbed and fragmented nature of the Study Area, the following native wildlife species were observed during site visits: monarch butterfly, coast range fence lizard, gopher snake, numerous common and sensitive avian species (**Appendix G2.4**), bats, brush rabbit, San Francisco dusky-footed woodrat, Sierran chorus frog, CRLF, sculpin, three-spine stickleback, and scat from coyote and black-tailed deer. A number of other wildlife species are likely to occur within the Study Area such as fox, raccoon, bobcat, opossum, and skunk.

Impacts

Construction of the combined facilities could interfere with wildlife movement temporarily and may displace wildlife movement habitat features. Additionally, construction associated with Environmental Enhancement and Habitat Restoration may temporarily deter wildlife movement, directly due to construction, or indirectly due to noise, vibrations, dust, and other activities. Until vegetation regrows, construction impact areas would lack cover for wildlife species. However, these areas are small in scale, and riparian and other native vegetation would naturally recruit and be replanted within the work areas upon completion of construction.

Alternative 3 would displace existing ruderal grassland that is situated within the corridor between the Wildlife Refuge and the western grassland terrace (west of the combined facilities site). However, the combined facilities site design includes the protection of an undeveloped corridor along the frontage of Harkins Slough Road (**Figures 5-12d and 5-13**). In general, this area is already fragmented by the landfill, busy roads, agricultural fields and infrastructure, and other County facilities including the Rountree Medium (Jail) Facility, Buena Vista Migrant Center (farmworker housing and childcare facility), and Tierra Alta Affordable Housing complex. The planned wildlife movement corridor would maintain an avenue for east-west movement in the midst of the existing and planned development. In addition, wildlife movement corridors along Channelized Gallighan Slough (although fragmented by roads) and along the SCBRL railroad tracks would continue to support wildlife movement.

Alternative 3 would protect and improve wildlife movement through implementation of two wildlife corridors: 1) Wildlife Movement Corridor between Gallighan Slough and Harkins Slough in the landfill area south of Harkins Slough Road, and 2) Wildlife Movement Corridor between USFWS Refuge and Undeveloped Open Space to the West (north of Harkins Slough Road). In addition, other Environmental Enhancement and Habitat Restoration Features would improve wildlife movement. The Culvert

Modification with Small Wildlife Crossing at Main Entrance and the Culvert Replacement under Internal Roadway to Old Landfill would improve conditions overall in the drainages and facilitate movement in the culverts. Restoration of the Harkins Slough Road Drainage, Reorientation and Expansion of Existing Irrigation Ditch Wetland, and Re-establishment of Open Drainage along North-South Roadway would improve wildlife movement opportunities on the north side of Harkins Slough Road through the establishment/re-establishment of hydration points and native vegetation that provides cover and foraging opportunities. Refer to **Figures 2-4 and 5-13.** These improvements would be implemented in conjunction with several other restoration projects planned by the County in the Study Area, including rehabilitation of Buena Vista Drive Tributary and an additional culvert replacement under Buena Vista Drive to allow for small wildlife passage, both part of the County's Buena Vista Drive Rehabilitation Project.

In summary, Alternative 3 construction activities such as vegetation removal, grading, and drainage work could temporarily affect wildlife movement corridors and reduce available cover for wildlife. Construction of the combined facilities may permanently displace a portion of the existing movement habitat. However, these impacts would be reduced to a less than significant level by installing protective fencing, relocating wildlife if necessary, conducting environmental training, and scheduling construction to avoid impacts to sensitive resources. The Environmental Enhancement and Habitat Restoration Features included as part of Alternative 3 (**Figure 5-13**) would further reduce these impacts. Therefore, the impact would be **Less than Significant with Mitigation** (Mitigation Measures BIO-1a, BIO-1b, BIO-3, BIO-8e, BIO-13).

Mitigation Measure BIO-1a: Conduct Environmental Training prior to Construction

Refer to the description of Mitigation Measure BIO-1a for Impact BIO-1 above.

Mitigation Measure BIO-1b: Schedule Construction to Avoid Impacts to Sensitive Biological Resources

Refer to the description of Mitigation Measure BIO-1b for Impact BIO-1 above.

Mitigation Measure BIO-3: Implement Protective Measures and Biological Monitoring for California Red-Legged Frog and Northwestern Pond Turtle

Refer to the description of Mitigation Measure BIO-3 for Impact BIO-3 above.

Mitigation Measure BIO-8e: Prepare and Implement a Habitat Mitigation Plan for Permanent Impacts to Sensitive Habitats, Including Aquatic Features, for Alternative 3

Refer to the description of Mitigation Measure BIO-8e for Impact BIO-8 below.

Mitigation Measure BIO-13: Install Protective Fencing and Conduct Wildlife Relocation if Necessary

The County or their construction contractor will work with a qualified biologist to ensure the following measures are implemented prior to and during construction.

- Prior to construction, a qualified biologist will determine locations for the installation of protective fencing with openings every 50 feet that would allow passage of wildlife.
- With agency approval, a qualified biologist or biological monitor will be present during construction to relocate wildlife species, as needed. The biological monitor will work with the County and contractor to implement monitoring measures, as determined in consultation with the resource agencies (County Environmental Planning, California Coastal Commission, U.S. Fish and Wildlife

Service, and California Department of Fish and Wildlife). The monitor will be present during initial vegetation removal, grubbing, grading or other ground disturbance and other activities that may impact sensitive wildlife species, as determined by the agencies and the qualified biologist. After these activities have been completed, the qualified biologist will remain on call to verify the identity of sensitive wildlife species and relocate animals, as needed.

Threshold E:	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

As described in Section 3.4.2, there are several local policies and ordinances for protecting biological resources that are relevant to the impact discussions above. This section focuses on potential conflicts with these ordinances, including the County's General Plan/LCP and specifically, the Sensitive Habitat Protection Ordinance, Riparian and Wetlands Protection Ordinance (discussed below), and the Significant Tree Protection Ordinance, given Alternative 3's location within the Coastal Zone. In addition, Alternative 3 would be required to comply with the County's Tree Removal Policy.

IMPACT BIO-14 ALTERNATIVE 3 CONSTRUCTION WOULD CONFLICT WITH LOCAL POLICIES OR ORDINANCES PROTECTING BIOLOGICAL RESOURCES. (LESS THAN SIGNIFICANT IMPACT WITH MITIGATION)

Santa Cruz County Local Coastal Program and Sensitive Habitat Protection Ordinance

A minimal portion of Alternative 3 would be sited within ESHA, including aquatic habitats, as defined by the Sensitive Habitat Protection Ordinance (SCCC Section 16.32.040), and as discussed under Thresholds B and C above. Therefore, an exception to the Sensitive Habitat Protection Ordinance would be required.

As described in the Regulatory Setting (Sections 3.4.2 and 6.4.2), development activities in or adjacent to sensitive habitat areas are required to conform to permitted uses identified in the ordinance and, for activities within the Coastal Zone, the LCP. As noted above under ARC-3.1.3, only resource-dependent uses shall be allowed within ESHA, unless the other uses are: (1) Consistent with sensitive habitat protection policies and serve a specific purpose beneficial to the public; (2) Determined through environmental review that any adverse impacts on the resource will be completely mitigated and there is no feasible less-damaging alternative; and (3) Legally necessary to allow a reasonable economic use of the land, and there is no feasible less-damaging alternative.

Alternative 3 does not fall within the allowed uses for ESHA (it is not resource dependent) nor does it meet all three of the criteria for "other uses."

The rules and regulations for evaluating the impacts of development activities on sensitive habitats within the County (and the Coastal Zone), determining limitations to these activities to protect sensitive habitats, and identifying conditions of approval through the environmental review process are also outlined in the Sensitive Habitat Protection Ordinance, including in Scope (SCCC § 16.32.020), Approval required (SCCC § 16.32.060), Assessments and reports required (SCCC § 16.32.070), Report preparation and review (SCCC § 16.32.080), and Approval conditions (SCCC § 16.32.090).

Section 16.32.090 identifies specific types of permitted uses allowed within sensitive areas, and only allows resource-dependent uses within ESHA. Exceptions (SCCC § 16.32.100) to the provisions of Section 16.32.090 may be made by the Decision-Making Body[15] if the following findings can be made:

(1) That adequate measures will be taken to ensure consistency with the purpose of this chapter to minimize the disturbance of sensitive habitats; and

(2) One of the following situations exists:

(a) The exception is necessary for restoration of a sensitive habitat; or

(b) It can be demonstrated by biotic assessment, biotic report, or other technical information that the exception is necessary to protect public health, safety, or welfare.

Alternative 3 may qualify for an exception to the Sensitive Habitat Protection Ordinance through 1 and 2b above, if the combined facilities if the Decision-Making Body determines that Alternative 3 is necessary to protect public health, safety, or welfare, through the ongoing provision of waste management service, and the other provisions of the ordinance are upheld.

Riparian Corridor and Wetlands Protection Ordinance

Discrete and limited portions of Alternative 3 are located within a County-defined riparian corridor (see also Section 3.4.2). The potential impacts to biological resources within riparian corridors are also discussed under **Threshold B** (Sensitive Habitats) and **Threshold C** (Wetlands/Other Waters) above.

As described in Section 3.4.2, the Santa Cruz County Riparian and Wetland Protection Ordinance (SCCC Chapter 16.30) requires projects to "minimize and to eliminate any development activities in the riparian corridor, preserve, protect, and restore riparian corridors" and "implement the policies of the General Plan and Local Coastal Program Land Use Plan."

Within the Coastal Zone, *development activities* within riparian corridors[16] and associated buffers are prohibited, and permittable impacts are limited to a list of seven uses (see Section 3.4.2) as identified in the California Coastal Act (PRC Section 30233). Impacts to riparian corridors associated with Alternative 3 do not fall within these permitted uses; therefore, a Riparian Exception would be required (SCCC § 16.30.060).

Minimal impacts to the seasonal irrigation ditch wetland associated with the combined facilities may qualify for an exception to the County Ordinances and the LCP if it is determined that "adequate measures will be taken to ensure consistency with the purpose of [SCCC Chapter 16.32] to minimize the disturbance of sensitive habitats"; and the project is necessary to protect public health, safety, and welfare, as described above under the Sensitive Habitat Protection Ordinance. In addition, to comply with the Santa Cruz County Riparian and Wetland Protection Ordinance, an exception may be authorized by the County based on a preliminary analysis that the Project meets the criteria below. These permits would include conditions of approval for Project implementation, in addition to mitigation measures (Impacts BIO-8, BIO-9, BIO-10, BIO-11, and BIO-12).

[15] Decision-Making Body means the Zoning Administrator, Planning Commission, or Board of Supervisors, whichever body is considering the development permit, when biotic review is concurrent with review of a development permit. When a biotic permit is required, the Decision-Making Body shall be the Planning Director.

[16] Riparian corridors within Santa Cruz County include wetlands, intermittent and perennial streams, associated riparian vegetation, and associated buffers.

If an exception is warranted, the County would be required to authorize a Riparian Exception, and the following findings must be made:

1. There are special circumstances or conditions affecting the property.

   Closure of the landfill and the development of the transfer station (in the combined facilities) is necessary to serve the public by accommodating waste from County residents after the active landfill has reached capacity. Impacts to riparian corridors and wetlands are limited to minimal impacts largely associated with implementing restoration actions to improve the functions and values of the drainages within the area and to facilitate safe wildlife movement near the landfill.

2. The exception is necessary for the proper design and function of the project.

   Minimal work within riparian corridors and wetlands would be necessary to achieve the necessary goals of developing the transfer station (in the combined facilities) and would allow for restoration of the drainages and establishment of safe wildlife movement passage.

3. The granting of the riparian exception will not be detrimental to the public welfare or injurious to other property downstream or in the area in which the project is located.

   Alternative 3 would be beneficial to the public welfare and would not be detrimental to other property downstream. Avoidance and minimization measures would be implemented to protect water quality and minimize impacts to riparian corridors and wetlands, and Alternative 3 is designed to restore functions and values of the drainages including along the Harkins Slough Road Drainage, Buena Vista Drive Tributary, Channelized Gallighan Slough, and associated wetlands.

4. **The granting of the exception, in the Coastal Zone, will not reduce or adversely impact the riparian corridor, and there is no feasible less environmentally damaging alternative.**

   Alternative 3 has been designed to minimize impacts to riparian corridors and wetlands to the greatest extent feasible during minor project-related impacts and restoration activities. Multiple designs have been explored to position transfer stations, organic diversion facilities, roads, and infrastructure improvements to avoid and minimize impacts to riparian corridors and wetlands. Alternative 3 would ultimately improve conditions within the riparian corridors and wetlands; and temporary impacts or displacement of wetlands would be mitigated on site. Alternative 3 would result in no net loss of wetland acreage.

5. **The granting of the riparian exception is in accordance with the purpose of (SCCC Chapter 16.30 Riparian Corridor and Wetlands Protection), the objectives of the General Plan and elements thereof, and the LCP Land Use Plan.**

   While impacts to riparian corridors and wetlands would occur as a result of the Alternative 3 project, these impacts would be minimal and would result in improvements to riparian corridors overall through restoration actions.

The required findings identified in bold above refer specifically to projects in the Coastal Zone and, as identified in Santa Cruz County General Plan/LCP ARC-3.3.3, require no net loss of riparian corridors and wetlands, and encourage restoration and a net increase of riparian corridors and wetland. Alternative 3 would comply with these conditions.

Preliminary analysis has determined that Alternative 3 complies with these findings and that an exception may be approved.

Significant Tree Protection Ordinance

Overview

The Alternative 3 project area is located within the Coastal Zone of Santa Cruz County; therefore, the County of Santa Cruz Significant Tree Protection Ordinance (SCCC Chapter 16.34) would apply. Mitigation would be required for any trees meeting the criteria of "significant" as determined by the ordinance if they would be impacted by the combined facilities or the Environmental Enhancement and Habitat Restoration projects.

The Alternative 3 Study Area is located beyond the County of Santa Cruz Urban and Rural Services Line, but portions of the Study Area are visible from Buena Vista Drive, a designated scenic road. No individual trees proposed to be removed for Alternative 3 are large enough (>40 inches DBH outside of the Urban and Rural Services Line) to be considered significant under the ordinance based on size criteria. All trees within a County-designated sensitive habitat (Sensitive Habitats section above) are considered significant trees.

In addition, all trees that would be removed within County rights-of-way are subject to the County of Santa Cruz Tree Removal Policy.

Alternative 3 components that could result in or contribute to this potential impact include the combined facilities (including stormwater management) and Restoration of Harkins Slough Road Drainage.

Occurrence

A survey of trees in or near the Alternative 3 project area was conducted by James P. Allen & Associates, and an Arborist Report was prepared in February 2025 (**Appendix G5**). Biologists with EcoSystems West conducted a follow-up survey of trees within the combined facilities site. Trees that would be removed are depicted on **Figure 3.4-4**.

A total of 113 trees were identified within or near the Alternative 3 project area. Surveyed trees include coast live oak trees present as solitary trees, scrub willow trees and California buckeyes within mixed willow riparian forest, and a number of non-native species that occur as ornamentals and are interspersed in naturalized or native habitat types.

Trees would be classified as significant trees if they meet any of the following criteria: (1) equal to or greater than 40 inches DBH; (2) a sprout clump of five or more stems, each greater than 20 inches DBH; or (3) a group of 10 or more trees on one parcel, each greater than 20 inches DBH. In addition, all trees within sensitive habitats are considered Significant Trees.

Impacts

Alternative 3 would result in the removal of 39 trees including 12 significant trees. **Table 6.4-12** lists all surveyed trees that would be removed, those trees situated within the temporary impact area (that may be limbed or pruned), and those trees that would be avoided. **Figure 6.4-1a–b** depicts these trees. Solitary trees are shown in **Figure 6.4-1b**, and arroyo willow are depicted as a habitat type in **Figure 6.4-1a**.

Table 6.4-12. Alternative 3 Tree Removal, including Significant Trees

Habitat Type/ Project Element	Species	Significant	Permanent	Temporary	No Impact
Mixed Willow Riparian					
Harkins Slough Road Drainage (Restoration)					
	Willow Species	X	12	9	2
Ameresco Building (No Impacts)					
	California Buckeye	X			5
Total Trees Mixed Willow Riparian			12	9	7
Non-Native Forest					
Harkins Slough Road Drainage (Restoration)					
	Coast Live Oak		1		1
	Ironbark		8		1
Landfill Closure					
	Coast Live Oak				5
	Coast Redwood			11	14
	Monterey Cypress			9	18
Total Trees Non-Native Forest			9	20	37
Solitary Trees					
Combined Facilities					
	Coast Live Oak		15		1
	Monterey Cypress		1		
Stormwater Basins and Wetlands					
	Coast Live Oak		2		
Total Solitary Trees			18		1
	Total Significant Trees proposed for Removal		12		
	Total Trees by Impact Type		39	**29**	**45**
	Total Trees in/near Project Area		113		

Of the 113 surveyed trees, 18 trees would be removed to accommodate the combined facilities (including stormwater management), and 21 trees would be removed for the Restoration of Harkins Slough Road Drainage. An additional 29 trees would be temporarily impacted (and may be limbed or pruned).

As stated, the 12 willow trees proposed for removal are considered “significant” by the County based on their location within a designated sensitive habitat, mixed willow riparian forest along the Harkins Slough Road Drainage. If feasible, willow trees would be avoided or salvaged and transplanted along the recontoured embankment on the north side of the Harkins Slough Road Drainage. Where feasible, additional riparian tree species and coast live oak trees would be planted along the Harkins Slough Road Drainage, along the combined facilities frontage of Harkins Slough Road (within the Wildlife Movement Corridor), and along the Re-established Open Drainage along North-South Roadway.

Apart from these locations, the Alternative 3 project area and immediate surroundings provide limited opportunities for on-site or near-site replacement tree planting. Closed landfill areas are not suitable for planting trees because of the necessity to protect the landfill cap from damage. The landfill cap includes

multiple layers of natural and manmade materials used to contain landfill waste, prevent infiltration of surface water, prevent the escape of landfill gas into the environment, and grow a protective vegetative layer to prevent erosion. The landfill cap is vulnerable to penetration by tree roots and other deep-rooted vegetation which would compromise the cap's containment integrity. If determined to be necessary, off-site tree replacement planting areas (such as Freedom Lake County Park) may be identified, in consultation with County Environmental Planning.

Alternative 3 construction would result in the loss of 12 significant trees within mixed willow riparian habitat, which conflicts with the County's Significant Tree Protection Ordinance. However, this habitat would be restored on site, and additional trees would be planted within or near the Alternative 3 project site, where feasible through mitigation.

Summary

In summary, construction of the Proposed Project would conflict with three local policies and ordinances: the Sensitive Habitat Protection Ordinance, the Riparian Corridor and Wetland Protection Ordinance, and the Significant Tree Protection Ordinance.

Implementing the environmental enhancement and habitat restoration features (e.g., restoration of drainages, wildlife movement corridor), the HMP for Alternative 3 (Mitigation Measure BIO-8e) and other mitigation measures further reduce ordinance conflicts to a less than significant level. Therefore, the impact would be **Less than Significant with Mitigation** (Mitigation Measures BIO-8a, BIO-8b, BIO-8c, BIO-8e, BIO-14).

Mitigation Measure BIO-8a: Implement Measures to Protect Sensitive and Native Habitats during Construction

Refer to the description of Mitigation Measure BIO-8a for Impact BIO-8 above.

Mitigation Measure BIO-8b: Implement Best Management Practices During Construction

Refer to the description of Mitigation Measure BIO-8b for Impact BIO-8 above.

Mitigation Measure BIO-8c: Stabilize and Restore Temporary Habitat Impact Areas

Refer to the description of Mitigation Measure BIO-8c for Impact BIO-8 above.

Mitigation Measure BIO-8e: Prepare and Implement a Habitat Mitigation Plan for Permanent Impacts to Sensitive Habitats, Including Aquatic Features, for Alternative 3

Refer to the description of Mitigation Measure BIO-8e for Impact BIO-8 above.

Mitigation Measure BIO-14: Implement Tree Replacement Planting and Habitat Enhancement

The County will mitigate for significant trees removed by confirming the number of trees required to be removed and implementing associated tree replacement planting at a ratio and species composition to be determined in coordination with the County Environmental Planning Division, the California Coastal Commission (CCC), the Regional Water Quality Control Board (Regional Board) and California Department of Fish and Wildlife (CDFW).

Wherever feasible, tree replacement will occur on site. Off-site locations (such as Freedom Lake County Park) will also be identified for tree replacement planting. The areas designated for replacement tree planting will be situated to improve the ecological landscape, including species richness, structural complexity, and an overall habitat mosaic that reflects plant communities present in or suitable to the surroundings.

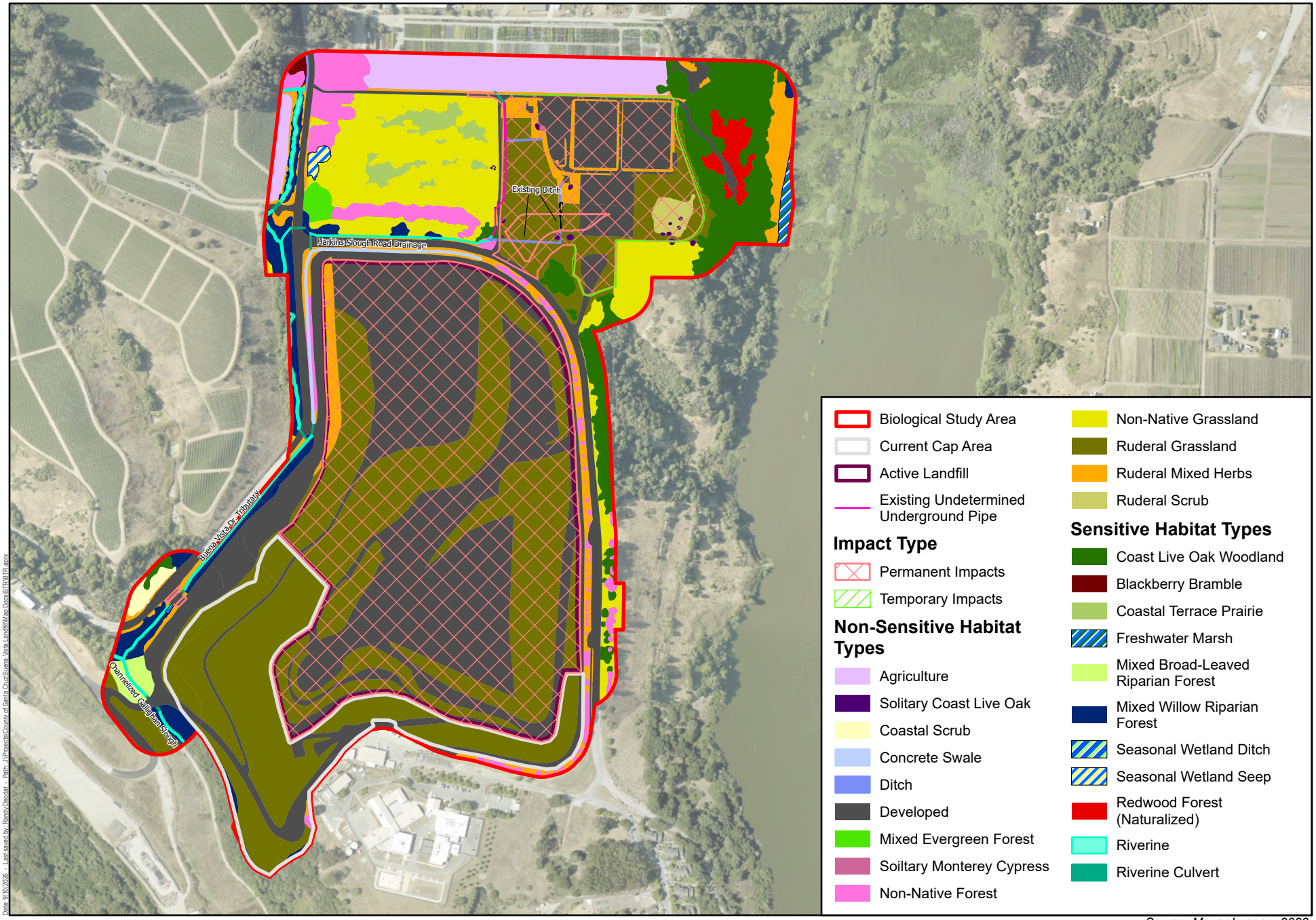
6.4.5 Cumulative Impact Discussion

The potential cumulative impacts of Alternative 3 would be notably less than those of the Proposed Project, which are presented in Chapter 4, Other CEQA-Required Discussions.

As discussed in Chapter 4, there is an existing significant cumulative impact for biological resources (sensitive habitat), and the Proposed Project would result in a considerable contribution to this cumulative impact by removing 91 trees and temporarily impacting 34 trees that are part of coast live oak woodland (affecting 0.54 acres), considered a sensitive habitat by the County and ESHA by the California Coastal Commission.

As described under Impact BIO-8 above, Alternative 3 would not permanently impact coast live oak woodland and forest habitat and would result in minimal impacts to sensitive habitats/ESHA. As described under Impact BIO-14, up to 18 coast live oak trees would be removed, but they are solitary and not part of coast live oak woodland habitat. Impacts to a seasonal irrigation ditch wetland would be 0.02 acres but would ultimately expand and improve the feature. The impact on sensitive habitats was determined less than significant with mitigation.

Therefore, the **Alternative 3 contribution would not be cumulatively considerable**, which is different than the Proposed Project which would result in a cumulatively considerable contribution.



Source: Maxar Imagery 2023.

Harris & Associates

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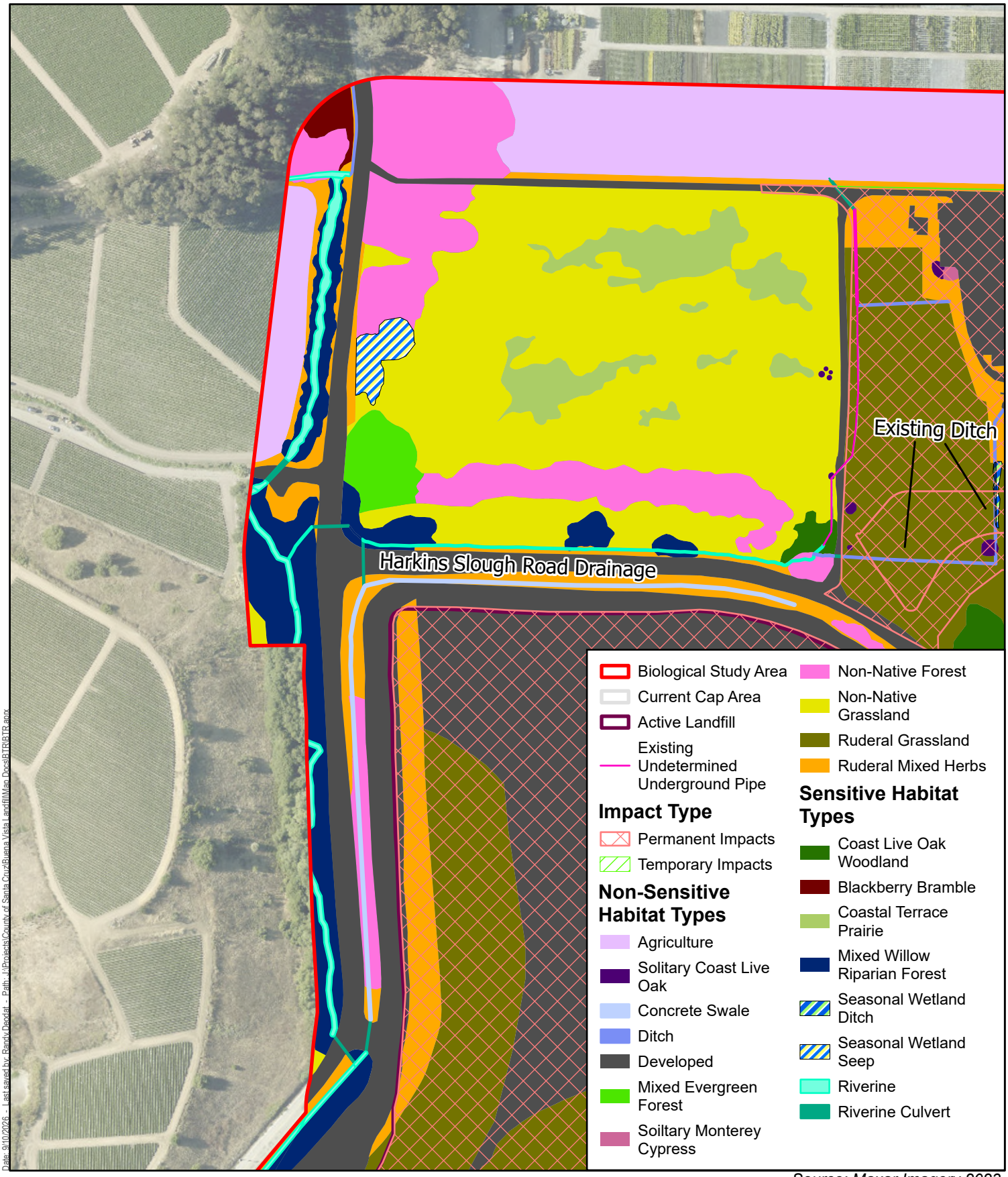
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Feet

Figure 6.4-1

Habitat Type Impacts for Alternative 3

Buena Vista Landfill Redevelopment Project



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Source: Maxar Imagery 2023.

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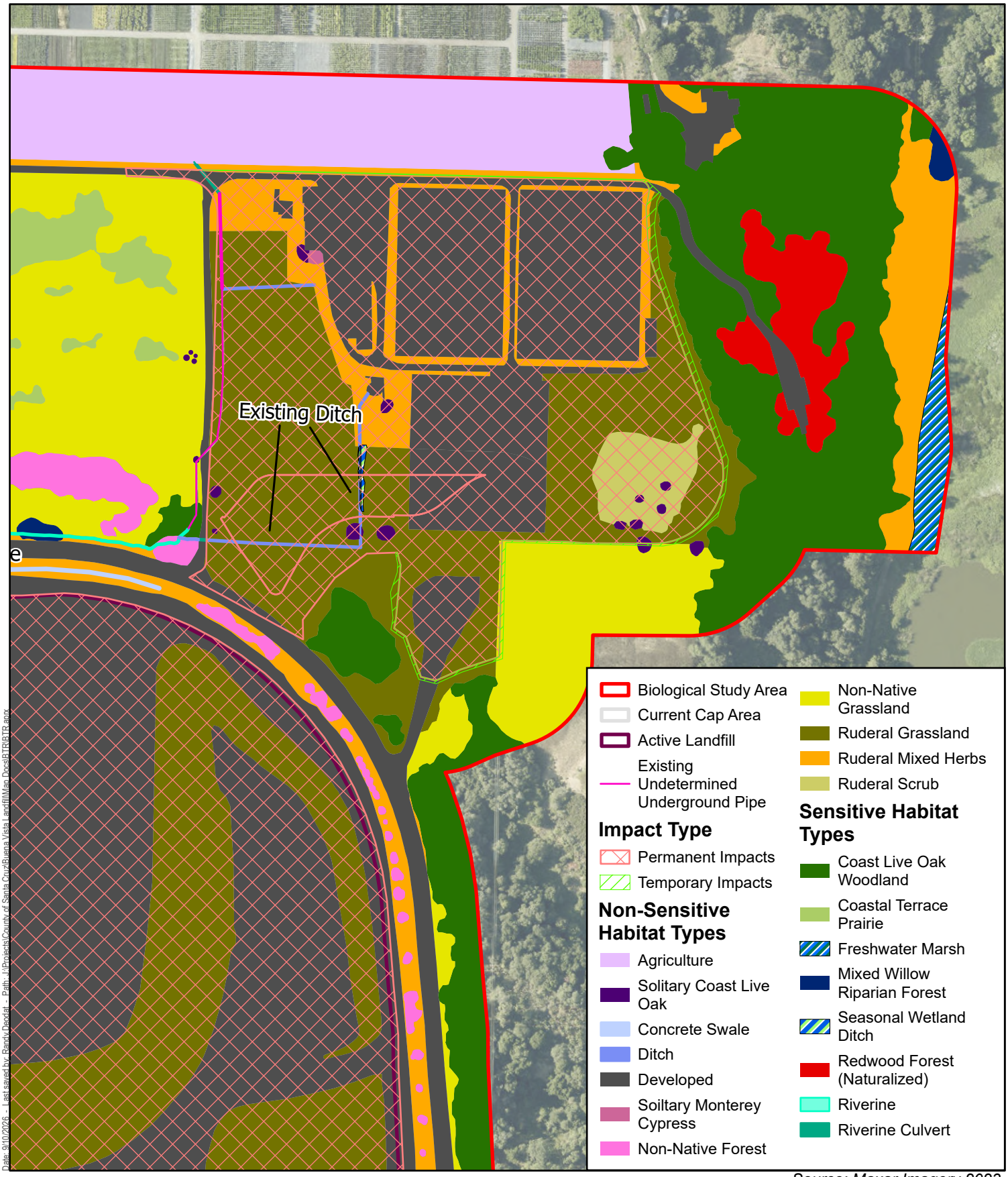
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Figure 6.4-1a

Habitat Type Impacts for Alternative 3

Buena Vista Landfill Redevelopment Project



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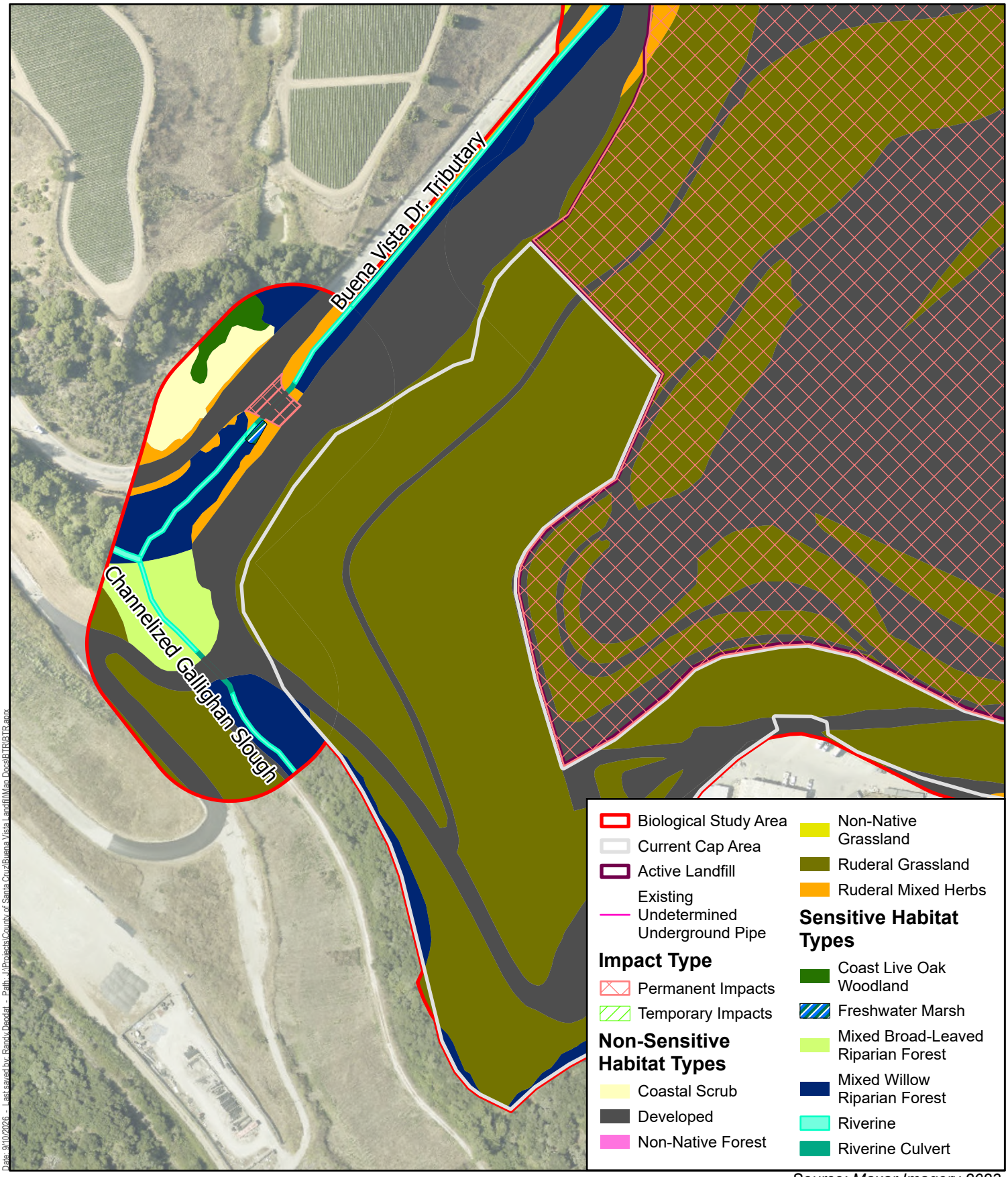
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Figure 6.4-1b

Habitat Type Impacts for Alternative 3

Buena Vista Landfill Redevelopment Project



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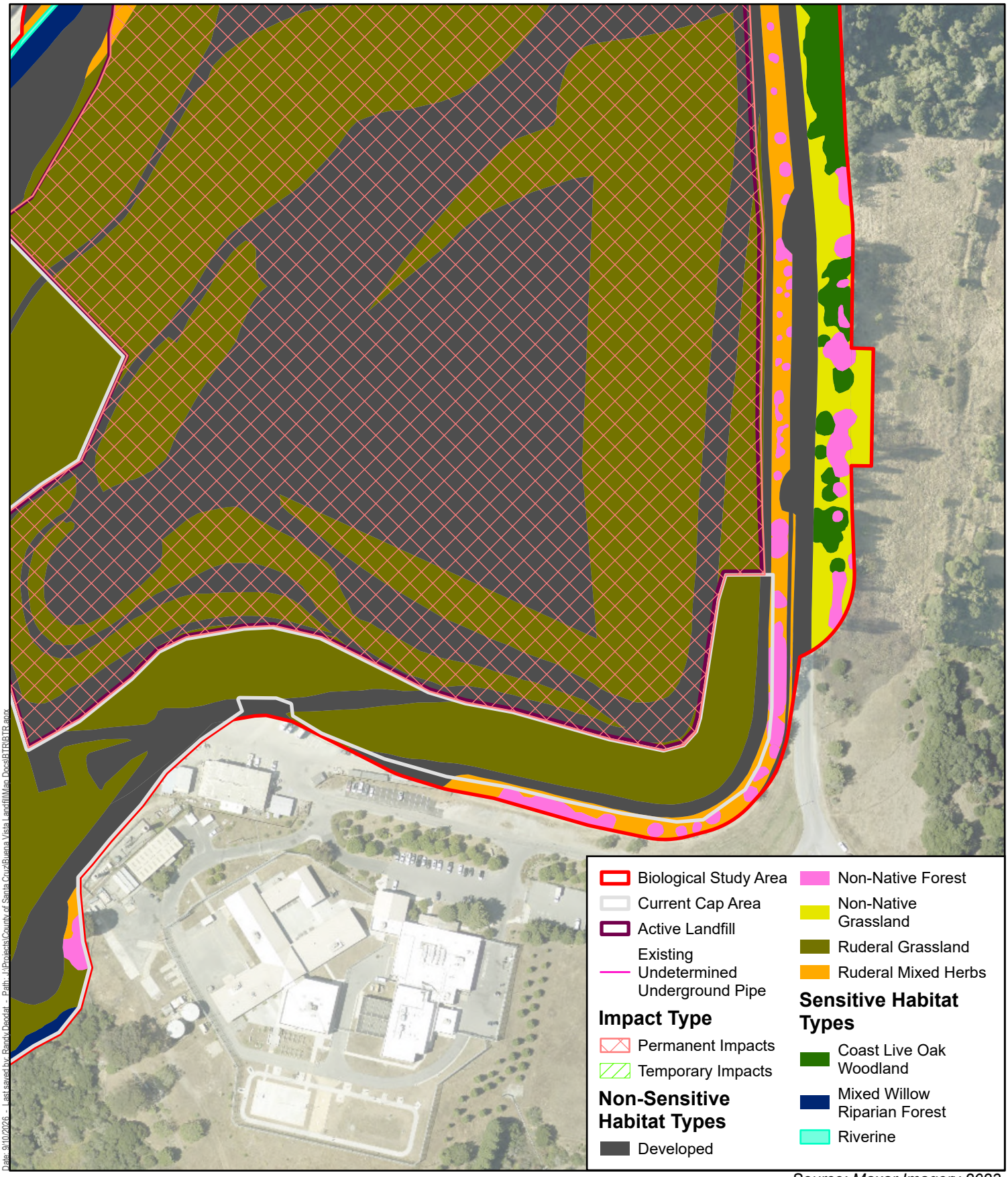
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Figure 6.4-1c

Habitat Type Impacts for Alternative 3

Buena Vista Landfill Redevelopment Project



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Figure 6.4-1d

Habitat Type Impacts for Alternative 3

Buena Vista Landfill Redevelopment Project

6.5 Cultural Resources

This section addresses potential impacts to cultural resources, including historical and archaeological resources that could result from the implementation of Alternative 3, Combined Facilities on Adjacent Property (Alternative 3), including potential impacts on unknown or undiscovered archaeological resources. The analysis of cultural resources provided in this section is based on the 2026 Cultural Resources Desktop Review for the Buena Vista Landfill Redevelopment Project, Alternative 3, Santa Cruz County, California (Albion 2026a) and the 2026 Historic Resource Evaluation for 1203 Buena Vista Drive, Santa Cruz County, California (Albion 2026b).

A summary of the potential impacts is presented in **Table 6.5-1**.

Table 6.5-1. Summary of Alternative 3 Impacts Related to Cultural Resources

Impact	Significance before Mitigation	Mitigation	Significance after Mitigation
CR-1. Alternative 3 would not have an adverse effect on historical resources.	Less than Significant	None Required.	Less than Significant
CR-2. Ground-disturbing activities during Alternative 3 construction may unearth or adversely impact subsurface archaeological resources.	Potentially Significant	CR-2a, CR-2b	Less than Significant
CR-3. Ground-disturbing activities during Alternative 3 construction may disturb human remains.	Potentially Significant	CR-2a, CR-2b	Less than Significant

Notes: The impact, significance determination, and mitigation apply to Alternative 3 as a whole, considering all components, unless otherwise noted.

6.5.1 Existing Conditions

Environmental Setting

Refer to Section 3.5.1, Existing Conditions, in Section 3.5, Cultural Resources, for a description of the environmental, precontact, and ethnographic settings. The Alternative 3 site is located in close proximity to Harkins Slough to the east.

Historic Setting

The Alternative 3 site is situated in the eastern portion of San Andres Rancho, a two-square league Mexican Land Grant that extended from Manresa Beach to Sunset Beach and Beach Road. In 1833, the Rancho was given to José Joaquín Castro, son of Joaquín Ysidro Castro, who was one of the first colonists to arrive in Monterey in 1776 with the De Anza expedition. A General Land Office (GLO) map from 1886 shows the Alternative 3 site within Township 12 south and Range 1 east in San Andres Rancho. No Spanish or Mexican period structures or features are known to have been present on or adjacent to the Alternative 3 site.

The Alternative 3 site is located west of the City of Watsonville in unincorporated Santa Cruz County. Watsonville was laid out in 1852 by Judge John Watson and D.S. Gregory and incorporated in 1868. By then, its population had reached nearly 2,000 people. Agricultural history in the region

includes the growth of the sugar beet industry at the end of the 19th century and the beginning of the fruit tree crop period, particularly apples, and lettuce through 1920. The population continued to increase during these years. The Depression, World War II, the internment of Japanese Americans, and emigration during the Dust Bowl occurred during the years 1931 – 1944. After World War II, there was a population increase again.

The Alternative 3 site is located within the San Andreas Planning Area as described in the Santa Cruz County Historic Context Statement (Statement). The Statement describes the Planning Area as suitable for grain cultivation and pastureland and originally had large sections of forest and waterways and wetlands. The area included a Southern Pacific Railroad station, which was constructed in 1876 but ended services in 1938. The area today is described as agricultural land, wildlife refuge, and a state park – the Rancho San Andres Castro Adobe Park Property.

Alternative 3 Site Setting

Archaeological Resources

Albion conducted a cultural resource inventory in the vicinity of the Alternative 3 site, including the 2-acre County-owned portion of the site within APN 052-021-33, for the Proposed Project between 2022 and 2024 to identify cultural resources in the vicinity and assess the potential for subsurface deposits. Background research consisted of a records search at the Northwest Information Center (NWIC) at Sonoma State University, Native American Heritage Commission Sacred Lands File search, review of archival maps and aerial photographs, and geoarchaeological review. In addition, outreach to identified Native American Tribes was conducted. Pedestrian field surveys were completed as part of a Phase I cultural resource inventory (Albion 2024) and subsurface investigations were completed for an Extended Phase I cultural resource assessment (Albion 2025).

Northwest Information Center Records Search

The NWIC provided the results of a records search (NWIC File No.: 25-0785) for cultural resources and cultural resource studies within a 0.25-mile radius of the Alternative 3 site on November 10, 2025. In addition to official maps and records, the following sources of information were consulted as part of the records search:

- Built Environment Resources Directory (BERD), which includes:
  National Register of Historic Places (NRHP)
  California Historical Landmarks
  Office of Historic Preservation Historic Properties Directory
- Office of Historic Preservation Archaeological Determinations of Eligibility
- California Inventory of Historical Resources
- Special Research Collections at the UCSC and UCSB Libraries (aerial images and historic maps)
- Albion's database of previously recorded sites

The records search did not identify any previously recorded archaeological or historical resources within a 0.25-mile radius of the Alternative 3 site. According to the NWIC, three cultural resource studies have been conducted within the Alternative 3 site. These studies were negative as they identified no resources within the Alternative 3 site. The studies are listed in **Table 6.5-2** below.

Table 6.5-2. Cultural Resource Studies Conducted within the Alternative 3 Site

Report No.	Citation Title	Authors	Citation Year
S-21261	Archaeological Survey Report for Bencich Farms in Watsonville, Santa Cruz County, California	K. Tremaine and J. Lopez	1998
S-24518	Preliminary Archaeological Reconnaissance for the Watsonville Municipal Airport Master Plan Improvements, Watsonville, Santa Cruz County, California	M. Doane and T. Haversat	2001
S-35147	Cultural Resources Study for the Watsonville Municipal Airport Updated Master Plan, Watsonville, Santa Cruz County, California	T. Vaughan	2008

According to the NWIC, two cultural resource studies have been conducted within a 0.25-mile radius of the Alternative 3 site (**Table 6.5-3**).

Table 6.5-3. Cultural Resource Studies Conducted within 0.25 Mile of the Alternative 3 Site

Report No.	Citation Title	Authors	Citation Year
S-055815	Historic Watsonville	K. Cardwell	1976
S-003935	An archaeological reconnaissance and literature search for certain areas which will be involved in improvements to the Watsonville Airport in Santa Cruz (letter report)	S. Dietz	1978

No previously recorded cultural resources were identified within the Alternative 3 site. However, four were identified within a 0.25-mile radius of the Alternative 3 site. These included two historic-era sites, one multicomponent site with both precolonial and historic resources, and one that is a redeposited precolonial resource. The resources are listed in **Table 6.5-4** below.

Table 6.5-4. Previously Recorded Cultural Resources within a 0.25-Mile Radius of the Alternative 3 Site

Primary Number	Trinomial No.	Description	Reference	Distance from Alternative 3 Site
P-44-000643	CA-SCR-371H	Historic debris concentration including broken iron plow, glass, metal, ceramics, and clam shells	Vaughan 2008	400 m NE
P-44-000644	No trinomial	850'-long historic fenceline	Vaughan 2008	320 m E
P-44-000773	CA-SCR-408	Precolonial and historic resource with shell, flaked stone, and two historic structures	Lopez and Tremaine 1997b	300 m S
P-44-000802	No trinomial	Redeposited precolonial midden soils with shell and a bowl mortar	Lopez and Tremaine 1997a	40 m E

Sacred Lands File Search

As discussed in Section 3.5, Cultural Resources, a Sacred Lands File search request was sent to the Native American Heritage Commission (NAHC) with a response received on August 3, 2024. The NAHC returned a positive result and provided a list of tribal contacts with knowledge of the area for input. Letters had already been sent to the tribal contacts on August 22, 2023, and follow-up emails were sent on July 23, 2024. Native American outreach was conducted in two phases. The first phase included the cultural resources inventory completed in 2024, and the second phase refers to the Extended Phase I assessment completed in 2025. No further information was received by the County during these outreach efforts regarding the Sacred Lands File positive search result.

Historical Imagery Review

Albion conducted an online search of historic maps and aerial photographs and found pertinent information from the following:

- 1860 rancho map
- 1886 GLO map
- 1931 aerial photograph
- 1948 aerial photograph
- 1964 aerial photograph

Geoarchaeological Sensitivity Review

This section considers the potential for the Alternative 3 site to contain buried precontact-period archaeological resources. For purposes of this analysis, the phrase *archaeological sensitivity* is used to characterize a given area's likelihood to contain buried archaeological resources. Through the review of geologic maps and studies, it was determined that 100% of the Alternative 3 site is mapped as Quaternary Pleistocene age deposits. The Pleistocene age spanned from 2.6 million to 11,700 years ago. The general scientific consensus regarding the timing of human occupation of North America is that humans occupied North America around 13,500 years ago, or just before the end of the Pleistocene epoch. This indicates that landforms created before this period have limited sensitivity with respect to buried archaeological resources. Given this, there is low potential for buried archaeological deposits in this portion of the Alternative 3 site.

Built Environment Historical Resources

PROPERTY SPECIFIC HISTORY

Aerial photographs were reviewed for the years 1931, 1948, and 1964. The aerial photograph from 1931 shows the Alternative 3 site possibly in use for cattle grazing with roads or driveways running north to south towards the west side of the parcel and the east side. Trees are to the east of the road on the eastern side of the parcel. The current residence located in the far eastern portion of the property cannot be seen on the 1931 aerial. This may be because it is obscured by trees or perhaps the building had not been constructed by 1931. The date of construction was not able to be definitively determined.

The existing residence is shown on the 1948 and 1964 aerial photographs, in addition to driveways or roadways on the site, perhaps other buildings in the north part of the parcel, and cultivated fields. The parcel has been used for cattle grazing and associated agricultural uses and was said by the current property owner to have been a cattle ranch. The property owner indicates that the

residence was originally a cabin constructed about 1930 and was remodeled and enlarged during 1980 and 1981 with bedrooms added.

Table 6.5-5 shows the history of the parcel's property ownership through deeds from 1940 to today and through historical research. Although public records of Santa Cruz County were searched from January 1, 1900, to February 1, 2026, no deeds prior to 1940 were located.

Table 6.5-5. History of Deeds and Ownership for 1203 Buena Vista Drive

Date Deed Executed/Sale/Inherited	Grantor	Grantee
Unknown	Unknown	James Hawkins (as seen on 1889 plat map)
7/1903 (The Pajaronian newspaper)	Estate of John F. Coope, deceased	Bertha Coope and Ethel Coope
12/1907 (court case)	Unknown	Bertha Coope
1917 (sale reported in newspaper)	Bertha Coope	Anton Hartmann
7/26/1940	Anton Hartman, Helen Hartman	Anton Hartman, Helen Hartman
11/27/1944	Helen Hartmann (who acquired title as Helen Hartman)	Frank J. Saveria
2/12/1945	Frank J. Saveria, Mary Saveria	Frane Saveria (name spelling is likely an error and should read Frank)
2/19/1946	Frane Saveria	Frank J. Saveria
3/26/1979	Frank J. Saveria, Mary H. Saveria	Yoshinobu Miyashita and Michiko Miyashita

FIELD SURVEY

On January 16, 2026, an Albion Archaeologist conducted a field reconnaissance of the Alternative 3 site and digitally photographed the built environment, under the direction of Albion's Senior Architectural Historian. The condition of structures and potential alterations were noted, and numerous digital photographs were taken of each side of the structures, and the parcel overall. The data was used to complete the evaluation of the buildings and site in Section 6.5.4 below.

6.5.2 Regulatory Setting

This section describes the applicable federal, state, and local laws, ordinances, regulations, and standards governing cultural resources.

Federal

Regulations at the federal level are described in Section 3.5.2.

State

California Environmental Quality Act

CEQA requires a lead agency to consider the impacts of a project on historical resources. A historical resource is a resource listed in or determined to be eligible for listing in the California Register of Historical Resources (CRHR) (CEQA Statutes, Section 21084.1), a resource included in a local register of historical resources (CEQA Guidelines, Section 15064.5[a][2]), or any object, building, structure,

site, area, place, record, or manuscript that a lead agency determines to be historically significant (CEQA Guidelines, Section 15064.5[a][3]).

CEQA Guidelines, Section 15064.5(a)(4), further states that "The fact that a resource is not listed in or determined to be eligible for listing in the California Register of Historical Resources, not included in a local register of historical resources (pursuant to Section 5020.1(k) of the Public Resources Code), or identified in an historical resources survey (meeting the criteria in Section 5024.1(g) of the Public Resources Code) does not preclude a lead agency from determining that the resource may be an historical resource as defined in Public Resources Code sections 5020.1(j) or 5024.1."

State CEQA Guidelines, Section 15064.5(b), prescribes that project effects that would "cause a substantial adverse change in the significance of an historical resource" are significant effects on the environment. A substantial adverse change in the significance of a historical resource means demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of a historical resource would be materially impaired (CEQA Guidelines, Section 15064.5[b][1]).

CEQA Guidelines, Section 15064.5, further states that "the significance of an historical resource is materially impaired when a project . . . demolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its inclusion in the California Register . . . local register of historic resources . . . or its identification in an historic resources survey." As such, the Project would have a significant impact on identified historical resources if it would materially impair physical integrity of the historical resource such that it could no longer be listed in the CRHR or a local landmark program.

California Register of Historical Resources

The California Register of Historical Resources (CRHR) was established in California Public Resources Code (PRC), Section 5024.1, which states that it is "an authoritative guide in California to be used by state and local agencies, private groups, and citizens to identify the state's historical resources and to indicate what properties are to be protected, to the extent prudent and feasible, from substantial adverse change." A resource may be listed as a historical resource in the CRHR if it meets the criteria for listing (PRC Section 5024.1, Title 14 CCR, Section 4852):

(1) Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage

(2) Is associated with the lives of persons important in our past

(3) Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values

(4) Has yielded, or may be likely to yield, information important in prehistory or history

Unique Archaeological Resources

CEQA Statutes, Section 21083.2(g), defines a unique archaeological resource as an artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it does one or more of the following:

- Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information
- Has a special and particular quality such as being the oldest of its type or the best available example of its type
- Is directly associated with a scientifically recognized important prehistoric or historic event or person

In addition, if a project can be demonstrated to cause damage to a unique archaeological resource, the lead agency may require reasonable efforts to permit any or all of these resources to be preserved in place or left in an undisturbed state. To the extent that resources cannot be left undisturbed, mitigation measures are required (CEQA Statutes, Section 21083.2[a], [b], and [c]).

Health and Safety Code, Section 7050.5: Human Remains

Section 7050.5(b) of the California Health and Safety Code states that "In the event of discovery or recognition of any human remains in any location other than a dedicated cemetery there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains until the coroner of the county in which the remains were discovered has determined" whether they are subject to the coroner's authority. Further, the section states that "the coroner shall make his or her determination within two working days from the time the person responsible for the excavation, or his or her authorized representative, notifies the coroner of the discovery or recognition of the human remains." Additionally, the Code states that "If the coroner determines that the remains are not subject to his or her authority and if the coroner recognizes the human remains to those of a Native American, or has reason to believe that they are those of a Native American, he or she shall contact, by telephone within 24 hours, the Native American Heritage Commission."

Coastal Act

The Project site is located in the Coastal Zone and, therefore, subject to the California Coastal Act. According to California Public Resources Code, Section 30244, "where development would adversely impact archaeological or paleontological resources as identified by the State Historic Preservation Officer, reasonable mitigation measures shall be required."

Local

Santa Cruz County General Plan and Local Coastal Plan

The Agriculture, Natural Resources + Conservation Element of the County General Plan includes objectives and policies to protect tribal cultural resources. Key policies and implementation strategies from the County General Plan pertaining to cultural resources are described in Section 3.5.2.

Santa Cruz County Municipal Code

Title 16, Environmental and Resource Protection, of the County Code outlines criteria for cultural studies (Chapter 16.40) and historic preservation (Chapter 16.42), which are described in Section 3.5.2.

6.5.3 Methodology and Significance Thresholds

Methodology

The following section analyzes potential impacts on built environment and archaeological resources, as well as human remains, that may be caused by Alternative 3. The analysis of cultural resources is

based on the cultural resource inventory that was conducted for the Proposed Project vicinity between 2022 and 2024 that included archival research and a background records search at the NWIC at Sonoma State University, NAHC Sacred Lands File search, and outreach to Native American Tribes identified by the NAHC (Albion 2024).

Based on these results, Albion completed an Extended Phase I study of three areas, and it included a review of the ethnographic setting of the Project area and a consideration of the results of AB 52 consultation between the County and local Native Americans (Albion 2025).

In addition, the analysis of cultural and historical resources provided in this section is based on the following reports prepared by Albion: 2026 Cultural Resources Desktop Review for the Buena Vista Landfill Redevelopment Project, Alternative 3, Santa Cruz County, California (Albion 2026a); and the 2026 Historic Resource Evaluation for 1203 Buena Vista Drive, Santa Cruz County, California (Albion 2026b).

Significance Thresholds

As stated in the Chapter 6 introduction, the significance thresholds used in this analysis are based on Appendix G of the CEQA Guidelines, which provides a sample Initial Study checklist that includes a number of factual inquiries related to the subject of cultural resources and the other environmental topics. Thus, the letters and thresholds presented below correspond with the questions in the Appendix G Initial Study checklist. They also reflect the operative language of pertinent provisions of CEQA and the CEQA Guidelines (i.e., California Public Resources Code, Sections 21083.2 and 21084.1, and CEQA Guidelines, Section 15064.5).

For the purposes of this EIR and consistent with the analysis for the Proposed Project, a significant impact would occur if implementation of the Project would result in any of the following conditions:

A. Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5.
B. Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5.
C. Disturb any human remains, including those interred outside of formal cemeteries.

Direct impacts can be assessed by identifying the types and locations of proposed development, determining the exact locations of cultural resources within a project vicinity, assessing the significance of the resources that may be affected, and determining the appropriate mitigation. Removal, demolition, or alteration of historical resources can permanently impact the historic significance of an archaeological site, structure, or historic district.

6.5.4 Alternative 3 Impact Analysis

For each impact, the discussion is separated into construction, operation, and project components as needed to describe the potential impact. The overall conclusion or significance determination is presented at the end of the discussion, as well as in parentheses at the end of the numbered impact statement.

As described in Section 5.2.3, Alternative 3. Combined Facilities on Adjacent Property (in Chapter 5, Project Alternatives), Alternative 3 includes the following components:

- Transfer Station
- Organics Diversion Facility
- Recycling Center

- Scale House
- General Plan/Local Coastal Program Land Use Designation and Zoning Map Amendments

Additionally, Landfill Closure and Revegetation, including the Environmental Enhancement and Restoration Features, would be implemented as described in Chapter 2, Section 2.4, Project Components; and the potential impacts of those features are included in the analysis in Section 3.5.4. The additional enhancement and restoration features included as part of Alternative 3 (described in Section 5.2.3 under *Additional Design Information*) are considered in the evaluation below.

Threshold A:	Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5.

IMPACT CR-1 ALTERNATIVE 3 WOULD NOT HAVE AN ADVERSE EFFECT ON HISTORICAL RESOURCES. (LESS THAN SIGNIFICANT IMPACT)

Alternative 3 would combine all new facilities on approximately 11 acres on the eastern portion of the parcel north of and adjacent to the current landfill site for waste management and transport activities. These activities would include using the site for Transfer Stations and other project components such as organics diversion and recycling. The existing vacant greenhouses, packing sheds, boiler house, and other miscellaneous structures would be demolished.

These buildings were evaluated for historical significance in the 2026 Historic Resource Evaluation for 1203 Buena Vista Drive, Santa Cruz County, California (Albion 2026b). None were found to meet the criteria for eligibility for the CRHR, as the buildings were not constructed in important artistic or architectural styles, do not meet any of the criteria for local listing or associated with an important person, event, or contain the potential to provide information important to history.

In summary, Alternative 3 (Combined Facilities on Adjacent Property), including the associated General Plan/LCP land use designation and zoning map amendments and environmental enhancement/restoration features, would not result in a substantial adverse change in the significance of a built environment historical resource. Therefore, Alternative 3 would not have an adverse effect on historical resources, and the impact would be **Less than Significant.** No mitigation is required.

Threshold B:	Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5.

IMPACT CR-2 GROUND-DISTURBING ACTIVITIES DURING ALTERNATIVE 3 CONSTRUCTION MAY UNEARTH OR ADVERSELY IMPACT SUBSURFACE ARCHAEOLOGICAL RESOURCES. (LESS THAN SIGNIFICANT IMPACT WITH MITIGATION)

Based on research conducted and documented in the 2026 Cultural Resources Desktop Review for the Buena Vista Landfill Redevelopment Project, Alternative 3 (Albion 2026a) to review the potential impacts of Alternative 3, it was determined the Alternative 3 site is not sensitive for historic-era archaeological resources. In addition, the study found that the Alternative 3 site appears to have low sensitivity for buried precolonial archaeological sites given that the geology has been mapped as Pleistocene in age. With regard to surface precolonial resources, portions of the Alternative 3 site have been heavily disturbed due to historic and recent agricultural use, potentially affecting the sensitivity of these areas. As a result, at least 50% of the Alternative 3 site, specifically the portion being used for structures and agriculture, is likely too disturbed to be sensitive for surface

precolonial resources. Given this and that no precolonial resources were identified by NWIC or during the previous three studies, there is low potential for precolonial surface resources to be identified within the Alternative 3 site.

Although there is low potential that cultural resources will be identified within the Alternative 3 site, Tribal input during AB 52 consultation noted that the Buena Vista Landfill and surrounding areas are highly sensitive for cultural resources. Moreover, it was requested that Tribal and archaeological monitoring take place in areas considered sensitive. Therefore, Albion recommends monitoring by a qualified archaeologist and Tribal monitor during initial ground-disturbing activities.

Additionally, as part of the 2024 tribal outreach and 2025 AB 52 consultation for the Proposed Project, several tribes requested that subsurface work in three specific areas be monitored by a qualified archaeologist and tribal consultant. Given this and the proximity of important cultural resources, the Extended Phase I Study for the Proposed Project (Albion 2025) recommended that all initial ground-disturbing activities associated with Areas 1, 2, and 3 be monitored by a qualified archaeologist and a representative from the local Native American community (refer to Section 3.5). Two of the three areas would be subject to ground-disturbing activities for Alternative 3. Area 1 would be disturbed for culvert modification at the main landfill entrance, which is an environmental enhancement feature for both the Proposed Project and Alternative 3. Area 2 would be disturbed for construction of the driveways and drainage infrastructure on the north side of Harkins Slough Road for Alternative 3 (and disturbed for Transfer Station A for the Proposed Project).

If previously unknown archaeological resources are encountered during ground disturbance, a substantial adverse change in the significance of the resource could occur from its demolition, destruction, relocation, or alteration; and thus the significance of the resource could be materially impaired (CEQA Guidelines, Section 15064.5[b][1]). This potentially significant impact would be reduced to a less than significant level by complying with SCCC, Section 16.40.040, which identifies the necessary actions when Native American cultural sites or human remains are discovered during ground-disturbing activities, and by implementing Mitigation Measure CR-2a (Stop Work if Inadvertent Encounter of Undiscovered Archaeological Resources during Ground-Disturbing Activities) and Mitigation Measure CR-2b (Archaeologist and Native American Monitoring During Initial Ground-Disturbing Activities in Specific Areas).

In summary, Alternative 3 (Combined Facilities on Adjacent Property), including the associated General Plan/LCP land use designation and zoning map amendments and environmental enhancement/restoration features, would not result in a substantial adverse change in the significance of a previously unknown archaeological resource with implementation of the mitigation measures to stop work if resources are discovered during construction (Mitigation Measure CR-2a) and to monitor specific areas (Mitigation Measure CR-2b). Therefore, the impact to cultural resources from ground-disturbing activities during construction would be Less than Significant with Mitigation (Mitigation Measure CR-1 and CR-2).

Mitigation Measure CR-2a: Stop Work if Inadvertent Encounter of Undiscovered Archaeological Resources during Ground-Disturbing Activities

In the event that archaeological resources are unexpectedly encountered during ground-disturbing construction activities, the construction contractor shall halt work within 200 feet of the find, and the County of Santa Cruz shall contact an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for Archeology to immediately evaluate the find, if an archaeological monitor is not already present. If the find is determined by the qualified

archaeologist to be prehistoric and a Native American monitor is not already present, then the County shall contact a Native American representative to participate in the evaluation of the find.

If necessary, archaeological testing for California Register of Historical Resources eligibility shall be completed by the qualified archaeologist. If the discovery proves to be eligible for the California Register of Historical Resources, and if impacts to the resource cannot be avoided via project redesign, a qualified archaeologist shall prepare a data recovery plan tailored to the physical nature and characteristics of the deposit, per the requirements of California Public Resources Code, Section 15126.4(b)(3)(C). The data recovery plan shall identify data recovery excavation methods, measurable objectives, and data thresholds to reduce any significant impacts to cultural resources.

Pursuant to the data recovery plan, the qualified archaeologist and Native American representative, as appropriate, shall recover and document the scientifically consequential information that justifies the resource's significance. The County, in coordination with the City, shall review and approve the treatment plan and archaeological testing as appropriate, and the resulting documentation shall be submitted to the regional repository of the California Historical Resources Information System, per California Public Resources Code, Section 15126.4(b)(3)(C).

Mitigation Measure CR-2b: Archaeologist and Native American Monitoring during Initial Ground-Disturbing Activities in Specific Areas

All initial ground disturbing activities in the following specific areas shall be monitored by a qualified archaeologist and a representative from the local Native American community.

Main Landfill Entrance. The culvert modification with small wildlife crossing, located below the driveway at the Main Entrance, will be implemented as part of Alternative 3.

Northeast Corner of Landfill Property. The undeveloped northeast corner of the landfill property, between Harkins Slough Road and the northern property line will be developed as part of Alternative 3 (for driveways and drainage infrastructure). Additionally, the Harkins Slough Road Drainage will be restored as part of Alternative 3.

The County of Santa Cruz shall retain a qualified archaeologist and a Native American monitor from a locally affiliated Tribe to monitor initial ground-disturbing activities. Archaeological monitoring shall be performed under the direction of an archaeologist meeting or exceeding the Secretary of the Interior's Professional Qualifications Standards for Archaeology. Either monitors shall have the authority to halt and redirect work should any archaeological resources be identified during monitoring. If archaeological resources are encountered during ground-disturbing activities, work in the immediate area shall halt, and Mitigation Measure CR-2a, Stop Work if Inadvertent Encounter of Undiscovered Archaeological Resources during Ground-Disturbing Activities, shall be implemented.

Archaeological monitoring may be reduced or halted at the discretion of the monitor, in consultation with the lead agency, as warranted by conditions such as encountering bedrock, sediments that are planned to be excavated are composed of fill, or negative findings during the first 50% of ground disturbance. If monitoring is reduced to spot-checking, spot-checking shall occur when ground disturbance moves to a new location within the Project Area and when ground disturbance will extend to depths not previously reached (unless those depths are within bedrock). Furthermore, monitoring may be terminated in the event that it is determined that the soils within the Project Area do not have the potential to contain cultural resources. The monitor shall submit a report within 30 days of completion of all ground-disturbing activities to the County to document compliance.

Threshold C:	Disturb any human remains, including those interred outside of formal cemeteries.

IMPACT CR-3 GROUND-DISTURBING ACTIVITIES DURING ALTERNATIVE 3 CONSTRUCTION MAY DISTURB HUMAN REMAINS. (LESS THAN SIGNIFICANT IMPACT WITH MITIGATION)

Alternative 3 construction requires ground disturbance. Based on the Phase I cultural resource inventory (Albion 2024) and Extended Phase I archaeological assessment (Albion 2025), no known human remains are located on the site. However, it is possible that excavation activities could inadvertently disturb previously unidentified human remains.

In the event that human remains are unexpectedly encountered during ground disturbance, the County and its construction contractor are required to comply with existing state and local regulations that protect the remains from disturbance, vandalism, or destruction and that appropriate authorities and parties, including Native American representatives, are notified.

The following procedures of conduct after the discovery of human remains are required by the California Health and Safety Code, Section 7050.5; PRC Section 5097.98; and CEQA Guidelines, Section 15064.5(e):

- If human remains are encountered at the site, all work within the immediate vicinity of the discovery shall cease, and the County Coroner shall be notified immediately.
- The coroner shall determine whether the remains are Native American. If the coroner determines the remains are Native American, the coroner shall notify the NAHC within 24 hours, which will, in turn, notify the person the NAHC identifies as the most likely descendant (MLD) in connection with any human remains. The MLD may make recommendations to the landowner or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains, and any associated grave goods as provided in PRC Section 5097.98.
- If the NAHC is unable to identify an MLD or the MLD does not make a recommendation within 24 hours after being notified by the commission, or the owner does not accept the recommendation of the MLD, and the mediation by the NAHC does not provide measures acceptable to the landowner, in accordance with PRC 5097.98(e), the owner shall, with appropriate dignity, reinter the remains in an area of the property secure from further disturbance (CEQA Guidelines, Section 15064.5[e][2]).

Consistent with state law, SCCC Section 16.40.040 requires the following:

- Cease and desist from all further excavations and disturbances within 200 feet of the discovery.
- Arrange for staking completely around the area of discovery by visible stakes no more than 10 feet apart, forming a circle having a radius of no less than 100 feet from the point of discovery; provided, however, that such staking need not take place on adjoining property unless the owner of the adjoining property authorizes such staking.
- Notify the Sheriff-Coroner of the discovery if human remains have been discovered. Notify the Planning Director if the discovery contains no human remains.
- Grant all duly authorized representatives of the Coroner and the Planning Director permission to enter onto the property and to take all actions consistent with this chapter.

The impact of potential disturbance to human remains would be reduced to a less than significant level by complying with the existing state and local regulations and requirements to protect the remains and notify the appropriate authorities, and by implementing Mitigation Measure CR-2a

(Stop Work if Inadvertent Encounter of Undiscovered Archaeological Resources during Ground-Disturbing Activities) and Mitigation Measure CR-2b (Archaeologist and Native American Monitoring During Initial Ground-Disturbing Activities in Specific Areas). **I**n summary, the potential impact to human remains from Alternative 3 (Combined Facilities on Adjacent Property), including the associated General Plan/LCP land use designation and zoning map amendments and environmental enhancement/restoration features, would be **Less than Significant with Mitigation** (Mitigation Measures CR-2a and CR-2b).

Mitigation Measure CR-2a: Stop Work if Inadvertent Encounter of Undiscovered Archaeological Resources during Ground-Disturbing Activities

Refer to the complete description under Impact CR-2 above.

Mitigation Measure CR-2b: Archaeologist and Native American Monitoring during Initial Ground-Disturbing Activities in Specific Areas

Refer to the complete description under Impact CR-2 above.

6.5.5 Cumulative Impact Discussion

The potential cumulative impacts of Alternative 3 would be similar to those of the Proposed Project, which are presented in Chapter 4, Other CEQA-Required Discussions.

As discussed in Chapter 4, the County's Sustainability Update EIR concluded that cumulative development projects located within Santa Cruz County could result in incremental losses of historical resources on a project-by-project basis, which could combine to constitute a significant cumulative effect. While the potential impacts on historical resources would be substantially reduced through compliance with federal, state, and local regulations and incorporation of mitigation measures, adverse effects on the significance of historical resources could occur as a result of future development facilitated by the Sustainability Update. The effects would be cumulatively considerable and, therefore, could result in a significant cumulative impact. However, as stated under Significant Impacts Identified in the Sustainability EIR, the County determined this was not a significant and unavoidable impact. Similar to the Proposed Project, Alternative 3 would not contribute to the cumulative loss of historical resources.

Similar to the Proposed Project, Alternative 3 could result in inadvertent discoveries of currently unknown archaeological resources or human remains during construction; however, Mitigation Measures CR-2a and CR-2b would reduce impacts to a less than significant level. Construction activities associated with cumulative projects identified in Table 4-1 may result in cumulative impacts to archaeological resources or human remains. However, similar to the Proposed Project, Alternative 3 would not contribute to the cumulative loss of archaeological resources due to the protective requirements in place.

Impact CR-C: Cumulative development would not result in a significant cumulative impact. Therefore, the **Alternative 3 contribution to the existing cumulative impact would not be cumulatively considerable,** which is the same as the Proposed Project.

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6.6 Energy

This section describes existing energy use, outlines the regulatory framework applicable to energy, and evaluates impacts related to energy as a result of Alternative 3, Combined Facilities on Adjacent Property (Alternative 3) construction and operation. **Table 6.3-1** presents a summary of potential impacts related to energy.

Table 6.3-1. Summary of Alternative 3 Impacts Related to Energy

Impact	Significance before Mitigation	Mitigation	Significance after Mitigation
EN-1. Alternative 3 would not result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during Alternative 3 construction or operation.	Less than Significant	None Required	Less than Significant
EN-2. Alternative 3 would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency.	Less than Significant	None Required	Less than Significant

Note: The impact, significance determination, and mitigation apply to Alternative 3 as a whole, considering all components, unless otherwise noted.

6.6.1 Existing Conditions

As described in Section 3.6.1, California is the second-largest total energy consumer among the states. However, as a result of energy efficiency efforts, the state's per capita energy consumption is the fourth lowest in the nation; and in 2023, California was the fourth-largest energy producer in the nation of renewable resources, including hydroelectric power and small-scale solar power. Santa Cruz County is in the service area for Central Coast Community Energy (3CE), which currently provides at least 35 percent of electricity from renewable resources to customers with a goal of providing 100 percent renewable energy to customers by 2030. Refer to Section 3.6.1 for additional information.

Buena Vista Landfill is an existing consumer of electricity, natural gas, and petroleum products. Electricity and natural gas are used to power existing waste processing equipment and facilities. Diesel and gasoline are consumed by off-road equipment, waste handling trucks, and personal vehicles. Additionally, landfill gas may be collected and used for electricity generation at the former Ameresco facility located below the Old Landfill, similar to the previous operation at the Ameresco facility, which ended in 2026, if a new energy reuse partnership is established.

6.6.2 Regulatory Setting

Federal

The following federal regulations are described in Section 3.6.2.

- Energy Policy and Conservation Act (Public Law 94-163)
- Energy Independence and Security Act (Public Law 110-140)

State

The following state regulations are described in Section 3.6.2.

- Assembly Bill 1007: State Alternative Fuels Plan
- California Building Standards Code (Title 24, Part 6)
- Renewables Portfolio Standard
- Off-Road Diesel-Fueled Fleets Regulation

Local

Santa Cruz County Climate Action and Adaptation Plan

The County Climate Action and Adaptation Plan (CAAP), approved in 2022, strives to meet the SB 32 target of reducing greenhouse gas emissions by 40 percent below 1990 levels before 2030, while simultaneously establishing a policy framework to achieve the longer-term target of net-negative greenhouse gas emissions by 2045 (AB 1279). The CAAP includes 29 strategies in seven sectors to achieve these goals, including reducing energy use. Strategy 14 directly relates to Buena Vista Landfill and seeks to reduce the landfill's carbon footprint by eliminating fossil fuel use in new buildings. Other objectives to support the strategy include evaluating new energy-efficient equipment, incorporating electric vehicle and other alternative-energy solutions into landfill plans, and exploring waste-to-energy technologies (Santa Cruz County 2022).

Santa Cruz County General Plan/Local Coastal Program

The County General Plan/Local Coastal Program (LCP) includes objectives and policies that would reduce community energy use by encouraging reduced use of resources, including fuel and energy. For example, Built Environment Element Objective BE-4.2 is to encourage building and site designs that conserve energy. It is supported by Policy BE-4.2.7, Energy Conservation, which encourages development to enable passive solar heating and lighting through building location, orientation, and massing wherever practicable. Further energy conservation is encouraged through energy-efficient building envelopes, lighting, heating, cooling, and ventilation systems, and renewable energy design components (Santa Cruz County 2024).

6.6.3 Methodology and Significance Thresholds

Methodology

The analysis of energy impacts follows the guidance and methodologies recommended in Appendix G of the California Environmental Quality Act (CEQA) Guidelines.

Significance Thresholds

As stated in the Chapter 6 introduction, the significance thresholds used in this analysis are based on Appendix G of the CEQA Guidelines, which provides a sample Initial Study checklist that includes a number of factual inquiries related to the subject of energy and the other environmental topics.

For the purposes of this EIR and consistent with the analysis for the Proposed Project, a significant impact would occur if implementation of Alternative 3 would result in any of the following conditions:

A. Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during Project construction or operation.

B. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

6.6.4 Alternative 3 Impact Analysis

For each impact, the discussion is separated into construction, operation, and facility components as needed to describe the potential impact. The overall conclusion or significance determination is presented at the end of the discussion, as well as in parentheses at the end of the numbered impact statement.

As described in Section 5.2.3, Alternative 3, Combined Facilities on Adjacent Property (in Chapter 5, Project Alternatives), Alternative 3 includes the following components:

- Transfer Station
- Organics Diversion Facility
- Recycling Center
- Scale House
- General Plan/Local Coastal Program Land Use Designation and Zoning Map Amendments

Additionally, Landfill Closure and Revegetation, including the Environmental Enhancement and Restoration Features, would be implemented as described in Chapter 2, Section 2.4, Project Components; and potential impacts are described in Section 3.6.4. The additional enhancement and restoration features included as part of Alternative 3 (described in Section 5.2.3 under *Additional Design Information*) are considered in the evaluation below.

Threshold A:	Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during Project construction or operation.

Impact EN-1 ALTERNATIVE 3 WOULD NOT RESULT IN POTENTIALLY SIGNIFICANT ENVIRONMENTAL IMPACT DUE TO WASTEFUL, INEFFICIENT, OR UNNECESSARY CONSUMPTION OF ENERGY RESOURCES, DURING PROJECT CONSTRUCTION OR OPERATION. (LESS THAN SIGNIFICANT IMPACT)

Alternative 3 construction would involve energy usage. Energy use during construction would be primarily in the form of fuel consumption to operate heavy equipment, light-duty vehicles, machinery, generators for power tools, and truck trips for the import and export of material. Temporary grid power may also be provided to construction trailers or electric construction equipment, depending on the location and construction activity. All the combined facilities components would require typical construction practices and would not include any components that would result in wasteful or inefficient use of energy during construction. Alternative 3 could not be implemented without the use of standard construction equipment and vehicle use; therefore, energy use would not be unnecessary. Impacts from Alternative 3 construction, including all components, would be Less than Significant.

Alternative 3 operation would use energy as described below for each of the primary components.

Transfer Station

Following construction, operation of the transfer station would require electricity use for the operation of mechanical equipment, as well as the office. No new natural gas use would occur. Additional fuel use would be required for operation of the off-road equipment and transfer trailers. As discussed in Section 6.17, Transportation, approximately 24 additional trucks would be required per day to transfer waste from Buena Vista Landfill to ReGen Monterey.

Building design would comply with applicable Title 24 building energy efficiency requirements, and the off-road equipment and truck fleet would be subject to increasingly stringent California Air Resources Board emissions standards. The emissions standards generally result in more fuel-efficient equipment or use of alternative fuels such that use of petroleum fuels is also reduced. Additionally, the transfer station would provide a local option for waste disposal, whereby waste can be consolidated into larger transfer vehicles to reduce the number of trips to a regional facility[1] that would otherwise occur with individual vehicles. Therefore, energy use from the transfer station would not be wasteful, and energy use would be efficient and necessary to serve waste disposal needs. The impact would be **Less than Significant**.

Organics Diversion Facility

Similar to the transfer station, operation of the ODF would require the use of energy for operation of mechanical and off-road equipment. Equipment would be required to comply with statewide energy and fuel efficiency requirements. Additionally, this component would replace the existing ODF operation at the landfill. Replacement of existing facilities with upgraded materials and equipment would reduce the net increase in energy required for handling increased organics disposal. Therefore, energy use would not be wasteful or inefficient. As described in Section 2.3, the purpose of the ODF is to respond to state requirements for organics diversion. As such, energy use for ODF operation would not be unnecessary. The impact would be **Less than Significant.**

Recycling Center

Similar to the ODF, the recycling center component would divert material and improve landfill capacity to handle the increased volume of recyclable materials, consistent with statewide waste diversion requirements. Additionally, this component would replace the existing recycling center. Replacement of existing facilities with upgraded materials and equipment would reduce the net increase in energy required for handling recycling materials. As such, energy use at the recycling center would be necessary to support ongoing solid waste diversion and would not be wasteful or inefficient. The impact would be Less than Significant**.**

In summary, construction and operation of Alternative 3, including the primary components and optional improvements described above, as well as the associated General Plan/LCP land use designation and zoning map amendments, would not result in potentially significant environmental impacts due to wasteful, inefficient, or unnecessary consumption of energy resources. The impact would be **Less than Significant**. No mitigation is required.

[1] As stated in Section 2.4, Project Components, the ReGen Monterey Landfill is a regional facility located 19 miles south in the City of Marina and is used for planning and analysis purposes based on capacity and relative proximity.

Threshold B:	Conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

Impact EN-2 ALTERNATIVE 3 WOULD NOT CONFLICT WITH OR OBSTRUCT A STATE OR LOCAL PLAN FOR RENEWABLE ENERGY OR ENERGY EFFICIENCY. (LESS THAN SIGNIFICANT IMPACT)

The County of Santa Cruz CAAP is the applicable local plan for renewable energy and energy efficiency. CAAP Strategy 14 directly relates to energy use at Buena Vista Landfill. This strategy seeks to reduce the landfill's carbon footprint, including eliminating fossil fuel use in new buildings, evaluating new energy-efficient equipment, incorporating electric vehicles and other alternative-energy solutions into landfill plans, and exploring waste-to-energy technologies. As discussed in Section 6.8, Greenhouse Gas Emissions, consistent with this strategy, no new natural gas use would occur as a result of Alternative 3 implementation.

Alternative 3 does not include any components that would interfere with a transition to an alternatively fueled vehicle and equipment fleet. Additionally, equipment used at the combined facilities (transfer station, ODF, recycling center, and supporting facilities) would meet current energy efficiency requirements and improve energy efficiency compared to existing equipment. Alternative 3 would not impact the potential future use of landfill gas for energy generation. Additionally, all new buildings would comply with, at a minimum, applicable California Building Energy Efficiency Standards (24 CCR, Part 6) and California Air Resources Board vehicle and fleet emissions standards. As such, Alternative 3 would implement CAAP strategies related to landfill energy use.

Therefore, Alternative 3, including the primary components and optional improvements described above, as well as the associated General Plan/LCP land use designation and zoning map amendments, would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. The impact would be **Less than Significant.** No mitigation is required.

6.6.5 Cumulative Impact Discussion

The potential cumulative impacts of Alternative 3 would be similar to those of the Proposed Project, which are presented in Chapter 4, Other CEQA-Required Discussions.

As discussed in Chapter 4, the Sustainability Update EIR concluded that a significant cumulative impact would not occur even though cumulative projects would result in a cumulative increase in energy use. The cumulative demand would be minimal relative to statewide energy use, cumulative projects would be required to comply with energy efficiency building standards, and statewide regulations related to fuel efficiency would reduce fuel demand.

Similarly, some projects listed in **Table 4-1** would have the potential to result in new sources of energy use. New buildings would be required to demonstrate consistency with energy efficiency standards, including CALGreen and local climate action plan consistency requirements. As such, consistent with the conclusions of the Sustainability Update EIR, the cumulative increase in energy demand would be expected to be minimal relative to statewide energy use, cumulative projects would continue to be required to comply with energy efficiency building standards, and statewide regulations would continue to reduce cumulative fuel demand.

Impact EN-C: Cumulative development would not result in a significant cumulative impact. Therefore, the **Alternative 3 contribution would not be cumulatively considerable**, which is the same as the Proposed Project.

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6.7 Geology and Soils

This section analyzes the potential impacts of Alternative 3, Combined Facilities on Adjacent Property (Alternative 3) related to existing geologic, seismic, and soil conditions and paleontological resources. A summary of the potential impacts is presented in **Table 6.7-1**. Information in this section is based on subsurface investigations conducted by Geosyntec Consultants (**Appendix Q**).

Table 6.7-1. Summary of Alternative 3 Impacts on Geology and Soils

Impact	Significance before Mitigation	Mitigation	Significance after Mitigation
GEO-1. Alternative 3 would not cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault or strong seismic ground shaking.	Less than Significant	None Required	Less than Significant
GEO-2. Alternative 3 would not exacerbate exposure of the public to liquefaction or landslide hazards and would not be located on a geological unit or soil that could become unstable as a result of lateral spreading, landslides, and liquefaction.	Less than Significant	None Required	Less than Significant
GEO-3. Alternative 3 would not result in substantial soil erosion or loss of topsoil.	Less than Significant	None Required	Less than Significant
GEO-4. Alternative 3 could exacerbate the existing risk to life or property resulting from expansive soils.	Potentially Significant	GEO-4	Less than Significant
GEO-5. Alternative 3 would not have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems.	Less than Significant	None Required	Less than Significant
GEO-6. Ground-disturbing activities during Alternative 3 construction would not directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.	Less than Significant	None Required	Less than Significant

Notes: The impact, significance determination, and mitigation apply to Alternative 3 as a whole, considering all components, unless otherwise noted.

6.7.1 Existing Conditions

Geologic Formations and Project Area Soils

Santa Cruz County (County) is located in the Coast Range Geomorphic Province. This province is characterized by parallel northwest-trending mountain ranges formed over the past 10 million years or less by active uplift, as a result of the complex tectonics of the San Andreas fault/plate boundary system (CGS 2002). The County is bounded to the north by San Mateo County, to the east by the crest of the Santa Cruz Mountains (Santa Clara County line), to the south by the Pajaro River (Monterey County line), and to the west by the Pacific Ocean (Monterey Bay). The existing geology and soils described below are based on information contained in geotechnical memoranda prepared for Alternative 3 (**Appendix Q**).

Like the Proposed Project area, the Alternative 3 site is underlain by at least 1,000 feet of a heterogeneous mixture of interbedded gravel, sand, silt, and clay. Surficial stream and terrace deposits overlie approximately 500 feet of fine sands of the Aromas formation. The Aromas formation in turn overlies the Purisima formation, which is approximately 500 feet thick and composed of semiconsolidated sand, silt, clay, and shale.

Coastal Santa Cruz County has step-like marine terraces of Pleistocene age that consist of weakly consolidated to semiconsolidated heterogeneous deposits of moderately to poorly sorted silt, silty clay, sand, and gravel. The Alternative 3 site, as well as the Proposed Project area, lies within a broad band of gently rolling hills of the Monterey Bay coastal plain. This gentle terrain has been incised by numerous small streams draining southward to the Pajaro River, including Harkins Slough to the east and Gallighan Slough to the southwest.

Portions of the area are underlain by recent fluvial terrace deposits consisting of poorly consolidated, heterogeneous deposits of gravel, sand, and silts. The fluvial terrace is underlain by the Aromas formation, which consists of clean, coarse- to medium-grained sands. Underlying the Aromas Sand formation is the Tertiary Purisima formation, which is too deep to be relevant to site hydrogeologic conditions. Groundwater beneath the site occurs in the Aromas Sand formation, but also occurs in the overlying aeolian and terrace deposits. Perched groundwater zones occur in the aeolian and terrace deposits where the percolation of rainfall and irrigation is inhibited by low-permeability horizons in near-surface deposits. Expansive soils are associated with clay-rich sediment deposits on alluvial floodplains.

Seismicity

Santa Cruz County is located in a seismically active region of California, between two major Holocene-active faults, including the San Andreas Fault, located along the northeast county boundary, and the San Gregorio Fault, located along the northwest county coast. In addition, the Ben Lomond Fault, Zayante-Vergeles Fault, and Butano Fault are other major faults in the County. These faults are associated with Holocene activity (movement in the last 11,000 years) and are considered to be active (Santa Cruz County 2024). Refer to **Figure 3.7-1** in Chapter 3, Section 3.7, for the locations of major regional faults in the area.

No known active faults are present near the Alternative 3 site. The nearest faults are the Zayante-Vergeles Fault located approximately 3 miles to the north and the San Andreas Fault system located approximately 6 miles to the north. The County Local Hazard Mitigation Plan 2021–2026 states that, based on historical evidence, the entire County is vulnerable to ground shaking from earthquakes (Santa Cruz County 2021). The epicenter of the 1989 Loma Prieta earthquake, which was the most intense to strike Santa Cruz County and California since the 1906 San Francisco earthquake, was associated with the San Andreas Fault, approximately 13 miles to the north.

Liquefaction, Lateral Spreading, Landslides, and Subsidence

Unstable soils can result in liquefaction, lateral spreading, landslides, and subsidence.

Soil liquefaction occurs when ground shaking from an earthquake causes a sediment layer saturated with groundwater to lose strength and take on the characteristics of a fluid, thus becoming similar to quicksand. Lateral spreading can occur when a liquefied soil moves toward a free slope face during the cyclic earthquake loading. Liquefaction-induced lateral spreading can also occur on mild slopes (flatter than 5 percent) underlain by loose sands and a shallow water table. If liquefaction occurs, the unsaturated overburden soil can slide as intact blocks over the lower, liquefied deposit, creating

fissures and scarps. Liquefaction and lateral spreading potential in the County is high in lowland areas of Santa Cruz, the Soquel Valley, and the Pajaro River Valley (Santa Cruz County 2021).

Landslides and other forms of mass wasting, including mud flows, debris flows, soil slips, and rock falls, occur as soil or rock moves downslope under the influence of gravity. Intense rainfall or seismic shaking could trigger landslides. Areas subject to landslide hazards are widely dispersed across inland portions of the County (Santa Cruz County 2021). The most concentrated areas of past landslide activity in the County are the western foothills of Ben Lomond Mountain and the foothills that border the County, southeast of State Route 17 (Roberts et al. 1988). The Project area is not located in an area identified on the County landslide map (Santa Cruz County 2024).

The Alternative 3 site is not mapped in a known liquefaction or landslide zone, the soils are dense, and no perched aquifers or shallow groundwater that would lead to liquefaction was identified at the site. Therefore, there is a very low potential for liquefaction, lateral spreading, or landslides.

The County does not have areas with a high susceptibility to subsidence. The estimated potential for areas in the County that are of low susceptibility to subsidence include the coastal areas of the County and inland areas toward the middle of the County (DWR 2014).

Paleontological Resources

Paleontological resources are contained within the geologic deposits or bedrock that underlie the soil layer. Paleontological resources are the fossilized remains, traces, and associated data of plants and animals, preserved in Earth's crust, that are generally considered to be older than middle Holocene (approximately 5,000 radiocarbon years before present) (SVP 2010). Body fossils include bones, teeth, shells, leaves, and wood, while trace fossils include trails, trackways, footprints, and burrows. With the exception of fossils found in low-grade metasedimentary rocks, significant paleontological resources are found in sedimentary rock units that are old enough to preserve the remains or traces of plants and animals. The Alternative 3 site is not located in an area of known paleontological resources within Santa Cruz County (Santa Cruz County 2024).

6.7.2 Regulatory Setting

This section describes the federal, state, and local plans, policies, and laws relevant to geology and soils for Alternative 3.

Federal

The following federal regulations are described in Section 3.7.2.

- Clean Water Act
- Seismic Design Guidance for Municipal Solid Waste Landfill Facilities

State

The following state regulations are described in Section 3.7.2.

- Alquist-Priolo Earthquake Fault Zoning Act
- Seismic Hazards Mapping Act
- California Coastal Act
- California Public Resources Code

Local

The relevant local regulations are described in Section 3.7.2, under the following:

- Santa Cruz County General Plan/Local Coastal Program
- Santa Cruz County Code

6.7.3 Methodology and Significance Thresholds

Methodology

This section describes the potential environmental impacts of Alternative 3 relevant to geology and soils, including paleontological resources. The impact analysis is based on an assessment of baseline conditions for the Alternative 3 site, including topography, geologic formations, seismicity, soils, and soil conditions, as described in Section 6.7.1, Existing Conditions. This analysis identifies potential impacts based on the predicted interaction between the affected environment and construction and operation of Alternative 3 and identifies mitigation measures, when necessary, to avoid or minimize impacts.

Significance Thresholds

As stated in the Chapter 6 introduction, the significance thresholds used in this analysis are based on Appendix G of the CEQA Guidelines, which is a sample Initial Study checklist that includes a number of factual inquiries related to the subject of geology and soils and other environmental topics. Thus, the letters and thresholds presented below correspond with the questions in the Appendix G Initial Study checklist.

For the purposes of this EIR and consistent with the analysis for the Proposed Project, a significant impact would occur if implementation of Alternative 3 would result in any of the following conditions:

A. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:
    1. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault. Refer to Division of Mines and Geology Special Publication 42.
    2. Strong seismic ground shaking.
    3. Seismic-related ground failure, including liquefaction.
    4. Landslides.
B. Result in substantial soil erosion or the loss of topsoil.
C. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the Project and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse.
D. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property.
E. Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water.
F. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

The potential for impacts to significant paleontological resources is based on the potential for ground disturbance to directly impact paleontologically sensitive geologic units. CEQA does not define "a unique paleontological resource or site." However, as stated above, the Society of Vertebrate Paleontology (SVP) broadly defines significant paleontological resources as follows (SVP 2010):

> Fossils and fossiliferous deposits, here defined as consisting of identifiable vertebrate fossils, large or small, uncommon invertebrate, plant, and trace fossils, and other data that provide taphonomic, taxonomic, phylogenetic, paleoecologic, stratigraphic, and/or biochronologic information. Paleontological resources are considered to be older than recorded human history and/or older than middle Holocene (i.e., older than about 5,000 radiocarbon years).

Therefore, the loss of paleontological resources that meet the criteria outlined above (i.e., considered a significant paleontological resource) would be considered a significant impact under CEQA.

6.7.4 Alternative 3 Impact Analysis

For each impact, the discussion is separated into construction, operation, and facility components as needed to describe the potential impact. The overall conclusion or significance determination is presented at the end of the discussion, as well as in parentheses at the end of the numbered impact statement.

As described in Section 5.2.3, Alternative 3. Combined Facilities on Adjacent Property (in Chapter 5, Project Alternatives), Alternative 3 includes the following components:

- Transfer Station
- Organics Diversion Facility
- Recycling Center
- Scale House
- General Plan/Local Coastal Program Land Use Designation and Zoning Map Amendments

Additionally, Landfill Closure and Revegetation, including the Environmental Enhancement and Restoration Features, would be implemented as described in Chapter 2, Section 2.4, Project Components; and potential impacts of those features are included in the analysis in Section 3.7.4. The additional enhancement and restoration features included as part of Alternative 3 (described in Section 5.2.3 under *Additional Design Information*) are considered in the evaluation below.

Threshold A.1:	Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault. Refer to Division of Mines and Geology Special Publication 42.
Threshold A.2:	Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking.

Impact GEO-1 ALTERNATIVE 3 WOULD NOT CAUSE POTENTIAL SUBSTANTIAL ADVERSE EFFECTS, INCLUDING THE RISK OF LOSS, INJURY, OR DEATH INVOLVING RUPTURE OF A KNOWN EARTHQUAKE FAULT OR STRONG SEISMIC GROUND SHAKING. (LESS THAN SIGNIFICANT IMPACT)

The Alternative 3 site is not zoned under the Alquist-Priolo Fault Rupture Zone Act, and there are no known active faults located in the area. However, like the Proposed Project area, the Alternative 3 site is located in a highly seismic region near several major fault zones. The nearest faults are the Zayante-Vergeles Fault located approximately 3 miles to the north and the San Andreas Fault system located approximately 6 miles to the north. The Alternative 3 site is also not located within a County Fault Zone.

As described in Section 5.2.3, all the structures at the combined facilities would be designed and constructed in conformance with the most recently adopted California Building Code (CBC) design parameters, which are specifically tailored to minimize the risk of structure failure due to seismic hazards. The structures include the Transfer Station, including the office; Organics Diversion Facility (ODF); Recycling Center; and Scale House. Therefore, conformance with the CBC would ensure that impacts relating to ground shaking would be less than significant.

Alternative 3 (Combined Facilities on Adjacent Property), including the associated General Plan/LCP land use designation and zoning map amendments and environmental enhancement/restoration features, would not exacerbate the existing risk of loss, injury, or death involving strong seismic ground shaking to workers or the public using the combined facilities. The impact would be **Less than Significant**. No mitigation is required.

Threshold A.3:	Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction.
Threshold A.4:	Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving landslides.
Threshold C:	Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the Project and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse.

IMPACT GEO-2 ALTERNATIVE 3 WOULD NOT EXACERBATE EXPOSURE OF THE PUBLIC TO LIQUEFACTION OR LANDSLIDE HAZARDS AND WOULD NOT BE LOCATED ON A GEOLOGICAL UNIT OR SOIL THAT COULD BECOME UNSTABLE AS A RESULT OF LATERAL SPREADING, LANDSLIDES, AND LIQUEFACTION. (LESS THAN SIGNIFICANT IMPACT)

Liquefaction tends to occur in loose, saturated, and fine-grained cohesionless sands, coarse silts, or clays with a low plasticity. For liquefaction to occur, there must be saturation of susceptible soil types and cyclic accelerations of sufficient magnitude to progressively increase the water pressures within the soil mass. Liquefaction-induced lateral spreading occurs when a liquefied soil mass fails toward an open slope face or fails on an inclined topographic slope.

The near-surface soils encountered at the Alternative 3 site are not considered susceptible to liquefaction due to such factors as depth to the groundwater table, soil density, and grain-size distribution (**Appendix Q**). Because the soils are not susceptible to liquefaction, lateral spreading and seismic settling are not expected. In addition, the Alternative 3 site is not located in an area identified on the County landslide map (Santa Cruz County 2024). Fill and cut slopes, required for

construction of the combined facilities, including the Transfer Station and other facilities, would be designed and constructed in conformance with the most recently adopted CBC design parameters. Therefore, the facilities would not be located on soil that is unstable or that would become unstable as a result of construction or operation of Alternative 3.

Alternative 3 (Combined Facilities on Adjacent Property), including the associated General Plan/LCP land use designation and zoning map amendments and environmental enhancement/restoration features, would not be located on soil that is unstable or would become unstable as a result of Alternative 3. Thus, it would not potentially result in slope instability (e.g., landslides, liquefaction, lateral spreading) that would have substantial adverse effects including risk of loss, injury, or death. The impact would be **Less than Significant**. No mitigation is required.

Threshold B:	Result in substantial soil erosion or the loss of topsoil.

IMPACT GEO-3 ALTERNATIVE 3 WOULD NOT RESULT IN SUBSTANTIAL SOIL EROSION OR LOSS OF TOPSOIL. (LESS THAN SIGNIFICANT IMPACT)

Construction

Construction activities associated with constructing the combined facilities could result in substantial soil erosion or loss of topsoil due to earthmoving activities such as excavation, filling, grading, utility location and relocation, placement of concrete retaining walls and foundations, installation of metal structures, and placement of crushed aggregate base and paved surface. As described in **Table 5-3**, Alternative 3 Construction (Earth Movement) Estimates, in Chapter 5, the construction of Alternative 3 includes 51,600 cubic yards of cut (excavation) and 38,600 cubic yards of embankment (fill).

During construction, runoff during a large storm has the potential to result in substantial amounts of erosion, resulting in off-site sediment transport via stormwater.

As stated in Section 5.2.3, because construction of Alternative 3 would disturb over 1 acre, it would be subject to the NPDES Construction General Permit (Order No. 2012-0006-DWQ) adopted by the State Water Resources Control Board. Compliance with the permit requires each qualifying development project to file a Notice of Intent with the State Water Resources Control Board. Permit conditions require development of a SWPPP, which must describe the site, the facility, erosion and sediment controls, runoff water quality monitoring, means of waste disposal, implementation of approved local plans, control of construction sediment and erosion control measures, maintenance responsibilities, and non-stormwater management controls. Additionally, inspection of construction sites before and after storms is required to identify stormwater discharge from the construction activity and to identify and implement erosion controls, where necessary. Compliance with the NPDES-required SWPPP would reduce the risk of soil erosion.

Further, as described in Section 5.2.3, Alternative 3 includes BMPs to minimize soil erosion and loss of topsoil and would be implemented during construction. These BMPs include, but are not limited to, the following:

- Erosion and sediment control measures shall be maintained continuously, repaired when and as necessary, and shall be inspected within 24 hours of each rainfall event. Seeded areas shall be checked regularly and shall be watered, fertilized, reseeded, and mulched as necessary to obtain a dense stand of grass.

- All drain inlets shall be protected from siltation (e.g., inlet filters, fiber rolls, gravel bags). Ineffective protection devices shall be immediately replaced and the inlet cleaned. Flushing is not an acceptable method of cleaning.
- When the crushed stone construction entrance has been covered with soil or has been pushed into the soil by construction traffic, it shall be replaced with a depth of stone equal to that of the original application.

Therefore, the potential for substantial soil erosion or loss of topsoil would be Less than Significant.

Operation

Post construction, most of the disturbed area would be impervious because it would be developed with the combined facilities and associated paved areas and roadways, thus limiting potential soil erosion and loss of topsoil. However, as described in Section 5.2.3, the combined facilities would include stormwater management to meet State regulatory compliance requirements. Stormwater surface runoff would be directed through grading, inlets, pipelines, and culverts to new stormwater management ponds located at the site's low point, south of the transfer station and west of the scale house. The stormwater would first enter a forebay (upper pond) to enable sediment to settle and then flow to a larger pond (lower pond), from which the stormwater would flow to a culvert to the existing drainage along the southern boundary, feeding into the Harkins Slough Road Drainage.

The ponds would have a clay lining to minimize infiltration and protect against liquefaction. The outlet would be sized to control the outflow, so the ponds are emptied within four days, consistent with statewide guidance for mosquito/vector control (CDPH 2012).

Filtration measures would be installed in the collection system and pond to prevent unwanted solid waste or contaminated stormwater from entering the stormwater system. Filtration measures could include filter socks or bags, Stormceptor units, drop inlets, and oil-water separators. Additionally, best management practices such as paved surface sweeping and drain inlet filter monitoring and maintenance would be employed. Therefore, the potential for substantial soil erosion or loss of topsoil would be Less than Significant.

In summary, Alternative 3 (Combined Facilities on Adjacent Property), including the associated General Plan/LCP land use designation and zoning map amendments and environmental enhancement/restoration features, would not result in substantial soil erosion or loss of topsoil. The impact would be **Less than Significant.** No mitigation is required.

Threshold D:	Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property.

IMPACT GEO-4 ALTERNATIVE 3 COULD EXACERBATE THE EXISTING RISK TO LIFE OR PROPERTY RESULTING FROM EXPANSIVE SOILS. (LESS THAN SIGNIFICANT IMPACT WITH MITIGATION)

Expansive soils are associated with clay-rich sediment deposits on alluvial floodplains. The Alternative 3 site is underlain by potentially expansive soil (**Appendix Q1 and Q2**). Therefore, construction of the combined facilities at the Alternative 3 site could exacerbate the existing risk to life or property resulting from expansive soils. This potential impact would be reduced to a less than significant level with design measures identified in the geotechnical studies (**Appendix Q1 and Q2**). Building footings or other structures founded on or adjacent to these potentially expansive soils shall require design measures such as excavation and replacement with non-expansive soils, amendment of the expansive soils with lime or cement, construction of moisture barriers, grading of surfaces to drain away from

the area, and restrictions on the use of irrigation and infiltration of stormwater into the subsurface to reduce potential impacts to less than significant.

Therefore, the potential impact for Alternative 3 (Combined Facilities on Adjacent Property), including the associated General Plan/LCP land use designation and zoning map amendments and environmental enhancement/restoration features, would be **Less than Significant with Mitigation** (Mitigation Measure GEO-4).

Mitigation Measure GEO-4: Expansive Soils Design Measures for Specific Structures

Due to the presence of expansive soils where specific structures will be located, the County and its design consultant shall ensure that the final design for the following structures includes design measures for building footings or other structures on or adjacent to these potentially expansive soils, such as excavation and replacement with non-expansive soils, amendment of the expansive soils with lime or cement, construction of moisture barriers, grading of surfaces to drain away from the area, and/or restrictions on the use of irrigation and/or infiltration of stormwater into the subsurface.

Combined Facilities on Adjacent Property: Transfer Station, including the office; Organics Diversion Facility; Recycling Center; and Scale House

Threshold E:	Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater.

IMPACT GEO-5 ALTERNATIVE 3 WOULD NOT HAVE SOILS INCAPABLE OF ADEQUATELY SUPPORTING THE USE OF SEPTIC TANKS OR ALTERNATIVE WASTEWATER DISPOSAL SYSTEMS. (LESS THAN SIGNIFICANT IMPACT)

Wastewater would be generated from the restrooms in the office and the contact water internal to the transfer station operation, including the tipping floor where there may be contact water from waste on the floor or from washing the building interior with a pressure washer. County permitting information for the Alternative 3 site shows no septic constraints. Domestic wastewater from restrooms would be disposed of on site using properly designed septic tank(s) and leach field(s) that comply with County wastewater management requirements. Wastewater that has the potential to include contact water would be collected in an underground holding tank adjacent to the office and transfer station and pumped out and hauled as needed to a wastewater treatment facility.

Therefore, Alternative 3 (Combined Facilities on Adjacent Property), including the associated General Plan/LCP land use designation and zoning map amendments and environmental enhancement/restoration features, would not result in a potential impact associated with soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems. The impact would be **Less than Significant.** No mitigation is required.

Threshold F:	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

IMPACT GEO-6 GROUND-DISTURBING ACTIVITIES DURING ALTERNATIVE 3 CONSTRUCTION WOULD NOT DIRECTLY OR INDIRECTLY DESTROY A UNIQUE PALEONTOLOGICAL RESOURCE OR SITE OR UNIQUE GEOLOGIC FEATURE. (LESS THAN SIGNIFICANT IMPACT)

The Alternative 3 site is not located in an area of known paleontological resources within Santa Cruz County (Santa Cruz County 2024). In addition, no unique paleontological resources or sites or unique geologic features are known to occur in the vicinity of the Project. Therefore, Alternative 3 (Combined Facilities on Adjacent Property), including the associated General Plan/LCP land use designation and zoning map amendments and environmental enhancement/restoration features, would not directly or indirectly destroy a unique paleontological resource or site or unique geologic feature. The impact would be **Less than Significant**. No mitigation is required.

6.7.5 Cumulative Impact Discussion

The potential cumulative impacts of Alternative 3 would be similar to those of the Proposed Project, which are presented in Chapter 4, Other CEQA-Required Discussions.

As discussed in Chapter 4, cumulative projects must adhere to required building/engineering design standards, per the most recent version of the California Building Code, to ensure the safety of building occupants and avoid a cumulative geologic hazard. Additionally, as needed, projects would incorporate individual mitigation or geotechnical requirements for site-specific geologic hazards present on each individual cumulative project site. Like other projects, Alternative 3 would be subject to the same requirements and thus not result in a substantial contribution.

Additionally, construction associated with those projects could result in an increase in impermeable surfaces, alteration of the hydrology of local streams and drainage, and grading and clearing of vegetation. All of these actions have the potential to contribute to a cumulative increase in erosion or topsoil loss. However, future development of the cumulative projects is subject to federal, state, and local runoff and erosion prevention requirements. Compliance with all applicable regulations and implementation of required construction best management practices (BMPs) and stormwater BMPs would minimize soil erosion and topsoil loss. Therefore, the County determined no significant cumulative impact.

Impact GEO-C: Cumulative development would not result in a significant cumulative impact. Therefore, **the Alternative 3 contribution would not be cumulatively considerable**, which is the same as the Proposed Project.

6.8 Greenhouse Gas Emissions

This section describes regional greenhouse gas (GHG) emissions sources and inventories and the regulatory framework applicable to GHG emissions and evaluates impacts related to GHG emissions resulting from Alternative 3 construction and operation. **Table 6.8-1** summarizes identified Alternative 3 impacts related to GHG emissions/climate change.

Table 6.8-1. Summary of Alternative 3 Impacts Related to Greenhouse Gas Emissions

Impact	Significance before Mitigation	Mitigation	Significance after Mitigation
GHG-1. Alternative 3 would not result in GHG emissions that would have a significant impact on the environment.	Less than Significant	None Required	Less than Significant
GHG-2. Alternative 3 would be consistent with applicable GHG reduction plans.	Less than Significant	None Required	Less than Significant
GHG-3. Alternative 3 would not expose people or structures to substantial risk of loss, injury, or death as a result of flooding from projected sea level rise and storms.	Less than Significant	None Required	Less than Significant

Note: The impact, significance determination, and mitigation apply to Alternative 3 as a whole, considering all components, unless otherwise noted.

GHG = greenhouse gas

6.8.1 Existing Conditions

Climate Change and Greenhouse Gases

Climate change is the observed increase in the average temperature of Earth's atmosphere and oceans, along with other substantial changes in climate (such as wind patterns, precipitation, and storms) over an extended period of time. The baseline against which these changes are measured originates in historical records identifying temperature changes that have occurred in the past, such as during previous ice ages. The global climate is continuously changing, as evidenced by repeated episodes of substantial warming and cooling documented in the geologic record. The rate of change has typically been incremental, with warming or cooling trends occurring over the course of thousands of years. The past 10,000 years have been marked by a period of incremental warming, as glaciers have steadily retreated across the globe. However, scientists have observed acceleration in the rate of warming during the past 150 years, and the prevailing scientific opinion on climate change is that most of the observed increase in global average temperatures since the mid-20th century is likely due to the observed increase in anthropogenic (human-induced) GHG concentrations (IPCC 2013).

Gases that absorb and re-emit infrared radiation in the atmosphere are called GHGs. They are present in the atmosphere naturally and are released by natural sources or formed from secondary reactions taking place in the atmosphere. The gases that are widely seen as the principal contributors to human-induced climate change include carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), and fluorinated gases such as hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride (SF_6). Refer to Section 3.8.1 for additional information regarding these primary GHGs of concern and their sources, global warming potential, and GHG inventories. In California, transportation is the major source of GHG emissions, followed by industrial operations, and GHG

emissions have followed a declining trend since 2007. In Santa Cruz County, passenger vehicles are the primary source of emissions, followed by residential natural gas.

Potential Effects of Climate Change

Potential effects of climate change in California include sea level rise, loss of water supply and snowpack, more numerous large forest fires, damage to agriculture, public health impacts, and habitat destruction (OAG 2022). The Santa Cruz County Coastal Climate Change Vulnerability Report was prepared for the County to provide greater detail on the risks to resources and assets from coastal climate change (Central Coast Wetlands Group 2017). The Alternative 3 site is included in the report study area. Harkins Slough, located east of the Alternative 3 area, is identified as a potential risk area for sea level rise and coastal flooding. However, the Alternative 3 site is located outside the hazard area.

6.8.2 Regulatory Setting

This section describes the international, federal, state, regional, and local plans, policies, and laws relevant to GHG emissions/climate change for Alternative 3.

International and Federal

Intergovernmental Panel on Climate Change

In 1988, the United Nations and the World Meteorological Organization established the Intergovernmental Panel on Climate Change (IPCC) to assess the scientific, technical, and socioeconomic information relevant to understanding the scientific basis for human-induced climate change, its potential impacts, and options for adaptation and mitigation. The most recent IPCC reports emphasized the scientific consensus that real and measurable changes to the climate are occurring, that they are caused by human activity, and that significant adverse impacts on the environment, the economy, and human health and welfare are unavoidable.

U.S. Environmental Protection Agency Endangerment Finding and Cause or Contribute Finding

In December 2009, the administrator of the U.S. Environmental Protection Agency (USEPA) signed the Endangerment Finding, which found that GHGs in the atmosphere threaten the public health and welfare of current and future generations. Although the Endangerment Finding does not place requirements on industry, it is an important step in the U.S. Environmental Protection Agency's (USEPA's) process to develop regulations. This action was a prerequisite to finalizing the USEPA's proposed GHG emission standards for light-duty vehicles. In the USEPA's Cause or Contribute Finding, the administrator found that the combined emissions of GHGs from new motor vehicles and new motor vehicle engines contribute to GHG pollution that threatens public health and welfare (NRDC 2017).

State

Assembly Bill 32, the California Global Warming Solutions Act of 2006

In September 2006, the state Legislature adopted Assembly Bill (AB) 32, the California Global Warming Solutions Act of 2006. AB 32 focuses on reducing GHG emissions in California. GHGs as

defined under AB 32 include CO_2, CH_4, N_2O, chlorofluorocarbons, hydrofluorocarbons, perfluorocarbons, and SF_6. Under AB 32, the California Air Resources Board (CARB) has the primary responsibility for reducing GHG emissions and continues with the Climate Change Action Team to coordinate statewide efforts and promote strategies that can be undertaken by many other California agencies. AB 32 required CARB to adopt rules and regulations that would achieve GHG emissions equal to statewide levels in 1990 by 2020.

In general, AB 32 directed CARB to do the following:

- Prepare and approve a Scoping Plan for achieving the maximum technologically feasible and cost-effective reductions in GHG emissions from sources or categories of sources of GHGs by 2020 and update the Scoping Plan every 5 years
- Maintain and continue reductions in emissions of GHG beyond 2020
- Identify the statewide level of GHG emissions in 1990 to serve as the emissions limit to be achieved by 2020
- Identify and adopt regulations for discrete early actions that could be enforceable on or before January 1, 2010
- Adopt a regulation that establishes a system of market-based declining annual aggregate emission limits for sources or categories of sources that emit GHG emissions
- Convene an Environmental Justice Advisory Committee to advise CARB in developing and updating the Scoping Plan and any other pertinent matter in implementing AB 32
- Appoint an Economic and Technology Advancement Advisory Committee to provide recommendations for technologies, research, and GHG emissions reduction measures

Regarding the first bulleted item above, the initial 2008 Scoping Plan was approved by CARB on December 11, 2008, and included measures to address GHG emissions reduction strategies related to energy efficiency, water use, and recycling and solid waste, among other measures (CARB 2008).

The 2017 Scoping Plan was adopted in November 2017. The 2017 Scoping Plan incorporates the 2030 target set by Executive Order B-30-15 and codified by Senate Bill (SB) 32. It identifies how the state can reach the 2030 climate target and substantially advance toward our 2050 climate goal to reduce GHG emissions by 80 percent below 1990 levels (CARB 2017).

The most recent update to the Scoping Plan, the 2022 Scoping Plan, was adopted by CARB in December 2022. The 2022 Scoping Plan assesses progress toward the statutory 2030 target and identifies a path to achieving carbon neutrality by 2045 (CARB 2022).

Assembly Bill 1279

Enacted in September 2022, AB 1279, the California Climate Crisis Act, updates the goals of AB 32. The bill established a statewide goal to achieve net-zero GHG emissions by 2045 and achieve and maintain net-negative GHG emissions thereafter. Additionally, the bill established a specific target for statewide anthropogenic GHG emissions to be reduced to at least 85 percent below 1990 levels by 2045. The bill requires CARB to work with relevant state agencies to ensure that updates to the Scoping Plan identify and recommend measures to achieve these policy goals and to identify and implement a variety of policies and strategies that enable CO_2 removal solutions and carbon capture, utilization, and storage technologies in California, as specified. The bill also requires CARB to submit an annual progress report. The 2022 Scoping Plan lays out a path to achieve targets for carbon neutrality and reduce anthropogenic GHG emissions by 85 percent below 1990 levels no later than 2045, as directed by AB 1279 (CARB 2022).

Refer to Section 3.8.2 for additional information on the following state legislation that provided the framework and supported the aforementioned legislation.

- Executive Order S-3-05
- Executive Order B-55-18
- Senate Bill 32
- Executive Order S-13-08

Local

Santa Cruz County Climate Action and Adaptation Plan

The Santa Cruz County Climate Action and Adaptation Plan (CAAP), approved in 2022, strives to meet the Senate Bill 32 target of reducing GHG emissions by 40 percent below 1990 levels before 2030, while simultaneously establishing a policy framework to achieve the longer-term target of net-negative GHG emissions by 2045 (AB 1279). The CAAP includes 29 strategies in seven sectors to achieve these goals, including strategies 14 through 16 related to waste management. Strategy 14 directly relates to Buena Vista Landfill and seeks to reduce the landfill's carbon footprint. The priority for this strategy is eliminating fossil fuel use in new buildings. Other objectives to support the strategy include evaluating new energy-efficient equipment, incorporating electric vehicle and other alternative-energy solutions into landfill plans, and exploring waste-to-energy technologies. Strategies 15 and 16 seek to increase diversion of waste from landfills and increase demand for organic waste products. Other relevant strategies include the natural and working lands strategies for conservation of natural habitat and increasing the urban canopy.

Santa Cruz County General Plan/Local Coastal Program

Several elements of the Santa Cruz County General Plan/Local Coastal Program (LCP) include objectives and policies that would reduce community GHG emissions by encouraging reduced use of resources, including fuel, energy, and water. As described in greater detail in Section 3.11, Land Use and Planning, the Santa Cruz County General Plan/LCP was updated as part of the County's Sustainability Update to make the County General Plan and County Code consistent with new state laws and new regional and local plans related to sustainable development. Objectives and policies pertinent to GHG emissions related to landfill operation are listed by element below (Santa Cruz County 2024).

BUILT ENVIRONMENT ELEMENT

- **Policy BE-4.2.9 – Construction Material Conservation.** Reduce the volume of construction waste going to landfills through promoting retention and reuse of existing structures, efficient design and construction techniques, use of recycled-content materials, and structure deconstruction instead of demolition.

PARKS, RECREATION AND PUBLIC FACILITIES ELEMENT

- **Policy PPF-4.5.1 Materials Recovery.** Establish, in conformance with state law, materials recovery through recycling, reuse, and composting, as the primary and fundamental strategy of solid waste management by the County, with landfill disposal as a secondary and essential component. Designate materials recovery and reuse projects as a funding priority in allocating capital expenditures for solid waste management.
- **Policy PPF-4.5.2 Zero Waste.** Take into account the whole materials management system to achieve a zero waste goal by focusing on reducing and eliminating materials from entering into the waste stream first and foremost; as a secondary strategy focus on reusing materials; and as a tertiary strategy recycling and composting all remaining materials for their highest and best use.

AGRICULTURE, NATURAL RESOURCES, AND CONSERVATION ELEMENT

- **Objective ARC-1.5 – Sustainable Agricultural Practices.** To support sustainable agricultural and land management practices on commercial and noncommercial agricultural lands, including efficient use of water and energy, reduction of agricultural waste entering landfills, and adaption to climate change.

6.8.3 Methodology and Significance Thresholds

Methodology

The construction- and operation-related GHG emissions from Alternative 3 are estimated using the California Emissions Estimator Model (CalEEMod), Version 2022.1.1.43.

Construction modeling is based on construction assumptions summarized in Section 5.2.3, Alternative 3. Combined Facilities on Adjacent Property, and consistent with the modeling assumptions described in Section 6.3, Air Quality.

For operation modeling, the net increase in energy, solid waste, and water use demand from Alternative 3 is conservatively based on the default assumptions for the CalEEMod manufacturing land use, except where Alternative-specific information is available. Energy emissions conservatively assume CalEEMod default forecast (Year 2029) emissions factors for Central Coast Community Energy. The manufacturing land use was determined to be the most representative of Project operation, because it is intended to represent land uses where the primary activity is the conversion of raw materials into finished products. Alternative 3 would include operation of equipment to handle and process materials, and it includes supporting office uses at the transfer station. No new natural gas use would occur as a result of Alternative 3 implementation. New non-mobile materials handling equipment and heating, ventilation, and air conditioning (HVAC) systems would include electric-powered equipment. The analysis focuses on CO_2, CH_4, and N_2O because these represent most of the GHG emissions that would be generated from the combined facilities. Detailed construction modeling assumptions are available in **Appendix O**, Air Quality and GHG Modeling Assumptions.

Disposal of waste in landfills is a typical source of CH_4 emissions. Alternative 3 addresses landfill operations, including transfer of waste to be landfilled, but Alternative 3 operation does not generate the waste. Alternative 3 is designed to address the waste disposal needs of existing and future land uses in the County. As such, CH_4 emissions resulting from disposal of solid waste generated by other land uses are not attributable to Alternative 3 and not calculated for this analysis.

Significance Thresholds

As stated in the Chapter 6 introduction, the significance thresholds used in this analysis are based on Appendix G of the California Environmental Quality Act (CEQA) Guidelines, which provides a sample Initial Study checklist that includes a number of factual inquiries related to the subject of GHG emissions and other environmental topics. The letters and thresholds presented below (A and B) correspond with the questions in Appendix G of the CEQA Guidelines Initial Study checklist.

The CEQA Guidelines do not quantify the amount of GHG emissions that would constitute a significant impact on the environment. Determination of the significance of GHG emissions is at the discretion of the lead agency, who may consider thresholds of significance previously adopted or recommended by other public agencies or recommended by experts (CEQA Guidelines, Sections 15064.4[a], 15064.7[c]).

In addition to the two thresholds (A and B) from the CEQA *Guidelines* Appendix G Initial Study checklist, this analysis includes a third threshold (C). Threshold C addresses the potential for Alternative 3 to expose people or structures to risks related to climate change, specifically flooding related to sea level rise or storms. Therefore, for the purposes of this Environmental Impact Report (EIR) and consistent with the analysis for the Proposed Project, a significant impact would occur if implementation of Alternative 3 would result in any of the following conditions:

A. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.

B. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

C. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death as a result of flooding from projected sea level rise and storms.

Threshold A is focused on the generation of anthropogenic emissions. Neither the Monterey Bay Air Resources District nor the County has adopted an evidence-based numeric threshold consistent with the 2022 Scoping Plan and the state's long-term GHG reduction goals. The County has an adopted CAAP, but the plan does not include a threshold or Project-specific requirements for determining if Alternative 3 emissions are cumulatively considerable. Therefore, it is not considered "qualified" for tiering to determine the significance of a Project according to CEQA Guidelines, Section 15183.5.

The Monterey Bay Air Resources District in the past has recommended use of the Bay Area Air Quality Management District adopted thresholds. The Bay Area Air Quality Management District (BAAQMD) has recently released CEQA thresholds that address the state's long-term goal of carbon neutrality; however, the thresholds are specific to land use development projects and consist of Alternative 3-specific design features that do not apply to changes to existing municipal infrastructure operations (BAAQMD 2022). However, the overall strategy of the BAAQMD thresholds (building electrification, vehicle miles traveled (VMT) efficiency, and support for future alternatively fueled vehicles) is consistent with the GHG reduction strategies identified in the 2022 Scoping Plan and County CAAP. CARB's 2022 Scoping Plan for Achieving Carbon Neutrality (2022 Scoping Plan) outlines a statewide path to achieving the net-zero statewide emissions goal of AB 1279. In the absence of an adopted local plan, the 2022 Scoping Plan has been determined to be the appropriate tool to determine the significance of Alternative 3 GHG emissions. Alternative 3 would result in a potentially significant impact related to GHG emissions under Threshold A if it conflicted with implementation of the 2022

Scoping Plan. As the applicable plan adopted for the purposes of reducing GHG emissions, 2022 Scoping Plan consistency is also the applicable threshold for Threshold B. As such, the discussions of significance for Threshold A and Threshold B are combined below. Additionally, although the CAAP is not qualified to determine the significance of GHG emissions, it is an applicable plan to reduce GHGs, and Alternative 3 is also evaluated for CAAP consistency.

6.8.4 Alternative 3 Impact Analysis

For each impact, the discussion is separated into construction, operation, and facility components as needed to describe the potential impact. The overall conclusion or significance determination is presented at the end of the discussion, as well as in parentheses at the end of the numbered impact statement.

As described in Section 5.2.3, Alternative 3. Combined Facilities on Adjacent Property (in Chapter 5, Project Alternatives), Alternative 3 includes the following components:

- Transfer Stations
- Organics Diversion Facility
- Recycling Center
- Scale House
- General Plan/Local Coastal Program Land Use Designation and Zoning Map Amendments

Additionally, Landfill Closure and Revegetation, including the Environmental Enhancement and Restoration Features, would be implemented as described in Chapter 2, Section 2.4, Project Components; and potential impacts are described in Section 3.8.4. The additional enhancement and restoration features included as part of Alternative 3 (described in Section 5.2.3 under *Additional Design Information*) are considered in the evaluation below.

Threshold A:	Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.
Threshold B:	Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

Impact GHG-1 ALTERNATIVE 3 WOULD NOT RESULT IN GHG EMISSIONS THAT WOULD HAVE A SIGNIFICANT IMPACT ON THE ENVIRONMENT. (LESS THAN SIGNIFICANT IMPACT)
Impact GHG-2 ALTERNATIVE 3 WOULD BE CONSISTENT WITH APPLICABLE GHG REDUCTION PLANS. (LESS THAN SIGNIFICANT IMPACT)

Alternative 3 construction and net change in operational GHG emissions are calculated below for informational purposes, followed by a comparison of Alternative 3 to the applicable GHG reduction strategies of the 2022 Scoping Plan and County CAAP.

Construction Emissions

Temporary impacts from construction would result in the temporary generation of GHG emissions from operation of construction equipment and generation of construction-related truck and vehicle trips. The total GHG emissions are estimated using CalEEMod, as described in the methodology above and presented in **Appendix O**. **Table 6.8-2** summarizes annual emissions for each

construction year, based on the anticipated schedule outlined in Section 5.2.3, combined with landfill closure emissions. The estimated worst-case total emissions for all Alternative 3 components, combined with landfill closure activities, are 2,556 metric tons of carbon dioxide equivalent (MT CO_2e). Estimated worst-case emissions for a given construction year are approximately 1,313 MT CO_2e.

For comparison with the estimated Alternative 3 construction emissions of 1,313 MT CO_2e in any given year, the counties within the Association of Monterey Bay Area Governments (AMBAG) region emitted 4,749,617 MT CO_2e of GHGs in 2020 (AMBAG 2022b). The AMBAG region includes Santa Cruz County, Monterey County, and San Benito County. In 2019, the County of Santa Cruz community emissions were approximately 691,262 MT CO_2e (Santa Cruz County 2022).

Table 6.8-2. Alternative 3 Construction Greenhouse Gas Emissions

Construction Year	Project Components	Annual MT CO_2e
2027	Alternative 3 Combined Facilities	438
2028	Landfill Closure, Alternative 3 Combined Facilities	1,313
2029	Landfill Closure	771
2030	Landfill Closure	34
Total		2,556

Source: Appendix F (landfill closure), **Appendix O** (Alternative 3).

Notes: MT CO2e = metric tons carbon dioxide equivalent

Alternative 3 construction would result in the temporary contribution of approximately 0.05 percent of the annual regional GHG emissions and 0.4 percent of annual County emissions, and emissions would cease following completion of construction. Additionally, construction of Alternative 3 components would take place over several years; therefore, the actual proportion of a given year's GHG emissions would be even less. Worst-case annual emissions would be approximately 0.03 percent of the annual regional GHG emissions and 0.2 percent of annual County emissions.

Construction emissions are necessary to implement the combined facilities (Alternative 3) to provide solid waste disposal services for existing and future land uses. As such, construction of Alternative 3 would result in a nominal one-time contribution to regional GHG emissions. The significance of Alternative 3 emissions is addressed through Plan Consistency below.

Operational Emissions

Compared to existing operational emissions, operation of the combined facilities would result in a net increase in GHG emissions from an increase in VMT from transfer trailer truck trips, energy use at new facilities and operation of new equipment, and a minor increase in water use and solid waste generation at the office. Operational emissions also conservatively assume operation of diesel off-road support equipment and 10 additional personal (employee) vehicle trips. However, it is likely that the project would not result in a net increase in off-road equipment because similar equipment is currently in use for landfill operation, including the Organics Diversion Facility (ODF) and recycling center; and use of this equipment would cease as a result of the landfill closure and relocation of components to the Alternative 3 site. Additionally, Alternative 3 is not anticipated to result in a change in employment that would generate additional personal (employee) vehicle trips.

Alternative 3 is anticipated to result in 24 new transfer trucks per day to transfer waste to ReGen Monterey, compared to existing conditions (Section 6.17, Transportation, and **Appendix T**). These larger transfer trucks would consolidate local waste that would have been deposited at Buena Vista Landfill to minimize the number of trips that would otherwise be required to move waste (i.e., trips by individuals who would need to self-transport waste to ReGen Monterey). Truck trips to haul waste respond to waste generation demand and would be required regardless of Alternative 3 implementation. Therefore, it is conservative to attribute these mobile GHG emissions to Alternative 3. However, the additional truck trips are included in modeling because they are a net increase compared to existing conditions. **Table 6.8-3** summarizes the total net increase in GHG emissions from Alternative 3 operation, based on this conservative assumption. Annual emissions would be expected to decrease over time, as off-road equipment and vehicle fleet are replaced by equipment meeting stricter emissions standards and alternatively fueled equipment, and Central Coast Community Energy increases the amount of energy provided to all customers from 100 percent renewable sources.

Table 6.8-3. Alternative 3 Operation Greenhouse Gas Emissions

Emissions Source	Annual MT CO_2e
Mobile	7
Area	4
Energy	79
Water	72
Solid Waste	77
Refrigerants	8
Off-road Equipment	314
Total	561

Source: Appendix O.

Notes: MT CO_2e = metric tons carbon dioxide equivalent

Plan Consistency

The 2022 Scoping Plan outlines a statewide path to achieve carbon neutrality (CARB 2022). The County CAAP, approved in 2022, strives to meet the SB 32 target of reducing GHG emissions by 40 percent below 1990 levels before 2030, while simultaneously establishing a policy framework to achieve the longer-term target of net-negative GHG emissions by 2045 (AB 1279). These plans are discussed below.

California Air Resources Board (CARB) 2022 Scoping Plan

CARB's 2022 Scoping Plan does not include recommendations for individual projects, but rather outlines a statewide strategy for achieving net-negative GHG emissions. The 2022 Scoping Plan strategies related to landfills and solid waste disposal focus on diversion of organic waste from landfill disposal, reducing methane emissions through landfill gas collection and control systems, and increased monitoring to detect and repair landfill gas leaks.

Solid waste diversion strategies apply to a wide variety of recyclable materials, including the diversion of organic waste to reduce GHG production associated with landfill disposal of these materials. Alternative 3 would continue to support the County's organic waste diversion strategy in

several ways. The ODF would provide an upgraded Organics Waste Diversion facility to handle the increase in diverted organic waste requiring processing.

As described in Section 2.4 under *Gas Monitoring*, there are currently landfill gas controls at the landfill, including landfill gas well controls and a gas collection and conveyance system. There would be ongoing gas control, collection, and monitoring as part of the landfill closure plan, consistent with Scoping Plan recommendations. The Scoping Plan also considers the use of landfill gas for biogas to reduce emissions from energy use. Alternative 3 would allow for future energy generation through a new energy reuse partnership to produce energy from landfill gas at the Buena Vista Landfill site, similar to the previous operation at the former Ameresco facility (located onsite below the Old Landfill), which closed in early 2026. Alternative 3 would not impact energy production. Therefore, Alternative 3 would be consistent with the applicable solid waste-related portions of the 2022 Scoping Plan.

The 2022 Scoping Plan also prioritizes a statewide reduction in vehicle miles traveled (VMT), particularly from petroleum-fueled vehicles. As described above, Alternative 3 would result in approximately 24 new haul truck deliveries (48 one-way trips) to transfer waste from Buena Vista Landfill to ReGen Monterey. However, these trips respond to existing and anticipated future waste disposal demand and would be required with or without Project or Alternative 3 implementation. Alternative 3 would potentially reduce truck VMT compared to conditions without the Project or Alternative 3, because the proposed transfer station would continue to provide a disposal location for local haul trucks. Waste can then be consolidated into the larger transfer trucks to reduce the total truck VMT required for disposal, whereas without the new transfer station, there would be more individual truck trips by self-haulers and franchise haulers to ReGen Monterey (as described in Section 6.17, Transportation, under Impact T-2, and in Chapter 5 under Alternative 2. No Project).

The 2022 Scoping Plan carbon sequestration components include natural and working lands as part of achieving statewide carbon neutrality. Alternative 3 would include environmental enhancement and habitat restoration features, as described in Section 2.4 and Section 5.2.3, including but not limited to restoration of an existing drainage ditch that extends along the north side of Harkins Slough Road. A portion of the drainage would be restored by adding suitable riparian plant species and replacing the eucalyptus trees with native vegetation, including coast live oak, willow, or other appropriate native tree species. Additionally, Alternative 3 would include restoration of a former naturally occurring drainage along the existing north-south roadway that bisects the Alternative 3 site. The combined facilities at the Alternative 3 site have been designed to minimize tree removal (limited to solitary trees that would be replaced elsewhere nearby) and retain the cluster of oak woodland trees and vegetation on the north side of the Harkins Slough Road curve. As such, Alternative 3 would be consistent with Scoping Plan strategies related to carbon sequestration. Impacts related to Scoping Plan consistency would be **Less than Significant**, with no mitigation**.**

County of Santa Cruz Climate Action and Adaptation Plan (CAAP)

The CAAP includes Strategy 14 that directly relates to Buena Vista Landfill and seeks to reduce the landfill's carbon footprint. The priority for this strategy is eliminating fossil fuel use in new buildings. Consistent with this strategy, no new natural gas use would occur as a result of Alternative 3 implementation. New materials handling and HVAC systems would include electric-powered equipment. Other objectives to support the strategy include evaluating new energy-efficient equipment, incorporating electric vehicles and other alternative-energy solutions into landfill plans, and exploring additional waste-to-energy technologies. Alternative 3 does not include any components that would interfere with a transition to an alternatively fueled vehicle and equipment

fleet. Additionally, the equipment used at the combined facilities would meet current energy efficiency requirements and improve energy efficiency compared to existing equipment. As described above, Alternative 3 supports a County partnership to use landfill gas for energy generation.

Strategies 15 and 16 are also related to waste management and seek to increase the diversion of waste from landfills and increase demand for organic waste products. As discussed above related to the Scoping Plan, solid waste diversion strategies apply to a wide variety of recyclable materials, including the diversion of organic waste to reduce GHG production associated with landfill disposal of these materials. Alternative 3 would continue to support the County's organic waste diversion strategy by providing an upgraded ODF, as well as an upgraded recycling center, to handle the increase in diverted waste that requires processing.

Other relevant strategies include the natural and working lands strategies for conservation of natural habitat and increasing the urban canopy. Specifically, the CAAP includes Natural/Working Lands Strategies 17 and 18 that include enhancing carbon sequestration through conservation of natural habitats and increasing the urban tree canopy. As discussed above related to the Scoping Plan, Alternative 3 includes environmental enhancement and habitat restoration features, as well as tree replacement components. As such, Alternative 3 would be consistent with all applicable CAAP strategies. This impact would be **Less than Significant**, with no mitigation required**.**

In summary, Alternative 3 (Combined Facilities on Adjacent Property), including the associated General Plan/LCP land use designation and zoning map amendments and environmental enhancement/restoration features, would be consistent with applicable plans to reduce GHG emissions, and as such would not result in significant GHG emissions. The impact would be **Less than Significant**. No mitigation is required.

Threshold C:	Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death as a result of flooding from projected sea level rise and storms.

Impact GHG-3 ALTERNATIVE 3 WOULD NOT EXPOSE PEOPLE OR STRUCTURES TO SUBSTANTIAL RISK OF LOSS, INJURY, OR DEATH AS A RESULT OF FLOODING FROM PROJECTED SEA LEVEL RISE AND STORMS.

The climate change risks of concern at the Alternative 3 site are risks related to sea level rise and storm flooding. The predicted area at risk from these hazards is based on data from the County's Coastal Climate Change Vulnerability Report (Central Coast Wetlands Group 2017) and the California Coastal Commission's Our Coast Our Future hazard viewer mapping tool (CCC 2026). The predicted risks are mapped by the California Coastal Commission and are based on best available prediction tools and data. However, modeling cannot definitively predict the future effects of climate change. This analysis presents the most conservative (highest risk) prediction of the effects of climate change, but actual future sea level rise and storm flooding may differ from mapped conditions.

As previously described, the Coastal Climate Change Vulnerability Report identifies Harkins Slough, east of the Alternative 3 site, as a potential risk area for sea level rise and coastal flooding. However, the Alternative 3 site is located outside the hazard area. The California Coastal Commission's Our Coast Our Future hazard viewer also identifies Harkins Slough as a potential flood area, but the projected flood area does not extend into the Alternative 3 site under the worst-case project flood condition of 500 centimeters of sea level rise and a 100-year storm event.

Therefore, although the Alternative 3 site could experience intermittent flooding, it would not expose people or structures to potential substantial adverse effects. Alternative 3 does not propose

new critical infrastructure in a projected hazard area. Impacts related to sea level rise and storm flooding would be **Less than Significant**. No mitigation is required.

6.8.5 Cumulative Impact Discussion

The potential cumulative impacts of Alternative 3 would be similar to those of the Proposed Project, which are presented in Chapter 4, Other CEQA-Required Discussions.

As discussed in Chapter 4, GHGs and climate change are, by definition, cumulative impacts. The geographic scope for considering cumulative impacts related to GHG emissions is the State of California. Although GHG emissions have worldwide repercussions, the contribution from Alternative 3 to the impact is addressed in light of the goal to reduce statewide emissions.

The cumulative projects being considered are those located in the County of Santa Cruz in the **Table 4-1** list of projects, as well as the projects considered in the cumulative analysis in the County's Sustainability Update EIR. These projects and Alternative 3 are within the jurisdiction of the County CAAP.

There is an existing, statewide significant cumulative impact related to GHG emissions. In response, CARB adopted the 2022 Scoping Plan, and the County of Santa Cruz adopted the CAAP. These plans outline a pathway to achieve statewide emissions reduction goals for reducing cumulative GHG emissions. A project that is consistent with these plans would not result in a cumulatively considerable contribution to GHG emissions.

In the Sustainability Update EIR Section 4.8, Greenhouse Gas Emissions, the County determined the impact of future development on GHG emissions would be less than cumulatively considerable for several reasons, including but not limited to: GHG emissions generated by future development are anticipated to be less than existing emissions due to cleaner on-road mobile sources (zero-emission vehicles and charging infrastructure), increased use of alternative transportation options, and increased energy efficiency requirements for buildings. Similarly, as discussed above, Alternative 3 would be consistent with the 2022 Scoping Plan and the County CAAP.

Impact GHG-C: There is an existing statewide cumulative impact related to GHG emissions. However, **the Alternative 3 contribution would not be cumulatively considerable**, which is the same determination as the Proposed Project.

6.9 Hazards and Hazardous Materials

This section describes existing hazards and hazardous materials, outlines the regulatory framework applicable to hazards and hazardous materials, and evaluates impacts related to hazards and hazardous materials as a result of Alternative 3, Combined Facilities on Adjacent Property (Alternative 3) construction and operation. **Table 6.9-1** presents a summary of potential impacts related to hazards and hazardous materials.

Table 6.9-1. Summary of Alternative 3 Impacts Related to Hazards and Hazardous Materials

Impact	Significance before Mitigation	Mitigation	Significance after Mitigation
HAZ-1. Alternative 3 would not create a significant hazard to the public or the environment through the routine transport, use, disposal, or release of hazardous materials.	Less than Significant	None Required	Less than Significant
HAZ-2. Alternative 3 would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.	No Impact	None Required	No Impact
HAZ-3. Alternative 3 would not be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, create a significant hazard to the public or the environment.	No Impact	None Required	No Impact
HAZ-4. Alternative 3 would not result in a safety hazard or excessive noise for people residing or working on the site due to proximity of an airport.	Less than Significant	None Required	Less than Significant
HAZ-5. Alternative 3 would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.	Less than Significant	None Required	Less than Significant
HAZ-6. Alternative 3 would not expose people or structures to a significant risk of loss, injury, or death involving wildfires.	Less than Significant	None Required	Less than Significant

Notes: The impact, significance determination, and mitigation apply to Alternative 3 as a whole, considering all components, unless otherwise noted.

6.9.1 Existing Conditions

Hazardous Waste

The U.S. Environmental Protection Agency (USEPA) defines a "hazardous waste" as a substance that (1) may cause or significantly contribute to an increase in mortality or an increase in serious, irreversible, or incapacitating reversible illness, and (2) poses a substantial present or potential future hazard to human health or the environment when it is improperly treated, stored, transported, disposed of, or otherwise managed (40 CFR 261.10). Hazardous waste is also defined as toxic, ignitable, corrosive, explosive, or reactive and is identified by the USEPA by its form: solids, semi-solids, liquids, and gases. Producers of such wastes include private businesses and federal, state, and local government agencies. A material may also be classified as hazardous if it contains

defined amounts of toxic chemicals. The USEPA regulates the production and distribution of commercial and industrial chemicals to protect human health and the environment. The USEPA also prepares and distributes information to inform the public about these chemicals and their effects and provides guidance to manufacturers in pollution prevention measures, such as more efficient manufacturing processes and recycling of used materials.

Santa Cruz County (County) Recycling & Solid Waste Services is responsible for the operation and administration of solid waste diversion and disposal services for the unincorporated area of the County and operates the County's two solid waste facilities, the Buena Vista Landfill and the Ben Lomond Transfer Station. The County has developed and implemented a Waste Screening and Acceptance Program to assist in preventing hazardous and other prohibited wastes from entering the facility and to establish procedures and acceptance levels for special (nontraditional) solid wastes.

The Buena Vista Landfill only accepts non-hazardous special wastes that have been properly sampled, analyzed, and found to be acceptable for disposal at the landfill or for use as cover at the landfill. It does not accept waste that is defined as hazardous by the Resource Conservation and Recovery Act (RCRA) and/or California Code of Regulations (CCR), Title 22. Hazardous waste, asbestos (friable and non-friable), radioactive waste, and untreated medical waste (biohazardous or infectious waste) are not allowed for disposal at the Buena Vista Landfill.

Special wastes must be pre-approved prior to acceptance at the Buena Vista Landfill. The County requires the completion of a Generator Waste Profile, along with any required analytical results before pre-approval would be granted. It is the responsibility of the generator to certify that the materials for management at the Buena Vista Landfill are non-hazardous per CCR Title 22 Section 66260. For materials that require laboratory analysis, the generator must provide representative analysis. The County only accepts material represented by analytical results indicating concentrations below established threshold values.

Airport Hazards

Alternative 3 is located approximately 0.8 miles southwest of the Watsonville Municipal Airport, which is owned and operated by the City of Watsonville. The Watsonville Municipal Airport updated its Airport Master Plan in 2023, which consists of a comprehensive and integrated package of improvements to airside and landside facilities at the airport. Alternative 3 is located within the designated Airport Influence Area for the Watsonville Municipal Airport. Specifically, the Alternative 3 site is located within the boundaries of the Safety Compatibility Zone 6 or the Traffic Pattern Zone (Santa Cruz County 2024a). Alternative 3 is also located in the Overflight Zone. A portion of the Alternative 3 area is located within the 60 A-weighted decibels (dBA) Community Noise Equivalent Level (CNEL) contour. This noise level is normally a compatible standard for sensitive receptors.

Emergency Response

The California Emergency Services Act provides the basic authority for conducting emergency operations following proclamations of emergencies by the Governor or other local authorities. All local emergency plans are extensions of the State of California Emergency Plan (CalOES 2017). Santa Cruz County is located in Mutual Aid Region II (the Coastal Region), which is one of six mutual aid regions that exist in California.

Fire Hazards

Wildfires are large-scale, unplanned, and uncontrolled fires that burn in a natural area with combustible vegetation, such as brush, grass, and forests. Wildfires can spread quickly and can affect adjacent developed areas. Wildfires are often caused by human activities and can result in loss of valuable wildlife habitat, soil erosion, and damage to life and property. Wildland fires are influenced by three factors: fuel, weather, and topography. Wildfire spread depends on the type of fuel involved (grass, brush, and trees). Weather influences wildland fire behavior with factors such as wind, relative humidity, temperature, fuel moisture, and possibly lightning. Several factors can modify the rate at which a fire will burn, while topography is the largest influence on fire severity (Santa Cruz County 2015).

The Alternative 3 area is mapped by the California Department of Forestry and Fire Protection (CAL FIRE) as a Local Responsibility Area and is not in a State Responsibility Area due to the lack of forest, watershed, and range lands useful for tree production, water sources, or foraging (CAL FIRE 2025). Refer to Section 3.20, Wildfire, for more information about CAL FIRE designations.

6.9.2 Regulatory Setting

Federal

The relevant federal plans, policies, and laws are described in Section 3.9.2, Regulatory Setting, under the following:

- U.S. Environmental Protection Agency
- U.S. Department of Transportation

State

The relevant state plans, policies, and laws are described in Section 3.9.2, Regulatory Setting, under the following:

- California Environmental Protection Agency
- California Department of Toxic Substances Control
- California Division of Occupational Safety and Health
- California Office of Emergency Services
- California Department of Pesticide Regulation
- California Fire and Building Code
- Assembly Bill 332

Regional/Local

The relevant local and regional plans, policies, and laws are described in Section 3.9.2, Regulatory Setting, under the following:

- Monterey Bay Air Resources District
- Santa Cruz County General Plan/Local Coastal Program (LCP)
- Santa Cruz County Code

- Santa Cruz County Environmental Health Division
- Operational Area Emergency Management Plan

6.9.3 Methodology and Significance Thresholds

Methodology

The analysis of hazards and hazardous materials impacts follows the guidance and methodologies recommended in Appendix G of the California Environmental Quality Act (CEQA) Guidelines.

Significance Thresholds

As stated in the Chapter 6 introduction, the significance thresholds used in this analysis are based on Appendix G of the CEQA Guidelines, which provides a sample Initial Study checklist that includes a number of factual inquiries related to the subject of hazards and hazardous materials and the other environmental topics.

For the purposes of this Environmental Impact Report (EIR) and consistent with the analysis for the Proposed Project, a significant impact would occur if implementation of Alternative 3 would result in any of the following conditions:

A. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.
B. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.
C. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.
D. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, create a significant hazard to the public or the environment.
E. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, result in a safety hazard or excessive noise for people residing or working in the project area.
F. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.
G. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires.

6.9.4 Alternative 3 Impact Analysis

For each impact, the discussion is separated into construction, operation, and facility components as needed to describe the potential impact. The overall conclusion or significance determination is presented at the end of the discussion, as well as in parentheses at the end of the numbered impact statement.

As described in Section 5.2.3, Alternative 3. Combined Facilities on Adjacent Property (in Chapter 5, Project Alternatives), Alternative 3 includes the following components:

- Transfer Station
- Organics Diversion Facility

- Recycling Center
- Scale House
- General Plan/Local Coastal Program Land Use Designation and Zoning Map Amendments

Additionally, Landfill Closure and Revegetation, including the Environmental Enhancement and Restoration Features, would be implemented as described in Chapter 2, Section 2.4, Project Components; and the potential impacts of those features are included in the analysis in Section 3.9.4. The additional enhancement and restoration features included as part of Alternative 3 (described in Section 5.2.3 under *Additional Design Information*) are considered in the evaluation below.

Threshold A:	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.
Threshold B:	Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.

Impact HAZ-1 ALTERNATIVE 3 WOULD NOT CREATE A SIGNIFICANT HAZARD TO THE PUBLIC OR THE ENVIRONMENT THROUGH THE ROUTINE TRANSPORT, USE, DISPOSAL, OR RELEASE OF HAZARDOUS MATERIALS. (LESS THAN SIGNIFICANT IMPACT)

Construction

Alternative 3 construction activities would require the operation of heavy equipment (e.g., dump trucks, loaders, bulldozers, concrete trucks, concrete pump trucks, cranes, and smooth or sheepsfoot compactors). The equipment would be fueled and maintained by petroleum-based substances such as diesel fuel, gasoline, oil, and hydraulic fluid, which are considered hazardous if improperly stored or handled. In addition, materials such as paints, adhesives, solvents, and other substances typically used in building construction would be located in the Alternative 3 area during construction.

Improper use, storage, or transportation of hazardous materials can result in accidental releases or spills. However, the use, transport, and disposal of hazardous materials would be subject to federal, state, and local regulations pertaining to the transport, use, storage, and disposal of hazardous materials. The Toxic Substances Control Act, RCRA, and Hazardous Waste Control Act would minimize risks associated with the storage, disposal, and transport of hazardous materials. The U.S. Department of Transportation, Pipeline and Hazardous Materials Safety Administration, regulates the transportation of hazardous materials, as described in the Code of Federal Regulations, Title 49, and CCR Title 13. This provides additional regulation for the transportation of hazardous materials by designating appropriate hazard label shipping preparation, vehicle loading, and hazardous materials registration, among other requirements. Documentation of compliance with hazardous materials regulations codified in CCR Titles 8, 22, and 26 is required for all hazardous materials and hazardous waste transport. Additionally, the California Building and Fire Code requirements detail standards for the safe management of materials that present a moderate explosion hazard, high fire or physical hazard, or health hazards. Compliance with all applicable federal, state, and local requirements related to the routine transport, use, or disposal of hazardous materials would maximize containment through safe handling and storage practices and provide for prompt and effective cleanup if an accidental release occurs. Therefore, the potential for the accidental release or upset of hazardous materials during construction would be minimal, and the impact would be less than significant, with no mitigation required.

Operation

Under Alternative 3, new combined facilities would be developed at the adjacent parcel for waste handling and transport. The combined facilities would include a transfer station, organics diversion facility (ODF), and recycling center to serve self-haulers (residents and businesses) and franchise haulers and larger commercial vehicles. After recyclables and organics are separated, transfer trucks would transport solid waste to a regional waste facility for disposal.

Consistent with current landfill operations, the combined facilities would accept the following waste:

- Household and/or commercial garbage, upholstered furniture, painted wood, treated wood waste, large non-recyclable metal items, rancid waste, and waste that requires special handling as determined by landfill staff.
- Recyclable materials (source separated for recycling) including metals, glass bottles and jars, presorted plastic containers, bagged stretchy (film) plastic, books/paper, and cardboard.
- Organic waste (source separated for composting) including clean sorted wood and yard waste (no dirt, treated or painted lumber, poison oak, pampas grass, yucca, palm, root balls), food waste (no raw meat, grease, or liquids), sheetrock/gypsum board, and pallets.
- Construction and demolition debris (source separated), including clean concrete, clean asphalt, base rock, brick, tile, and porcelain.
- Large recyclables, including appliances, mattresses, box springs, clean carpet and foam padding (6’ wide or less, rolled separately), electronic waste (TVs, computers, printers, small appliances), tires, 1- to 5-gallon empty propane tanks, and agricultural plastics.

Also consistent with current operations, the Buena Vista facility would continue to accept Household Hazardous Waste (HHW) at its HHW facility for offsite disposal (e.g., cleaning products, automotive products, batteries), but it does not accept waste that is defined as hazardous by RCRA and/or CCR Title 22. Hazardous waste, asbestos (friable and non-friable), radioactive waste, and untreated medical waste (biohazardous or infectious waste) are not currently allowed for disposal and would not be allowed for disposal under Alternative 3. Additionally, although current operations accept dead animals and soil that meets screening requirements, the new combined facilities would not accept dead animals or soil of any kind (Santa Cruz County 2024b).

Operation of the combined facilities would require the use of heavy equipment that may be fueled and maintained by alternative fuels or by petroleum-based substances such as diesel fuel, gasoline, oil, and hydraulic fluid, which are considered hazardous if improperly stored or handled. Operations would be required to comply with all applicable federal, state, and local laws and regulations regarding the transport, use, and storage of hazardous related materials.

Additionally, operation of the combined facilities would entail routine cleaning and maintenance activities using common hazardous materials, including cleaning fluids, detergents, solvents, adhesives, sealers, paints, fuels/lubricants, and fertilizers and/or pesticides. The use of these common hazardous materials for cleaning and maintenance would not be at levels that would result in substantial hazardous emissions or waste. These materials would be contained, stored, and used on site in accordance with manufacturers’ instructions, applicable standards, and federal, state, and local regulations. Compliance with applicable regulations would serve to protect against a significant and irreversible environmental change that could result from the accidental release of hazardous materials. Therefore, operation of Alternative 3 would not create a significant hazard to the public. The impact would be less than significant, with no mitigation required.

In summary, during construction and operation, compliance with applicable regulations would serve to protect against a significant and irreversible environmental change that could result from the accidental release of hazardous materials. Therefore, Alternative 3 (Combined Facilities on Adjacent Property), including the associated General Plan/LCP land use designation and zoning map amendments and environmental enhancement/restoration features, would not create a significant hazard to the public or the environment through the routine transport, use, disposal, or release of hazardous materials. The impact would be **Less than Significant**. No mitigation is required.

Threshold C:	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.

Impact HAZ-2 ALTERNATIVE 3 WOULD NOT EMIT HAZARDOUS EMISSIONS OR HANDLE HAZARDOUS OR ACUTELY HAZARDOUS MATERIALS, SUBSTANCES, OR WASTE WITHIN ONE-QUARTER MILE OF AN EXISTING OR PROPOSED SCHOOL. (NO IMPACT)

No existing or proposed schools are located within 0.25 mile of the Alternative 3 area. The nearest school is Pajaro Valley High School located approximately 0.9 miles east. Therefore, implementation of Alternative 3 would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school. There would be **No Impact**.

Threshold D:	Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, create a significant hazard to the public or the environment.

Impact HAZ-3 ALTERNATIVE 3 WOULD NOT BE LOCATED ON A SITE WHICH IS INCLUDED ON A LIST OF HAZARDOUS MATERIALS SITES COMPILED PURSUANT TO GOVERNMENT CODE SECTION 65962.5 AND, AS A RESULT, CREATE A SIGNIFICANT HAZARD TO THE PUBLIC OR THE ENVIRONMENT. (NO IMPACT)

The Hazardous Waste and Substances Sites (Cortese) List is a planning document used by the state, local agencies, and developers to comply with the CEQA requirements by providing information about the location of hazardous materials release sites. Based on a review of the Cortese List, no sites listed on the Cortese List are located on or within 100 feet of the Alternative 3 site. Therefore, Alternative 3 (Combined Facilities on Adjacent Property), including the associated General Plan/LCP land use designation and zoning map amendments and environmental enhancement/restoration features, would not be located on a site which is included on a list of hazardous materials sites compiled pursuant to California Government Code, Section 65962.5, and as a result, would not create a significant hazard to the public or the environment. There would be **No Impact**.

Threshold E:	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, result in a safety hazard or excessive noise for people residing or working in the project area.

Impact HAZ-4 ALTERNATIVE 3 WOULD NOT RESULT IN A SAFETY HAZARD OR EXCESSIVE NOISE FOR PEOPLE RESIDING OR WORKING ON THE SITE DUE TO PROXIMITY OF AN AIRPORT. (LESS THAN SIGNIFICANT IMPACT)

The Watsonville Municipal Airport is located approximately 0.9 miles northeast of the Alternative 3 site. The airport is owned and operated by the City of Watsonville. The Watsonville Municipal

Airport updated its Airport Master Plan in 2023, which consists of a comprehensive and integrated package of improvements to airside and landside facilities at the airport.

Noise. Alternative 3 is located within the designated Airport Influence Area for the Watsonville Municipal Airport. Specifically, Alternative 3 is partially located in Safety Compatibility Zone 6, or the Traffic Pattern Zone, as well as Safety Compatibility Zone 3, or the Inner Turning Zone. The Alternative 3 site is also located in the Overflight Zone. A portion of the site is located within the 60 dBA CNEL contour. This noise level is normally a compatible standard for sensitive receptors. Therefore, Alternative 3 would not result in any new receptors within an area with the potential to be exposed to airport noise in excess of the normally compatible standard for sensitive receptors. Additionally, the combined facilities are not a sensitive receptor and do not include any components that would have the potential to introduce new sources of aircraft noise. Also refer to Section 6.13, Noise.

Elevation. The elevation for the various Alternative 3 components and associated structures would be as follows, which would be below the 200-foot limit:

- The combined transfer station would be located in the center of the property, on the east side of the existing driveway bisecting the site, where site elevation is lowest. The exterior building height would be approximately 40 feet tall. The building location minimizes the required excavation and height of the building above mean sea level.
- The ODF would be located east of the transfer station. ODF activities would occur in an enclosed structure to avoid stormwater contact, control runoff from the facility, and prevent materials from dispersing offsite. The height of the tallest roof structure would not exceed 40 feet.
- The Recycling Center area would be paved, and recycling activities would occur in an enclosed structure to avoid stormwater contact, control runoff from the facility, and prevent materials from dispersing offsite. The height of the tallest roof structure would not exceed 40 feet.
- The Scale House and scales would be located on the south side of the facility near the Harkins Slough Road entrance. All public access to the waste disposal site, including access to the recycling facility, would come through the Harkins Slough Road entrance and pass through the Scale House.

The elevation for the various Alternative 3 components and associated structures would be below the 200-foot limit. However, due to its location within the designated Airport Influence Area for the Watsonville Municipal Airport, Alternative 3 would be required to obtain a Determination of No Hazard to Air Navigation from the Federal Aviation Administration prior to construction.

Bird Hazards. The landfill will be closing and no longer accepting solid waste, which would substantially reduce the number of birds attracted to the Buena Vista site. The combined facilities would be located approximately 4,000 feet from the closest edge of the airport runway; and the transfer station, organics diversion facility, and recycling center would be enclosed structures.

In summary, Alternative 3 (Combined Facilities on Adjacent Property), including the associated General Plan/LCP land use designation and zoning map amendments and environmental enhancement/restoration features, would not result in a safety hazard or excessive noise for people working in the Alternative 3 area during construction activities or operational maintenance activities. The impact would be **Less than Significant.** No mitigation is required.

Threshold F:	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

Impact HAZ-5 ALTERNATIVE 3 WOULD NOT IMPAIR IMPLEMENTATION OF OR PHYSICALLY INTERFERE WITH AN ADOPTED EMERGENCY RESPONSE PLAN OR EMERGENCY EVACUATION PLAN. (LESS THAN SIGNIFICANT IMPACT)

The County Operational Area Emergency Management Plan addresses the planned response to large-scale emergencies affecting the unincorporated area of the County (Santa Cruz County 2015). Santa Cruz County is the lead agency for the County operational area and would prepare for, respond to, and recover from emergencies in coordination with other local jurisdictions within the operational area. The plan does not identify a specific evacuation plan or specific routes.

The combined facilities would be accessed from Harkins Slough Road ingress/egress. As discussed in Section 6.17, Transportation (Impacts T-3 and T-4), Alternative 3 would not substantially increase hazards due to a geometric design feature or incompatible use, nor result in inadequate emergency access. Therefore, Alternative 3 would not interfere with emergency access in and out of this area, nor with an Emergency Response Plan or Emergency Evacuation Plan.

During construction, there could be temporary lane closures on Harkins Slough Road, but there would be no planned road closures. Emergency access and general access to adjacent facilities would be retained throughout construction with traffic controls. All other construction-related activities would occur within the Alternative 3 site and would not interfere with emergency response or access.

Therefore, Alternative 3 (Combined Facilities on Adjacent Property), including the associated General Plan/LCP land use designation and zoning map amendments and environmental enhancement/restoration features, would not impair implementation of, or physically interfere with, an Emergency Response Plan or Emergency Evacuation Plan adopted by the County. The impact would be **Less than Significant**. No mitigation is required.

Threshold G:	Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires.

Impact HAZ-6 ALTERNATIVE 3 WOULD NOT EXPOSE PEOPLE OR STRUCTURES, EITHER DIRECTLY OR INDIRECTLY, TO A SIGNIFICANT RISK OF LOSS, INJURY OR DEATH INVOLVING WILDLAND FIRES. (LESS THAN SIGNIFICANT IMPACT)

The Alternative 3 site is not located in a CAL FIRE State Responsibility Area. However, portions of the Alternative 3 site are located in the County's Local Responsibility Area in a Very High Fire Severity Zone (CAL FIRE 2025). Alternative 3 would include development of combined waste management facilities on the adjacent property immediately north of the Buena Vista Landfill. The combined facilities would include a transfer station, ODF, recycling center, scale house, and office facilities. Existing site conditions on the site to be developed include vacant structures (three large greenhouses, packing shed, boiler house, and other miscellaneous structures) and grassland areas with shrubs and solitary trees to be removed. The oak woodland area near Harkins Slough would remain in place.

Alternative 3 would not include housing or other land uses that would result in permanent residential occupants at the site. Similar to the Proposed Project, Alternative 3 would introduce new operational structures that could require fire protection measures during a fire event. The facilities would include fire detection and fire suppression systems in accordance with the California Fire Code (CFC).

Therefore, Alternative 3 (Combined Facilities on Adjacent Property), including the associated General Plan/LCP land use designation and zoning map amendments and environmental enhancement/restoration features, would not expose people or structures to a significant risk of loss, injury, or death involving wildland fires. The impact would be **Less than Significant**. No mitigation is required.

6.9.5 Cumulative Impact Discussion

The potential cumulative impacts of Alternative 3 would be similar to those of the Proposed Project, which are presented in Chapter 4, Other CEQA-Required Discussions.

Hazardous materials use and potential impacts are project- and site-specific and can be mitigated on a project-by-project basis with adherence to federal, state, and local laws and regulations. Therefore, cumulative projects would be required to comply with applicable local, state, and federal regulations regarding hazardous materials that would avoid the aggregation of individual effects into a significant cumulative impact. Further, in the Sustainability Update EIR, the County determined there is no existing cumulative impact with respect to hazards and hazardous materials.

Impact HAZ-C: Cumulative development would not result in a significant cumulative impact. Therefore, **the Alternative 3 contribution would not be cumulatively considerable**, which is the same determination as the Proposed Project.

6.10 Hydrology and Water Quality

This section describes the existing hydrology and water quality conditions and the applicable regulatory framework, and this section identifies potential impacts relating to hydrology and water quality resulting from Alternative 3, Combined Facilities on Adjacent Property (Alternative 3) construction and operation. Information in this section is based on the Drainage Report prepared by SCS Consultants (**Appendix R**). **Table 6.10-1** summarizes identified impacts related to hydrology and water quality.

Table 6.10-1. Summary of Alternative 3 Impacts Related to Hydrology and Water Quality

Impact	Significance before Mitigation	Mitigation	Significance after Mitigation
HYD-1. Alternative 3 would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality or conflict with a Water Quality Control Plan.	Less than Significant	None Required	Less than Significant
HYD-2. Alternative 3 would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge.	Less than Significant	None Required	Less than Significant
HYD-3. Alternative 3 would not substantially alter drainage patterns within the site or vicinity.	Less than Significant	None Required	Less than Significant
HYD-4. Alternative 3 would not risk release of pollutants due to facilities inundation in flood hazard, tsunami, or seiche zones.	No Impact	None Required	No Impact

Note: The impact, significance determination, and mitigation apply to Alternative 3 as a whole, considering all components, unless otherwise noted.

6.10.1 Existing Conditions

Water Quality

The California Department of Water Resources (DWR) divides surface watersheds in California into 10 hydrologic regions. Alternative 3 is located in the Central Coast Hydrologic Region. The DWR subdivides hydrologic regions into hydrologic units that are commonly known as watersheds. In the Central Coast Hydrologic Region, Alternative 3 is located in the Pajaro River Hydrologic Unit. The DWR further subdivides hydrologic units into hydrologic areas and hydrologic sub-areas. Finally, Alternative 3 is located in the Pajaro River Subbasin and the Watsonville Slough Watershed. The Central Coast Regional Water Quality Control Board (CCRWQCB) governs basin planning and water quality in the Pajaro River Hydrologic Unit (CCRWQCB 2019). Please refer to Section 3.10.1, Hydrology and Water Quality, for a description of the Central Coast Hydrologic Region.

Drainage Patterns

This section describes the existing surface conditions and drainage patterns at the Alternative 3 site. The Alternative 3 site consists of a low-lying terrace in the west portion and a higher terrace in the east portion. The existing drainage patterns are a result of the previous agricultural/greenhouse uses. The existing property contours have created a type of drainage swale to convey the

stormwater through the property. Runoff captured in this ditch is intended to flow through a culvert at the southern property boundary and west into the daylighted Harkins Slough Road Drainage. Stormwater runoff from the property upslope to the north is directed to a buried pipe in the lower terrace which flows to the Harkins Slough Road Drainage. These features are shown in Figure 5-13a.

Groundwater

The Alternative 3 site overlies the Pajaro Valley Groundwater Subbasin, which is over-drafted and experiencing seawater intrusion. The Alternative 3 site is not located in a designated groundwater recharge area. Refer to Section 3.10, Hydrology and Water Quality, for a full description of the Pajaro Valley Groundwater Subbasin.

Hazards

Federal Emergency Management Agency Flood Hazard Zones

The Federal Emergency Management Agency (FEMA) establishes base flood heights for the 100-Year Flood Zone and the 500-Year Flood Zone. The 100-Year Flood Zone is defined as the area that could be inundated by a flood that has a 1 percent probability of occurring in any given year, or once every 100 years. The 500-Year Flood Zone is defined as the area that could be inundated by a flood that has a 0.2 percent probability of occurring in any given year, or once in 500 years.

Alternative 3 is not located in any Special Flood Hazard Areas.

Seiche and Tsunami

A seiche is a standing wave oscillating in a body of water and may occur in any enclosed or semi-enclosed bodies of water, such as bays and lakes. Seiches are typically caused by strong wind and rapid changes in atmospheric pressure. They can also form along ocean shelves and harbors due to earthquakes, tsunamis, or severe storm fronts. Alternative 3 is not located near an enclosed body of water.

A tsunami is a series of waves generated by an impulsive disturbance in the ocean or in a small, connected body of water. Tsunamis are produced when movement occurs on faults in the ocean floor, usually during very large earthquakes. Sudden vertical ocean floor movement when fault movement occurs can displace the overlying water column, creating a wave that travels outward from the earthquake source.

Alternative 3 is not located in a Tsunami Inundation Zone.

6.10.2 Regulatory Setting

Federal

The relevant federal regulations are described in Section 3.10.2, Regulatory Setting, under the following:

- Federal Clean Water Act
- Federal Emergency Management Agency

State

The relevant state regulations are described in Section 3.10.2 under the following:

- Porter-Cologne Water Quality Control Act
- California Coastal Act
- Industrial General Permit (Order No. 2014-0057-DWQ, as Amended)
- Construction General Permit (State Water Resources Control Board [SWRCB] Order No. 2009-0009-DWQ, as Amended)
- Sustainable Groundwater Management Act

Regional

The relevant regional regulations are described in Section 3.10.2 under the following:

- Central Coast Water Quality Control Plan

Local

The relevant local regulations are described in Section 3.10.2 under the following:

- Santa Cruz County General Plan/Local Coastal Program (LCP)
- Santa Cruz County Code
- Local Hazard Mitigation Plan

6.10.3 Methodology and Significance Thresholds

Methodology

The impact analysis in Section 6.10.4 is based on an assessment of baseline conditions for the Alternative 3 site (including water quality, drainage patterns, groundwater, and hazards/floodplains), and the potential changes to these conditions that would be caused by construction and operation in light of relevant regulations and policies.

Significance Thresholds

As stated in the Chapter 6 introduction, the significance thresholds used in this analysis are based on Appendix G of the California Environmental Quality Act (CEQA) Guidelines, which provides a sample Initial Study checklist that includes a number of factual inquiries related to the subject of hydrology and water quality, as well as the other environmental topics. Thus, the letters and thresholds presented below correspond with the questions in the Appendix G Initial Study checklist.

For the purposes of this Environmental Impact Report (EIR) and consistent with the analysis for the Proposed Project, a significant impact would occur if implementation of Alternative 3 would result in any of the following conditions:

A. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality.
B. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the Project may impede sustainable groundwater management of the basin.

C. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:
   1. Result in substantial erosion or siltation on- or off-site.
   2. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite.
   3. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff.
   4. Impede or redirect flood flows.

D. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation.

E. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.

6.10.4 Alternative 3 Impact Analysis

For each impact, the discussion is separated into construction, operation, and facility components as needed to describe the potential impact. The overall conclusion or significance determination is presented at the end of the discussion, as well as in parentheses at the end of the numbered impact statement.

As described in Section 5.2.3, Alternative 3, Combined Facilities on Adjacent Property (in Chapter 5, Project Alternatives), Alternative 3 includes the following components:

- Transfer Station
- Organics Diversion Facility
- Recycling Center
- Scale House
- General Plan/Local Coastal Program Land Use Designation and Zoning Map Amendments

Additionally, Landfill Closure and Revegetation, including the Environmental Enhancement and Restoration Features, would be implemented as described in Chapter 2, Section 2.4, Project Components, and potential impacts of those features are included in the analysis in Section 3.7.4. The additional enhancement and restoration features included as part of Alternative 3 (described in Section 5.2.3 under *Additional Design Information*) are considered in the evaluation below.

Threshold A:	Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality.
Threshold E:	Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.

IMPACT HYD-1 ALTERNATIVE 3 WOULD NOT VIOLATE ANY WATER QUALITY STANDARDS OR WASTE DISCHARGE REQUIREMENTS OR OTHERWISE SUBSTANTIALLY DEGRADE SURFACE OR GROUNDWATER QUALITY OR CONFLICT WITH A WATER QUALITY CONTROL PLAN. (LESS THAN SIGNIFICANT IMPACT)

Construction

Alternative 3 construction activities could result in soil erosion or the loss of topsoil due to earthmoving activities such as excavation, filling, grading, utility location and relocation, placement of concrete retaining walls and foundations, installation of metal structures, and placement of crushed aggregate base and paved surface. During construction, runoff during a large storm has the

potential to result in substantial amounts of erosion, resulting in off-site sediment transport via stormwater. The types of pollutants contained in runoff from construction sites could include sediments and contaminants such as oils and fuels from construction equipment.

Construction of the combined facilities at the Alternative 3 site could also potentially result in the accidental release of hazardous materials such as diesel fuel, gasoline, lubricant oils, hydraulic fluid, antifreeze, transmission fluid, cement slurry, and other fluids required for the operation of construction vehicles or equipment. Motorized equipment used during construction of Alternative 3 could also leak the previously described hazardous fluids due to inadequate or improper maintenance, unnoticed or unrepaired damage, improper refueling, or operator error. These accidentally released or leaked hazardous materials could directly or indirectly impact water quality during a subsequent storm event, when the spilled material could come in contact with or be washed into flowing water and eventually enter a nearby drainage. Similarly, groundwater could be contaminated through direct or indirect contact with potentially harmful or hazardous materials.

As stated in Section 5.2.3 (under Construction/Water Quality Protection and Best Management Practices), because construction of the combined facilities at the Alternative 3 site would disturb over one acre, Alternative 3 would be subject to the National Pollutant Discharge Elimination System (NPDES) Construction General Permit (Order No. 2012-0006-DWQ) adopted by the SWRCB. Compliance with the permit requires each qualifying development project to file a Notice of Intent with the SWRCB. Permit conditions require the development of a Stormwater Pollution Prevention Plan (SWPPP), which must describe the site, the facility, erosion and sediment controls, runoff water quality monitoring, means of waste disposal, implementation of approved local plans, control of construction sediment and erosion control measures, maintenance responsibilities, and non-stormwater management controls. Additionally, inspection of construction sites before and after storms is required to identify stormwater discharge from the construction activity and to identify and implement erosion controls, where necessary. Compliance with the NPDES-required SWPPP would reduce the risk of soil erosion.

Further, Alternative 3 includes the following best management practices (BMPs) identified in Section 5.2.3 to be implemented during construction. These BMPs include, but are not limited to, the following:

1. Limit vehicle speeds on unpaved roads to a maximum of 25 miles per hour.
2. Limit fugitive dust by watering exposed dirt surfaces in construction areas twice daily, keeping all trenches dry to protect their integrity.
3. Apply soil stabilizers on inactive construction areas (disturbed lands unused for four consecutive days) and cover inactive storage piles.
4. Apply native hydro-seed or non-toxic binders to exposed areas after cut/fill operations.
5. Install perimeter protection (e.g., silt fence, fiber rolls) on downslope areas and near drainages and open space to prevent contaminated construction runoff from leaving the construction site.
6. Minimize removal or disturbance of existing vegetation outside the footprint of project construction activities.
7. Limit site access and parking, equipment storage, and stationary construction activities to the designated staging areas to the maximum extent feasible.
8. Store, maintain, and refuel all equipment and materials in designated portions of the staging areas in accordance with permit requirements. As such, no staging would occur in areas with sensitive biological resources.

9. Prior to staging equipment on site, clean all equipment caked with mud, soils, or debris from off-site sources to avoid introducing or spreading invasive exotic plant species.
10. Position all stationary equipment, such as motors, pumps, generators, and/or compressors, over drip pans.
11. Erosion and sediment control measures shall be maintained continuously, repaired when and as necessary and shall be inspected within 24 hours of each rainfall event. Seeded areas shall be checked regularly and shall be watered, fertilized, reseeded, and mulched as necessary to obtain a dense stand of grass.
12. All drain inlets shall be protected from siltation (e.g., inlet filters, fiber rolls, gravel bags). Ineffective protection devices shall be immediately replaced and the inlet cleaned. Flushing is not an acceptable method of cleaning.

Implementation of the BMPs and compliance with the NPDES-required SWPPP and County's grading regulations would reduce the risk of water degradation on and off site from soil erosion; thus, pollutants related to construction activities would not obstruct or conflict with the implementation of the Basin Plan. Therefore, this construction-related impact of Alternative 3 would be **Less than Significant**. No mitigation is required.

Operation

Operation of the combined facilities at the Alternative 3 site would have the potential to generate operational pollutants that could degrade the surface water quality of downstream receiving waters. Pollutant sources could include trash and debris, chemicals from cleaners, pathogens, and oil and grease from vehicles. These pollutants could potentially discharge into surface waters and result in degradation of water quality.

The Basin Plan stormwater program objectives include identification and elimination of pollutant contact with stormwater by implementation of BMPs. Alternative 3 would implement stormwater BMPs in compliance with Santa Cruz County Code 7.79.110 that would reduce the amount of pollutants transported to receiving waters.

The combined facilities would include stormwater management to meet State regulatory compliance requirements. The stormwater management plan is described in Section 5.2.3 and shown on the site plan (**Figure 5-12d)**.

Stormwater surface runoff would be directed through grading, inlets, pipelines, and culverts to new stormwater management ponds located at the site's low point, south of the transfer station near the entrance/exit from Harkins Slough Road. The stormwater would first enter a forebay (upper pond) to enable sediment to settle and then flow to a larger pond (lower pond) with an outlet to a culvert under the roadway to the existing Harkins Slough Road Drainage. The stormwater ponds have been designed and placed at the low spot of the site to provide detention of the runoff and slowly release it into the drainage systems.

The ponds would have a clay lining to minimize infiltration and protect against liquefaction. The outlet would be sized to control the outflow, so the ponds are emptied within four days, consistent with statewide guidance for mosquito/vector control (MVC/CDPH, July 2012).

Filtration measures would be installed in the collection system and pond to prevent unwanted solid waste or contaminated stormwater from entering the stormwater system. A number of options could be used, such as, but not limited to, filter socks or bags, Stormceptor units, drop inlets, and oil-water separators.

Additionally, BMPs such as paved surface sweeping and drain inlet filter monitoring and maintenance would be employed.

In summary, Alternative 3 (Combined Facilities on Adjacent Property), including the associated General Plan/LCP land use designation and zoning map amendments and environmental enhancement/restoration features, would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality or conflict with a Water Quality Control Plan. Therefore, the impact would be **Less than Significant**. No mitigation is required.

Threshold B:	Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the Project may impede sustainable groundwater management of the basin.
Threshold E:	Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.

IMPACT HYD-2 ALTERNATIVE 3 WOULD NOT SUBSTANTIALLY DECREASE GROUNDWATER SUPPLIES OR INTERFERE SUBSTANTIALLY WITH GROUNDWATER RECHARGE. (LESS THAN SIGNIFICANT IMPACT)

Alternative 3 would not decrease groundwater supplies or interfere substantially with groundwater recharge such that the combined facilities may impede sustainable groundwater management of the basin.

Alternative 3 includes the construction and operation of combined facilities (Transfer Station, Organics Diversion Facility, Recycling Center, and Scale House). During construction, water needed for dust control would be provided by water trucks. For operation, the office in the transfer station would require water for the break room and restrooms, and the combined facilities would require water for occasional cleaning and fire suppression systems. As described in Section 6.19, Utilities and Service Systems, the estimated water use at the combined facilities would be similar to current water use for the existing landfill operations. However, the water would be provided from an existing water well on the Alternative 3 site, which has adequate supply to serve the facilities without substantially decreasing groundwater supplies (PV Water 2022), rather than the well at the County Rountree Medium (Jail) Facility. Therefore, Alternative 3 would not use additional groundwater and would not deplete groundwater resources, compared to existing conditions.

Alternative 3 would introduce approximately 230,000 square feet (SF) of new impervious surfaces. As described above for Impact HYD-1, Alternative 3 includes a stormwater management plan which would protect groundwater quality. The potential impact to groundwater recharge would be less than significant because the amount of new impervious surface would be relatively small compared to the total surface area of the groundwater basin. Further, Alternative 3 is concentrating development and new impervious surface on 11 acres in the most disturbed area (with existing structures) of the 26.95-acre parcel (Assessor's Parcel Number [APN] 052-011-11), and keeping the remainder of the parcel undeveloped and pervious.

Therefore, Alternative 3 would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge. The impact would be **Less than Significant**. No mitigation is required.

Threshold C:	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would (1) result in substantial erosion or siltation on- or off-site, (2) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite, (3) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff, or (4) impede or redirect flood flows.

IMPACT HYD-3 ALTERNATIVE 3 WOULD NOT SUBSTANTIALLY ALTER DRAINAGE PATTERNS WITHIN THE SITE OR VICINITY. (LESS THAN SIGNIFICANT IMPACT)

Construction and operation of Alternative 3 would not result in alterations of the course of a stream or river. As described below, although there would be new impervious surfaces, the existing and proposed drainage facilities would accommodate increases in stormwater runoff, so existing drainage patterns would not be substantially altered, compared to existing conditions.

Construction

Construction activities associated with constructing the combined facilities could result in the temporary alteration of localized drainage patterns and a temporary increase in erosion and sedimentation in the construction area. The potential erosion and sedimentation impacts of increased runoff are discussed above under Impact HYD-1. With compliance with the NPDES-required SWPPP, which would include the implementation of erosion and sediment control BMPs, any short-term impacts resulting from alterations of drainage and hydrology during construction would be Less than Significant.

Operation

Post construction, most of the disturbed area would be impervious because it would be developed with the combined facilities and associated paved areas and roadways. As described in Section 5.2.3, the combined facilities would include stormwater management to meet State regulatory compliance requirements. Stormwater surface runoff would be directed through grading, inlets, pipelines, and culverts to new stormwater management ponds located at the site's low point, south of the transfer station near the entrance/exit at Harkins Slough Road. The stormwater would first enter a forebay (upper pond) to enable sediment to settle and then flow to a larger pond (lower pond), from which the stormwater would flow to a culvert to the existing drainage along the southern boundary, feeding into the Harkins Slough Road Drainage. The stormwater ponds have been designed and placed at the low spot of the site to provide detention of the runoff and slowly release it into the drainage systems. The ponds would have a clay lining to minimize infiltration and protect against liquefaction. The outlet would be sized to control the outflow, so the ponds are emptied within four days, consistent with statewide guidance for mosquito/vector control (CDPH 2012).

In addition, Alternative 3 includes environmental enhancement and habitat restoration features that would improve the function and value of the existing drainage system on site and downstream.

As described in Section 5.2.3 and shown on **Figure 5-13**, these features include reorienting and expanding the existing wetland ditch (which was created by human activities to capture piped runoff from the greenhouses to the east) to the new stormwater ponds onsite. From there, stormwater would flow to the Harkins Slough Road Drainage, which would be restored, and then to

the Buena Vista Drive Tributary and Gallighan Slough. These features also include recreating the open drainage along the north-south roadway onsite and removing the buried pipe that redirected the natural drainage. The new open drainage would be planted with native riparian vegetation and capture runoff from the areas to the north and west and carry it to the restored Harkins Slough Road Drainage. Additionally, downstream of the Harkins Slough Road Drainage, the culvert under the internal roadway (crossing Gallighan Slough) to the Old Landfill would be replaced with a larger culvert, improving overall stormwater drainage in the area.

In summary, construction and operation of Alternative 3 (Combined Facilities on Adjacent Property), including the associated General Plan/LCP land use designation and zoning map amendments and environmental enhancement/restoration features, would not substantially alter existing drainage patterns within the site or vicinity in a manner that would result in flooding on or off site, create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems, or provide substantial additional sources of polluted runoff, compared to existing conditions. Instead, Alternative 3 would improve the existing drainage patterns onsite and downstream, reducing flooding that currently occurs on Buena Vista Drive during storm events, compared to existing conditions. Therefore, the impact would be **Less than Significant.** No mitigation is required.

Threshold D:	In flood hazard, tsunami, or seiche zones, risk release of pollutants due to Project inundation.

IMPACT HYD-4 ALTERNATIVE 3 WOULD NOT RISK RELEASE OF POLLUTANTS DUE TO FACILITIES INUNDATION IN FLOOD HAZARD, TSUNAMI, OR SEICHE ZONES. (NO IMPACT)

Alternative 3 is not located in any FEMA-designated Special Flood Hazard Areas. In addition, a seiche is a phenomenon typically associated with landlocked bodies of water, none of which occur near Alternative 3. Finally, Alternative 3 is not located in a tsunami inundation zone.

Implementation of Alternative 3 (Combined Facilities on Adjacent Property), including the associated General Plan/LCP land use designation and zoning map amendments and environmental enhancement/restoration features, would not release pollutants due to inundation caused by a flood hazard, tsunami, or seiche. Therefore, there would be **No Impact.**

6.10.5 Cumulative Impacts

The potential cumulative impacts of Alternative 3 would be similar to those of the Proposed Project, which are presented in Chapter 4, Other CEQA-Required Discussions.

As discussed in Chapter 4, cumulative projects would be subject to federal, state, and local regulations (e.g., the NPDES permit, Central Coast Water Quality Control Plan or Basin Plan) that are designed to reduce stormwater runoff from project sites by promoting infiltration, minimizing impervious surfaces, and requiring a no-net increase in flows over the existing condition through hydromodification processes to improve water quality and not obstruct or conflict with Basin Plan implementation. With the cumulative projects' compliance with applicable laws and regulations and their incorporation of required construction and operational BMPs, the cumulative project impact would not be significant. Alternative 3 has incorporated a stormwater management plan and stormwater BMPs that could reduce the amount of pollutants transported to receiving waters from operation and would be subject to the same applicable laws. A

Impact HYD-C: Cumulative development would not result in a significant cumulative impact. Therefore, **the Alternative 3 contribution would not be cumulatively considerable**, which is the same as the Proposed Project.

6.11 Land Use and Planning

This section describes existing land use, outlines the regulatory framework applicable to land use and planning, and evaluates potential impacts related to land use and planning as a result of Alternative 3, Combined Facilities on Adjacent Property (Alternative). **Table 6.11-1** presents a summary of potential impacts related to land use and planning.

Table 6.11-1. Summary of Alternative 3 Impacts on Land Use and Planning

Impact	Significance before Mitigation	Mitigation	Significance after Mitigation
LUP-1. Alternative 3 would not physically divide an established community.	Less than Significant	None Required	Less than Significant
LUP-2. Alternative 3 would not conflict with applicable land use plans, policies, or regulations adopted for the purpose of avoiding or mitigating an environmental effect.	Less than Significant	None Required	Less than Significant

Notes: The impact, significance determination, and mitigation apply to Alternative 3 as a whole, considering all Project components, unless otherwise noted.

6.11.1 Existing Conditions

Regional Setting

Santa Cruz County (County) occupies approximately 600 square miles of urban and rural lands bordered by beaches and coastal bluffs along Monterey Bay, with coastal mountains and valleys to the east. The County supports a diverse range of habitats and land uses that generally include redwood forests in the mountains in the northern portion of the County, urban and residential development in the central portion, and agricultural land uses in the northwestern and southern portions. Most of the population in the County is centrally located in urban and residential development.

Land uses in the County are predominately open space (including agriculture), which accounts for approximately 64 percent of the land uses (169,600 acres). This is followed by lands designated for residential uses (65,152 acres, or 24.5 percent), public and institutional lands (24,252 acres, or 9.1 percent), and commercial and industrial lands (6,431 acres, or 2.4 percent) (Santa Cruz County 2022).

Alternative 3 is situated in a generally rural area of south County, and it is on the west side of State Route 1 (Highway 1) in the Coastal Zone.

The dominant land uses in the unincorporated south County region are low-density and rural residential; open space including public beaches, trails, and the Watsonville sloughs; and agriculture. The southern part of Santa Cruz County, where Buena Vista Landfill is located, is the most productive agricultural region in the County. Commercial Agriculture (CA) is the most common zoning designation in this region. Other zoning designations include Public and Community Facilities (PF); Parks, Recreation and Open Space (PR); Residential Agriculture (RA); and Special Use (SU). The Alternative 3 area and surrounding parcels are located within safety zones of the Watsonville Municipal Airport and are therefore included in the Airport Combining Zone (AIA).

Alternative 3 Setting

The Alternative 3 site is located at 1203 Buena Vista Drive (APN 052-011-11), which is immediately north of the Buena Vista Landfill. The parcel is 26.95 acres, but only 11 acres on the eastern portion of the property would be used for the combined facilities. Additionally, an approximately 2-acre portion of the County-owned landfill property to the south (the undeveloped area between the adjacent property line and Harkins Slough Road that is part of APN 052-021-33) would be used for the combined facilities ingress and egress (driveways) and improvements to the Harkins Slough Road Drainage.

Existing land uses on the 11-acre eastern portion of the property (APN 052-011-11), where the combined facilities would be located, include three large greenhouses, a packing shed, a boiler house, a bathroom, and several other miscellaneous structures associated with previous greenhouses and cattle grazing uses that are no longer occurring (**Figure 5-12a**).

The other portions of the property (APN 052-011-11) that are not proposed for development are primarily undeveloped open space. The western portion of the property is covered in grassland, with trees along the western and southern perimeter (predominately eucalyptus trees); and it was historically used for cattle grazing. The far eastern portion of the property includes oak woodland and a patch of naturalized redwood forest, sloping towards Harkins Slough, and a small residence currently occupied by a property owner.

Surrounding land uses include agricultural uses (landscape nursery, horse stables, row crops/vineyards, fallow lands) to the north; Buena Vista Drive and productive agricultural land to the west; Harkins Slough and the USFWS Wildlife Refuge to the east and southeast; and the Buena Vista Landfill to the south.

6.11.2 Regulatory Setting

This section describes the federal, state, regional, and local plans, policies, and laws relevant to land use for the Project.

Federal

The relevant federal plans, policies, and laws are described in Section 3.11.2, Regulatory Setting, under the following:

- Coastal Zone Management Act

State

The relevant state plans, policies, and laws are described in Section 3.11.2, under the following:

- California Coastal Act

Regional

The relevant regional plans, policies, and laws are described in Section 3.11.2, under the following:

- Watsonville Municipal Airport Land Use Compatibility Plan

Local

The relevant local plans, policies, and laws are described in Section 3.11.2, under the following:

- Santa Cruz County General Plan/Local Coastal Program
- Santa Cruz County Zoning Ordinance, Title 13, Title 16

Refer to Section 6.4.2 in Section 6.4, Biological Resources, for a description of the Santa Cruz County Sensitive Habitat Protection Ordinance, Riparian Corridor and Wetlands Protection Ordinance, Significant Trees Protection Ordinance, and Tree Removal Policy.

6.11.3 Methodology and Significance Thresholds

Methodology

Potential impacts related to land use and planning as a result of Alternative 3 were evaluated by comparing Project objectives and characteristics to existing plans and policies throughout the County, including General Plan and LCP land use and zoning designations and policies. Mitigation measures required throughout this EIR for identified areas of potentially significant impacts were taken into consideration in the evaluation of consistency with applicable policies and plans.

Significance Thresholds

As stated in the Chapter 6 introduction, the significance thresholds used in this analysis are based on Appendix G of the California Environmental Quality Act (CEQA) Guidelines, which provides a sample Initial Study checklist that includes a number of factual inquiries related to the subject of land use and the other environmental topics. The letters and thresholds presented below correspond with the questions in the Appendix G Initial Study checklist.

For the purpose of this EIR and consistent with the analysis for the proposed project, a significant impact would occur if implementation of Alternative 3 would:

A. Physically divide an established community.

B. Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.

6.11.4 Alternative 3 Impact Analysis

For each impact, the overall conclusion or significance determination is presented at the end of the discussion, as well as in parentheses at the end of the numbered impact statement.

As described in Section 5.2.3, Alternative 3. Combined Facilities on Adjacent Property (in Chapter 5, Project Alternatives), Alternative 3 includes the following components:

- Transfer Station
- Organics Diversion Facility
- Recycling Center
- Scale House
- General Plan/Local Coastal Program Land Use Designation and Zoning Map Amendments

Additionally, Landfill Closure and Revegetation, including the Environmental Enhancement and Restoration Features, would be implemented as described in Chapter 2, Section 2.4, Project

Components; and the potential impacts of those features are included in the analysis in Section 3.11.4. The additional enhancement and restoration features included as part of Alternative 3 (described in Section 5.2.3 under Additional Design Information) are considered in the evaluation below.

Threshold A:	Physically divide an established community.

Impact LUP-1 ALTERNATIVE 3 WOULD NOT PHYSICALLY DIVIDE AN ESTABLISHED COMMUNITY. (LESS THAN SIGNIFICANT)

Alternative 3 would include new combined facilities (Transfer Station, Organics Diversion Facility, Recycling Center, Scale House) on the adjacent property, which is located immediately north of the Buena Vista Landfill and Harkins Slough Road.

Implementation of Alternative 3 would not create any new land use barriers or otherwise divide or disrupt the physical arrangement of the surrounding community. Harkins Slough Road would continue to provide access to the Buena Vista Migrant Center (farmworker housing and childcare facility) and the Housing Authority's affordable housing complex known as Tierra Alta, southeast of the landfill, and the Rountree Medium (Jail) Facility south of the landfill. As discussed in Section 6.17, Transportation, Harkins Slough Road has adequate capacity and sight distance for vehicles entering and exiting the combined facilities.

Therefore, Alternative 3 (Combined Facilities on Adjacent Property), including the associated General Plan/LCP land use designation and zoning map amendments and environmental enhancement/restoration features, would not physically divide established communities. The impact would be **Less than Significant.** No mitigation is required.

Threshold B:	Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.

Impact LUP-2 ALTERNATIVE 3 WOULD NOT CONFLICT WITH APPLICABLE LAND USE PLANS, POLICIES, OR REGULATIONS ADOPTED FOR THE PURPOSE OF AVOIDING OR MITIGATING AN ENVIRONMENTAL EFFECT. (LESS THAN SIGNIFICANT)

The Alternative 3 site is zoned Commercial Agriculture-Airport Influence Area Combining District (CA-AIA). As described in Section 5.2.3, Alternative 3 includes a General Plan/LCP Amendment to redesignate the entirety of parcel APN 052-011-11 and APN 052-021-33 to Public Facility/Institutional (P) and amend the County Zone District Map to Public Facilities-Airport Influence Area Combining District (PF-AIA).

To address potential conflicts with any applicable land use plan, policy, or regulations, Alternative 3 is evaluated for consistency with specific relevant policies—the purpose of which is to avoid or mitigate an environmental effect—in the County General Plan/LCP. As demonstrated in **Table 6.11-2,** Santa Cruz County General Plan/Local Coastal Program Policy Consistency Analysis, Alternative 3 would not conflict and therefore would be consistent with most of the applicable policies (63 of the 68 policies discussed). **Table 6.11-2** includes the consistency determination for both Alternative 3 and the Proposed Project to facilitate comparison.

Alternative 3, as well as the Proposed Project, would be inconsistent with policies related to the protection of sensitive habitat areas, riparian corridors, and wetlands. As discussed in Section 6.4, Biological Resources, the impacts of Alternative 3 would be mitigated to a less than significant level.

In summary, Alternative 3 (Combined Facilities on Adjacent Property), including the associated General Plan/LCP land use designation and zoning map amendments and environmental enhancement/restoration features, would be consistent with most applicable policies (63 of 68) and therefore would not cause a significant impact due to a conflict with a land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. This impact would be **Less than Significant**. No mitigation is required.

6.11.5 Cumulative Impact Discussion

The potential cumulative impacts of Alternative 3 would be similar to those of the Proposed Project, which are presented in Chapter 4, Other CEQA-Required Discussions.

As discussed in Chapter 4, the Sustainability Update EIR concluded that cumulative development would not combine to have a significant cumulative effect related to physical division of established communities. Implementation of Alternative 3 would not create any new land use barriers or otherwise divide or disrupt the physical arrangement of the surrounding community. In addition, the Sustainability Update EIR concluded that impacts related to conflicts with land use plans, policies, and regulations would generally not combine to result in cumulative impacts. The determination of significance related to these issues is based on site-specific conflicts within each jurisdiction and is addressed on a project-by-project basis, and the cumulative impact would not be significant. Further, cumulative development projects would be required to comply with applicable policies established by the County General Plan and other adopted planning documents that limit the bounds and extent of development.

Impact LUP-C: Cumulative development would not result in a significant cumulative impact. Therefore, the **Alternative 3 contribution would not be cumulatively considerable**, which is the same as the Proposed Project.

Table 6.11-2. Santa Cruz County General Plan/Local Coastal Program Policy Consistency Analysis

Santa Cruz County General Plan Policy	Consistency Discussion (Provides both Proposed Project & Alternative 3 for Comparison)
Built Environment Element	
BE-4.2.2 (LCP) Site Design for Environmental Protection. Review new developments for compliance with SCCC Title 16 environmental ordinances. Siting and designs should minimize grading, avoid or provide mitigation for geologic hazards and sensitive habitats, reduce fire risk, conform to the physical constraints and topography of the site, and maintain natural drainage patterns. Streams should remain daylighted rather than piped, where possible, with development incentives or variances allowed to ensure feasibility and property owner support for open streams. Development on slopes should be low profile and step down the hillside. Unnecessary grading for the purpose of meeting building height restrictions is prohibited.	**PROPOSED PROJECT** Consistent. The Project has been designed to minimize the required grading to minimize impacts to geological hazards and sensitive habitats, reduce fire risk, conform to the physical constraints and topography of the site, and maintain natural drainage patterns. For example, the Harkins Slough Road realignment near the oak woodland to the east would have a 2:1 slope, rather than a 3:1 slope or retaining wall that would require a large construction footprint and remove more trees. The grading required for the landfill closure and revegetation would be in compliance with regulatory requirements for landfill closure. Please refer to Sections 3.4, Biological Resources, 3.7, Geology and Soils, and 3.20, Wildfire, for additional discussions. **ALTERNATIVE 3** Consistent. Alternative 3 has been designed to minimize the required grading to minimize impacts to geological hazards and sensitive habitats, reduce fire risk, conform to the physical constraints and topography of the site, and maintain natural drainage patterns. For example, the combined facilities would be located on the most disturbed portion of the parcel (APN 052-011-11) where greenhouses and other existing structures are currently located, avoiding impacts to the oak woodland in the far east portion and to the undisturbed grassland on the western third of the parcel. The main entrance/exit from Harkins Slough Road would avoid all the existing oak woodland on the north side of Harkins Slough Road (APN 052-021-33). The stormwater ponds would be located on the south side of the combined facilities, outside the perimeter security fencing, with connection to an identified wildlife corridor extending along the north side of Harkins Slough Road, from the west side (where the Harkins Slough Road Tributary and undisturbed grasslands are located) to the east side (where oak woodland and the Wildlife Refuge are located). Additionally, the Project has been designed to take advantage of the site's topography by locating the transfer station at the low point in the center of the site, which minimizes the required grading (i.e., Alternative 3 requires excavation up to 10 feet deep for foundation/footers, whereas the Proposed Project requires excavation up to 25 feet deep for full depth tunnels). Please refer to Sections 6.4, Biological Resources, 6.7, Geology and Soils, and 6.20, Wildfire, for additional discussions.

Table 6.11-2. Santa Cruz County General Plan/Local Coastal Program Policy Consistency Analysis

Santa Cruz County General Plan Policy	Consistency Discussion (Provides both Proposed Project & Alternative 3 for Comparison)
BE-4.2.4 (LCP) Wildlife-Compatible Development. Limit reflectivity, glare, and artificial light pollution from buildings and sites as practicable in order to preserve dark skies and reduce impacts to wildlife, especially in rural areas and over marine waters. Encourage landscapes that provide habitat for birds and wildlife as appropriate based on the location and intensity of development. Encourage the use of native plants and discourage the use of invasive species.	**PROPOSED PROJECT** Consistent. The Project would limit reflectivity, glare, and artificial light pollution from new facilities. For example, the lighting for Transfer Station A in the northeast corner near the Wildlife Refuge (as well as Transfer Station B in the existing landfill maintenance yard) would be kept to a minimum to what is required for safety and operational needs during normal operating hours from 7:00 am to 5:00 pm, and it would be low level and directed away from the adjacent Wildlife Refuge. There could be minimal lighting installed for security at the optional equipment parking and storage area on Rountree Lane, which is located further from the Wildlife Refuge. There is no planned lighting for ODF Options 1 and 2, optional road improvements, or for landfill closure and revegetation. The Project does not include landscaping at existing or new facilities, but it does include several environmental enhancement and restoration features that support and encourage wildlife movement. As described in Section 2.4, these include: Restoration of Harkins Slough Road Drainage, Culvert Modification with Small Wildlife Crossing at Main Entrance, Culvert Replacement under Internal Roadway to Old Landfill, and a Wildlife Movement Corridor planted with native vegetation, where feasible, between Gallighan Slough and Harkins Slough. Also, refer to Section 3.4 (Impact BIO-4). **ALTERNATIVE 3** Consistent. Alternative 3 would limit reflectivity, glare, and artificial light pollution from new facilities. Exterior site lighting would be kept to a minimum to what is required for safety and operational needs during normal operating hours from 7:00 am to 5:00 pm, and it would be low level and directed downward and away from adjacent land. Additionally, the large structures in the combined facilities would be earth tones to minimize reflectivity and glare, and the use of reflective materials would be minimized. Alternative 3 does not include landscaping, but it does include several environmental enhancement and restoration features that support and encourage wildlife movement. As described above for Policy BE-4.2.2, the Alternative 3 design avoids oak woodland and preserves an existing east-west wildlife corridor to enable movement in the evening. As described in Section 5.2.3 for the Alternative 3 site, these include: Creation of Open Drainage along North-South Roadway, Reorientation and Expansion of Existing Wetland Ditch, and Culvert and Fencing Designed for Wildlife Movement. As described in Section 2.4 for the landfill site, these include: Restoration of Harkins Slough Road Drainage, Culvert Modification with Small Wildlife Crossing at Main Entrance, Culvert Replacement under Internal

Table 6.11-2. Santa Cruz County General Plan/Local Coastal Program Policy Consistency Analysis

Santa Cruz County General Plan Policy	Consistency Discussion (Provides both Proposed Project & Alternative 3 for Comparison)
	Roadway to Old Landfill, Wildlife Movement Corridor between Gallighan Slough and Harkins Slough, and Wildlife Directional Features at Key Locations.
BE-4.2.5 (LCP) Stormwater Runoff Reduction. Encourage the use of design elements such as permeable pavers and bioswales, in order to minimize impervious area and to reduce and pretreat stormwater flowing off site into the public storm drain system, and to improve the quality of stormwater infiltrating into the groundwater supply both on- and off-site.	**PROPOSED PROJECT** Consistent. The Project would result in an increase in impervious surfaces compared to existing conditions. The Project includes stormwater filtration measures to prevent unwanted solid waste or contaminated stormwater from entering the stormwater system, including Stormceptors or filtration inlet bags. Refer to Section 3.10, Hydrology and Water Quality, for additional discussion on stormwater runoff reduction. **ALTERNATIVE 3** Consistent. Alternative 3 would result in an increase in impervious surfaces compared to existing conditions. Alternative 3 includes stormwater basins/wetlands and filtration measures as part of the collection system to prevent unwanted solid waste or contaminated stormwater from entering the stormwater system and natural drainages. A number of options for filtration could be used such as, but not limited to, filter socks or bags, Stormceptor units, drop inlets, and oil-water separators.
BE-5.4.2 (LCP) Airport Land Use Compatibility. All land uses and development activity within the AIA must comply with the height, use, noise, safety, and density criteria that are compatible with airport operations as established by the latest version of the California Department of Transportation Division of Aeronautics Airport Land Use Planning Handbook (Handbook), and any applicable federal aviation regulations, including, but not limited to, Part 77 (commencing with Section 77.1) of Title 14 of the Code of Federal Regulations.	**PROPOSED PROJECT** Consistent. The Project area is located within the designated Airport Influence Area (AIA) for the Watsonville Municipal Airport. Specifically, the Project area is located within the boundaries of the Safety Compatibility Zone 6 or the Traffic Pattern Zone (Santa Cruz County 2024a). The Project area is also located in the Overflight Zone. The Project is not located within the 60-decibel Community Noise Equivalent Level contour, and no sensitive receptors would be subject to adverse aviation noise impacts. The maximum allowable elevation or height of the landfill, in accordance with the permits and the restrictions of the Overflight Zone, is 200 feet. The elevation for the various Project components and associated structures would be below the 200-foot limit. Refer to Section 3.9, Hazards and Hazardous Materials, for additional discussion. The FAA No Hazard Determination has been issued to the County. **ALTERNATIVE 3** Consistent. Alternative 3 is located within the designated Airport Influence Area (AIA) for the Watsonville Municipal Airport. Specifically, the Alternative 3 site is located within the boundaries of the Safety Compatibility Zone 6 or the Traffic Pattern Zone

Table 6.11-2. Santa Cruz County General Plan/Local Coastal Program Policy Consistency Analysis

Santa Cruz County General Plan Policy	Consistency Discussion (Provides both Proposed Project & Alternative 3 for Comparison)
	(Santa Cruz County 2024a). A portion of the Alternative 3 area is located within the 60 dBA CNEL contour and the site is subject to overflight. This noise level is normally compatible standard for sensitive receptors. Therefore, Alternative 3 would not result in any new receptors within an area with the potential to be exposed to airport noise in excess of the normally compatible standard for sensitive receptors. Additionally, Alternative 3 is not a sensitive receptor and does not include any components that would have the potential to introduce new sources of aircraft noise. The maximum allowable elevation or height of the landfill, in accordance with the permits and the restrictions of the Overflight Zone, is 200 feet. The elevation for the various components and associated structures would be below the 200-foot limit. Refer to Section 6.9, Hazards and Hazardous Materials, for additional discussion. An FAA No Hazard Determination would be requested by the County.
BE-5.4.4 (LCP) Land Use Limitations in Airport Safety Zones. New development within the airport safety zones must comply with the uses, densities, and intensities as established by the Handbook and federal law.	**PROPOSED PROJECT** Consistent. The Project area is located within the designated AIA for Watsonville Municipal Airport. Specifically, the Project area is located within the boundaries of the Safety Compatibility Zone 6 or the Traffic Pattern Zone (Santa Cruz County 2024a). The Project components (Transfer Stations A and B, Organics Diversion Facility Options 1 and 2, landfill closure and revegetation, and the optional elements of internal access road improvements, scale house upgrades, recycling center upgrades, and parking and equipment storage area) are allowable uses within the Watsonville Safety Compatibility Zone 6. **ALTERNATIVE 3** Consistent. Alternative 3 would be the same as the Proposed Project.
BE-5.4.10 (LCP) Airspace Obstructions. Limit the height of buildings, antennas, other types of structures, and trees so as not to pose a potential hazard to flight. The criteria for determining the acceptability of a project or other condition with respect to height is determined by the standards set forth in Federal Aviation Regulations Part 77, Subpart C, Objects Affecting Navigable Airspace; the United States Standard for Terminal Instrument Procedures; and applicable airport design standards published by the Federal Aviation Administration (FAA).	**PROPOSED PROJECT** Consistent. The maximum allowable elevation or height of the landfill, in accordance with the permits and the restrictions of the Overflight Zone, is 200 feet. The elevation for the various Project components and associated structures would be below the 200-foot limit. Refer to Section 3.9 for additional discussion. **ALTERNATIVE 3** Consistent. Alternative 3 would be the same as the Proposed Project.
BE-6.2.1 Environmental Review Required. Require environmental review per CEQA (California Public Resources Code, Title 13, Sections 21000–21178; and California	**PROPOSED PROJECT** Consistent. The Project would require a General Plan/Local Coastal Program Amendment and a change to the General Plan/Local Coastal Program Land Use

Table 6.11-2. Santa Cruz County General Plan/Local Coastal Program Policy Consistency Analysis

Santa Cruz County General Plan Policy	Consistency Discussion (Provides both Proposed Project & Alternative 3 for Comparison)
Code of Regulations, Title 14, Sections 15000-15387) and associated guidelines for all non-exempt development projects, rezonings, and General Plan Amendments.	Designation maps to redesignate the 35 acres on parcel APN 052-021-33 currently designated Agriculture (A) to Public Facility/Institutional (P). This Environmental Impact Report (EIR) is a project-specific EIR being prepared for the Buena Vista Landfill Redevelopment Project. **ALTERNATIVE 3** Consistent. Alternative 3 would require a General Plan/Local Coastal Program Amendment and a change to the Land Use Designation maps to redesignate the 26.95 acres of parcel APN 052-011-11, as well as the 35 acres on parcel APN 052-021-33, currently designated Agriculture (A) with CA-AIA zoning to Public Facility/Institutional (P) with PF-AIA zoning. This EIR is a project-specific EIR being prepared for the Buena Vista Landfill Redevelopment Project.
BE-6.2.2 Mitigation Measures Required. Require mitigation measures as identified through the environmental review process to be incorporated into all approved projects as conditions of approval or require adoption of statements of overriding considerations if mitigations cannot be implemented to reduce environmental impacts below significance thresholds.	**PROPOSED PROJECT** **Consistent.** This project-specific EIR is being prepared for the Buena Vista Landfill Redevelopment Project. Mitigation measures have been identified in the following sections and will be incorporated into the conditions of approval for the Proposed Project. A list of the mitigation measures is provided in the Executive Summary, **Table ES-2**. ▪ 3.4, Biological Resources ▪ 3.5, Cultural Resources ▪ 3.7, Geology and Soils ▪ 3.13, Noise ▪ 3.18, Tribal Cultural Resources **ALTERNATIVE 3** **Consistent.** This project-specific EIR is being prepared for the Buena Vista Landfill Redevelopment Project. Mitigation measures have been identified in the following sections and will be incorporated into the conditions of approval for Alternative 3. A list of the mitigation measures is provided in the Executive Summary, **Table ES-2**. ▪ 6.2, Agricultural Resources ▪ 6.4, Biological Resources ▪ 6.5, Cultural Resources ▪ 6.7, Geology and Soils ▪ 6.13, Noise ▪ 6.18, Tribal Cultural Resources

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Santa Cruz County General Plan Policy	Consistency Discussion (Provides both Proposed Project & Alternative 3 for Comparison)
Access and Mobility Element	
AM-6.2.1 Level of Service Criteria. Require development projects to provide multimodal roadway improvements necessary to achieve a minimum level of service (LOS) of "D," except for those where a lesser LOS has been accepted by the County pursuant to the criteria specifically identified in Table 3-2 below. When development is proposed on roads where a LOS E or F standard has been accepted, require feasible mitigation in the form of road improvements, a fair share contribution to a road improvement program, or other in-lieu mitigation for the transportation system.	**PROPOSED PROJECT** **Consistent.** As discussed in Section 3.17, Transportation, and described in Appendix L, Transportation Impact Analysis, all study intersections are anticipated to operate at an acceptable LOS during the AM and PM peak hour, and the Project is not anticipated to create a significant traffic adverse effect, under all the conditions evaluated, including: Existing, Interim (2032), Interim (2032) Plus Project, Cumulative (2045), and Cumulative (2045) Plus Project. Additionally, there is sufficient queuing storage for all movements at study intersections. The Project is not anticipated to increase the vehicle queue and create an adverse effect to the study intersections during AM and PM peak hours. **ALTERNATIVE 3** **Consistent**. Alternative 3 would be the same as the Proposed Project. Please refer to Section 6.17, Transportation, and Appendix T.
AM-6.2.3 Trip Generation Reductions. Allow for the reduction of trip generation rates for the purposes of VMT analysis if proposed development can demonstrate lower than average trip rates through land use siting close to high quality transit, transportation demand management measures, providing a mixture of uses on site, or other factors that have been demonstrated through research to produce lower trip rates than Institute of Traffic Engineers (ITE) standard trip rates.	**PROPOSED PROJECT** **Consistent.** As discussed in Section 3.17, Transportation, a Vehicle Miles Traveled (VMT) screening was conducted for the Project. The County's VMT Guidelines provide details on appropriate screening thresholds that can be used to identify when a proposed land use project is anticipated to result in a less than significant VMT impact without conducting a more detailed VMT analysis. The Small Project screening criteria apply to projects with low trip generation per existing CEQA exemptions. Projects generating less than 110 net new trips per day are presumed to have a less than significant VMT impact and require no further analysis. The employee daily trip estimates from Institute of Transportation Engineers (ITE), 11th Edition for Small Office Buildings (ITE 712) are summarized in Section 3.17 (**Table 3.17-4**). ITE estimates the new office space constructed as Project workspace would generate a total of 86 weekday vehicle trips per day, which is below the small project screening threshold of 110 net new trips. Therefore, no additional VMT analysis is needed. It is also important to note that Project operation is not anticipated to generate any "new" vehicle trips, as the waste management workforce is expected to stay the same. Thus, the ITE trip generation rates estimate trips for the existing workforce, not new trips generated by the Project.

Table 6.11-2. Santa Cruz County General Plan/Local Coastal Program Policy Consistency Analysis

Santa Cruz County General Plan Policy	Consistency Discussion (Provides both Proposed Project & Alternative 3 for Comparison)
	ALTERNATIVE 3 **Consistent.** As discussed in Section 6.17, Transportation, a Vehicle Miles Traveled (VMT) screening was conducted for Alternative 3. The County's VMT Guidelines provide details on appropriate screening thresholds that can be used to identify when a proposed land use project is anticipated to result in a less than significant VMT impact without conducting a more detailed VMT analysis. The Small Project screening criteria apply to projects with low trip generation per existing CEQA exemptions. Projects generating less than 110 net new trips per day are presumed to have a less than significant VMT impact and require no further analysis. The employee daily trip estimates from Institute of Transportation Engineers (ITE), 11th Edition for Small Office Buildings (ITE 712) are summarized in Section 6.17 (**Table 6.17-4**). ITE estimates the new office space constructed as Project workspace would generate a total of 78 weekday vehicle trips per day, which is below the small project screening threshold of 110 net new trips. Therefore, no additional VMT analysis is needed. It is also important to note that operation is not anticipated to generate any "new" vehicle trips, as the waste management workforce is expected to stay the same. In addition, the other trips associated with Alternative 3 involve transfer trucks, which are commercial semi-trucks hauling 40- to 55-foot enclosed trailers. These transfer trucks would transfer the consolidated large solid waste from the Alternative 3 site to the ReGen Monterey Landfill facility located 19 miles south in the City of Marina. The amount of anticipated waste arriving at the Alternative 3 site is expected to increase with the increase in population and employment within Santa Cruz County. This increase in waste would be associated with an increase in trips to the Alternative 3 site. However, it should be noted that Alternative 3 itself would not generate this additional traffic and as such would not cause any increase in VMT. Thus, the ITE trip generation rates estimate trips for the existing workforce, not new trips generated by Alternative 3.
Agriculture, Natural Resources and Conservation Element	
Policy ARC-1.3.1 Conversion of Commercial Agricultural Lands. Consider conversion and/or development of commercial agricultural lands to non-agricultural uses only when all of the following criteria are met: ▪ It is determined that the land is not viable for farming or for other allowable agriculture uses, and that it is not likely to become viable in the near future (See Policy ARC-1.3.2); and	**PROPOSED PROJECT** **Consistent.** A portion of the Proposed Project area (35 acres) is zoned Commercial Agriculture and Airport Combining Zone (CA-AIA), and no portion of the Project area is enrolled in a Williamson Act contract. The 35-acre portion of the Project area zoned CA-AIA is not currently being farmed or grazed, and there is no history of conventional farming or use of the property as rangeland (**Appendix B**). However, as currently zoned, some of the Project components and uses (Transfer Station A, ODF Option 1, and optional equipment parking and storage area) would conflict with the

Table 6.11-2. Santa Cruz County General Plan/Local Coastal Program Policy Consistency Analysis

Santa Cruz County General Plan Policy	Consistency Discussion (Provides both Proposed Project & Alternative 3 for Comparison)
▪ Findings are made that new information has been presented to demonstrate that the conditions on the land in question do not meet the criteria for commercial agricultural land; and ▪ The conversion of such land or use to non-agricultural uses will not impair the viability of, or create potential conflicts with, other commercial agricultural lands in the area; and ▪ The conversion of such land is concentrated on the site or parcel to the minimum area necessary to achieve the objectives of the proposed conversion.	allowed uses under the existing zoning for commercial agricultural use. The Project includes updates to land use designations of parcel APN 052-021-33, including Agricultural Resource Map, General Plan/LCP Program Map, and Zoning Map amendments, to reflect and support the historical use of the property as a landfill and the proposed landfill redevelopment. An Agricultural Viability Study (**Appendix B**) was prepared as an agriculture-based evaluation of the condition and status of the 35 acres located in the eastern portion of land within APN 052-021-33. Based on the analysis, the study concluded that the 35-acre area was never wholly appropriate for use as designated Commercial Agriculture (CA). In addition, the study determined that the poor and highly variable soil quality, native vegetation, proximity to the wildlife refuge, and topography were not and are not suitable for farming, nor would it be suitable for farming upon cessation of the existing landfill activities. Refer to Section 3.2, Agricultural Resources, for a discussion of potential impacts and mitigation measures. **ALTERNATIVE 3** **Consistent.** The Alternative 3 site, including 11 acres within parcel APN 052-011-11 and 2 acres within APN 052-021-33, is zoned Commercial Agriculture and Airport Combining Zone (CA-AIA), and no portion of the Alternative 3 site is enrolled in a Williamson Act contract. The 2-acre portion (APN 052-021-33) is not currently being farmed or grazed, and there is no history of conventional farming or use of the area as rangeland (**Appendix B**). However, the 11-acre portion (APN 052-011-11) has been historically used for cattle grazing and until 2016 was used for agricultural production in greenhouses (**Appendix N**). As currently zoned, the combined facilities, as a public facility use, would conflict with the existing commercial agricultural zoning designation. Alternative 3 includes updates to designations of both parcels, APN 052-011-11 and APN 052-021-33, including Agricultural Resource Map, General Plan/LCP Program Map, and Zoning Map amendments to Public Facilities (PF), which supports the combined public facilities use. Refer to Section 6.2, Agricultural Resources, for a discussion of potential impacts and mitigation measures. As described above for the Proposed Project, an Agricultural Viability Study (**Appendix B**) was prepared for the 35 acres located in the eastern portion of land within APN 052-021-33, including the 2-acre portion which would be included in the Alternative 3 site; and the study determined that the poor and highly variable soil quality, native vegetation, proximity to the wildlife refuge, and topography were not

Table 6.11-2. Santa Cruz County General Plan/Local Coastal Program Policy Consistency Analysis

Santa Cruz County General Plan Policy	Consistency Discussion (Provides both Proposed Project & Alternative 3 for Comparison)
	and are not suitable for farming, nor would it be suitable for farming upon cessation of the existing landfill activities. An additional Agricultural Viability Study (**Appendix N**) was prepared for the 26.95 acres of land located in APN 052-011-11. The study concluded that the 11-acre portion where the combined facilities would be located (the Alternative 3 site) included similar soil conditions observed in the viability study prepared for the Proposed Project, and that the Alternative 3 site is not viable for commercial farming due to soil characteristics that include poor irrigability, high erosion, and which are susceptible to saturation and flooding. The conditions at the site therefore do not meet the criteria for designation as commercial agricultural land. The Alternative 3 project, as designed and implemented, would include measures to protect adjacent commercial agricultural uses, and is sited to occupy just a portion of the overall parcel. The Alternative 3 project is therefore consistent with the policy criterion for Conversion of Commercial Agricultural Lands.
ARC-1.3.2 Determining Agricultural Viability. Require a viability study to be conducted in conjunction with an application that proposes to convert commercial agricultural and prime agricultural lands to non-agricultural land uses, to include but not limited to an economic feasibility evaluation which contains at least: ▪ An analysis of the gross revenue from the agricultural products grown in the area for the five years immediately preceding the date of filing the application. ▪ An analysis of the operational expenses, excluding the cost of land, associated with the production of agricultural products grown in the area for the five years immediately preceding the date of filing the application. ▪ An identification of the geographic area used in the analyses. The area shall be of sufficient size to provide an accurate evaluation of the economic feasibility of agricultural uses for the land stated in the application. Recommendations regarding viability shall be made by the Agricultural Policy Advisory Commission based on evaluation of the viability study and the following criteria: parcel size, sizes of adjacent parcels, degree of non-agricultural development in the area, inclusion of the parcel in utility assessment districts, soil capabilities and topography, water availability and quality, and proximity to other agricultural use.	**PROPOSED PROJECT** **Consistent.** As stated above, an Agricultural Viability Study (**Appendix B**) was prepared for the 35 acres located in the eastern portion of land within APN 052-021-33 and concluded that the 35-acre area was never wholly appropriate for use as designated Commercial Agriculture (CA). An economic feasibility evaluation was not included in the viability study, because the area analyzed has not been in agricultural production since the County approved landfill expansion in 1985 (over 40 years ago). The County's Agricultural Policy Advisory Commission (APAC) would review the viability study and make recommendations as part of the approval process. **ALTERNATIVE 3** **Consistent.** An Agricultural Viability Study was prepared for APN 052-011-11 as part of the Alternative 3 site (**Appendix N**) and found the soils are poor and very poor, are prone to saturation and flooding, and are expected to have low potential for crop productivity. The study did not include an economic feasibility evaluation of the site because the area analyzed has not been in agricultural production since 2016 (10 years ago). Additionally, the Agricultural Viability Study which was prepared for the Proposed Project **(Appendix B)** included evaluation of the 2-acre portion of APN 052-021-33 which would also be utilized in the Alternative 3 site and assessed similar

Table 6.11-2. Santa Cruz County General Plan/Local Coastal Program Policy Consistency Analysis

Santa Cruz County General Plan Policy	Consistency Discussion (Provides both Proposed Project & Alternative 3 for Comparison)
	challenging soil conditions as stated above and concluded that the site area was never wholly appropriate for designation as commercial agricultural use. The County's Agricultural Policy Advisory Commission (APAC) would review the evaluations made in the Viability Studies and make recommendations as part of the discretionary approval process.
ARC-1.4.1 Agricultural Buffers Required. In order to prevent or minimize potential land use conflicts, nonagricultural habitable uses such as residences (excluding farmworker housing), habitable accessory structures and non-agricultural commercial businesses that are located on land adjacent to a parcel in the Commercial Agriculture or Agriculture Preserve zone districts are required to provide a 200-foot buffer setback to the property line of the adjacent commercial agricultural parcel, unless an exception, as provided in ARC-1.4.2, is approved to reduce the extent of the agricultural buffer. **ARC-1.4.2 (LCP) Reduced Agricultural Buffer Setbacks**. Any reduction in the 200-foot agricultural buffer setback may only occur as approved by the APAC or other County decisionmaker, as established by the Agricultural Land Preservation and Protection ordinance.	**PROPOSED PROJECT** **Consistent.** The Proposed Project does not propose any non-agricultural habitable uses such as residences, nor commercial business operations. The Proposed Project includes public facility operations (e.g., waste transfer, organics diversion, recycling) which would be located more than 200 feet from adjacent commercial agricultural properties. Although Transfer Station A in the northeast corner could be within 200 feet of land zoned for Commercial Agriculture, the land to the east is a Wildlife Refuge and would not be used for agricultural purposes, and the land to the north is abandoned greenhouses with no planned agricultural production. Additionally, Transfer Station A would be enclosed with fencing to prevent potential land use conflicts. Also refer to Section 3.2, Agricultural Resources. **ALTERNATIVE 3** **Consistent.** Alternative 3 does not propose any non-agricultural habitable uses such as residences, nor commercial business operations. However, Alternative 3 does include public facility operations (e.g., waste transfer, organics diversion, recycling), which are considered areas of intensive human use and are subject to agricultural buffer setback requirements. The transfer station and organics diversion facility (ODF) buildings would be within 200 feet of the existing landscape nursery on land zoned for Commercial Agriculture to the north. The waste transfer, organics diversion, and recycling operations would all be within enclosed structures, and the trucks and vehicles carrying waste to these facilities would be covered as required by law. As discussed in Section 6.2, Agricultural Resources, where development is proposed within the 200-foot agricultural buffer setback, the Alternative 3 project would include solid fencing and a vegetative barrier, as prescribed by County Code and subject to approval by the Agricultural Policy Advisory Commission (APAC). Refer to Section 6.2 for additional discussion relating to the solid fencing and vegetative barrier as a mitigation measure (AG-2).

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Santa Cruz County General Plan Policy	Consistency Discussion (Provides both Proposed Project & Alternative 3 for Comparison)
ARC-3.1.3 (LCP) Environmentally Sensitive Habitat Areas (ESHA). Evaluate sites proposed for development within the coastal zone for the presence of ESHA, within the categories of habitat areas described in ARC-3.1.2(d) through (j), and other categories that may meet the Coastal Act Section 30107.5 definition of ESHA. Areas confirmed to be ESHA may only be developed for uses dependent on such resources in these habitats within the Coastal Zone, unless the other uses are: (1) consistent with sensitive habitat protection policies and serve a specific purpose beneficial to the public; (2) determined through environmental review that any adverse impacts on the resource will be completely mitigated and there is no feasible less-damaging alternative; and (3) legally necessary to allow a reasonable economic use of the land, and there is no feasible less-damaging alternative	**PROPOSED PROJECT** **Inconsistent.** As discussed in Section 3.4, the Proposed Project would impact coast live oak woodland and, minimally, Harkins Slough Road Drainage, which are considered Coastal Act/LCP ESHA, from construction of Transfer Station A and the realignment of Harkins Slough Road. The project has been designed to minimize this impact to the extent feasible as described in Section 2.4 under Harkins Slough Road Realignment and in Section 3.4; however, the Project is not considered an allowable resource-dependent use within ESHA, nor does it fulfill all of the three conditions listed in the column to the left. Therefore, the Project would be inconsistent with General Plan/LCP Policy ARC-3.1.3. An exception may be granted by the Decision-Making Body[1] if, as described in detail in Section 3.4.2 Regulatory, and under Thresholds B, C, and E of Section 3.4.4, the following findings can be made: (1) That adequate measures will be taken to ensure consistency with the purpose of this chapter to minimize the disturbance of sensitive habitats; and (2) One of the following situations exists: (a) The exception is necessary for restoration of a sensitive habitat; or (b) It can be demonstrated by biotic assessment, biotic report, or other technical information that the exception is necessary to protect public health, safety, or welfare. The Proposed Project, or the least environmentally damaging alternative, may qualify for an exception to ARC-3.1.3, because the Project is necessary to protect public health, safety, and welfare (see 2b above) through the ongoing provision of public waste management services. **ALTERNATIVE 3** **Inconsistent.** As discussed in Section 6.4, Biological Resources, Alternative 3 would result in impacts to a ditch wetland, which is considered a Coastal Act/LCP ESHA, for the construction of the combined facilities and stormwater management infrastructure. Alternative 3 has been designed to minimize this impact to the extent feasible and would ultimately expand the wetland feature, as described in Section 5.2.3 under Environmental Enhancement and Habitat Restoration Features and in Section 6.4. However, Alternative 3 is not considered an allowable resource-

[1] Decision-Making Body means the Zoning Administrator, Planning Commission, or Board of Supervisors, whichever body is considering the development permit, when biotic review is concurrent with review of a development permit. When a biotic permit is required, the Decision-Making Body shall be the Planning Director.

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	dependent use within ESHA, nor does it fulfill all of the three conditions listed in the column to the left. Therefore, Alternative 3 would be inconsistent with General Plan/LCP Policy ARC-3.1.3. As described above, under the Proposed Project, Alternative 3, or the least environmentally damaging alternative, may qualify for an exception to ARC-3.1.3, because the project is necessary to protect public health, safety, and welfare (see 2b above) through the ongoing provision of public waste management services.
ARC-3.1.6 (LCP) Development Within Sensitive Habitats. Sensitive habitats shall be protected against any significant disruption of habitat values, and any proposed development within or adjacent to these areas must maintain or enhance the functional capacity of the habitat. Reduce in scale, redesign, or, if no other alternative exists, deny any project that cannot sufficiently mitigate significant adverse impacts on sensitive habitats unless approval of a project is legally necessary to allow a reasonable use of the land**.**	**PROPOSED PROJECT** **Inconsistent.** As described above in the Consistency Discussion for Policy ARC-3.1.3 and in Section 3.4, development of Transfer Station A and the realignment of Harkins Slough Road would impact coast live oak woodland and, minimally, the riverine habitat of the Harkins Slough Road Drainage, both of which are considered sensitive habitat. Impacts to coast live oak woodland would be significant and unavoidable. ODF Option 2, if selected, would minimally impact a wetland swale. In addition, Project improvements are positioned adjacent to oak woodland along Harkins Slough Road and within the Wildlife Refuge, and ODF Option 2 is adjacent to wetlands and other sensitive habitats. Impacts to sensitive habitats would be minimized to the extent feasible and mitigation would be implemented to compensate for impacts. Nevertheless, the Project would be inconsistent with General Plan/LCP Policy ARC-3.1.6, as well as the County's Sensitive Habitat Ordinance (SCCC Chapter 16.32) The Proposed Project may qualify for an exception to ARC-3.1.6 as described above under ARC-3.1.3. **ALTERNATIVE 3** **Inconsistent.** As discussed above in the Consistency Discussion for Policy ARC-3.1.3 and in Section 6.4, development of the combined facilities and stormwater management infrastructure would result in minimal impacts to a ditch wetland, which is considered a sensitive habitat. In addition, Alternative 3 improvements would be positioned adjacent to coast live oak woodland and Harkins Slough Road Drainage. Impacts to sensitive habitats would be minimized to the extent feasible, and mitigation would be implemented to compensate for impacts. Nevertheless, the Project would be inconsistent with General Plan/LCP Policy ARC-3.1.6, as well as the County's Sensitive Habitat Ordinance (SCCC Chapter 16.32) The Proposed Project may qualify for an exception to ARC-3.1.6 as described above under ARC-3.1.3.

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ARC-3.1.7 (LCP) Site Design and Use Regulations. Protect sensitive habitats against any significant disruption or degradation of habitat values in accordance with the Sensitive Habitat Protection ordinance. Utilize the following site design and use regulations on parcels containing these resources, excluding existing agricultural operations: (1) Structures, when allowed, shall be placed as far from the habitat as feasible. (2) Delineate development envelopes to specify location of development in minor land divisions and subdivisions. (3) Consider use of conservation or open space easements, deed restrictions, Conditions of Approval or equivalent measures to protect that portion of a sensitive habitat on a project parcel which is undisturbed by a proposed development activity or to protect sensitive habitats on adjacent parcels. (4) Limit or restrict outdoor access of domestic animals where they threaten sensitive habitats. (5) Limit removal of native vegetation to the minimum amount necessary for structures, landscaping, driveways, septic systems and gardens; (6) Maintain regulations and impose development permit conditions of approval as warranted, to limit landscaping with invasive or exotic species and to strongly encourage or require the use of characteristic native species, as well as consistency with the Water Efficient Landscaping Ordinance.	**PROPOSED PROJECT** **Inconsistent.** Construction of Transfer Station A and the realignment of Harkins Slough Road require the displacement of coast live oak woodland, a sensitive habitat. ODF Option 2, if selected, would result in minimal impacts to a wetland swale. In addition, these improvements would occur adjacent to coast live oak woodland in the Wildlife Refuge and may degrade this important habitat. These Project components have been designed to reduce tree removal and impacts to the extent feasible. Additionally, the Project includes minimal impacts to, and restoration of, the Harkins Slough Road drainage, located on the west side of Transfer Station A, which would ultimately improve habitat values in this drainage. Proposed Environmental Enhancement and Restoration Features, as described in Section 2.4, would improve habitat conditions in other sensitive habitats within the Project Area. With the exception of Transfer Station A and the Harkins Slough Road Realignment, the Proposed Project's primary components are within developed and ruderal habitats. However, the Proposed Project would result in impacts within and adjacent to sensitive habitats and, therefore, is inconsistent with ARC-3.1.7. See also ARC-3.1.3. An exception may be authorized, as described under ARC-3.1.3 above. **ALTERNATIVE 3** **Inconsistent.** The Alternative 3 combined facilities and stormwater management infrastructure features would impact an irrigation ditch wetland, which is considered a sensitive habitat. Alternative 3 has been designed to minimize this impact to the extent feasible and would ultimately expand and improve the wetland feature, as described in Section 5.2.3 and Section 3.4. The remainder of the improvements would be located on the existing disturbed landfill facility and the most disturbed portion of the parcel (APN 052-011-11), where greenhouses and other existing structures are currently located, avoiding impacts to the oak woodland in the far east portion and to the undisturbed grassland on the western third of the parcel. The main entrance/exit from Harkins Slough Road would avoid all the existing oak woodland on the north side of Harkins Slough Road (APN 052-021-33). The stormwater basins would be located on the south side of the combined facilities, outside the perimeter security fencing, with connection to an identified wildlife corridor extending along the north side of Harkins Slough Road. Alternative 3 also includes Environmental Enhancement and Restoration Features, as described in

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	Section 5.2.3. However, Alternative 3 would result in impacts within and adjacent to sensitive habitats and is, therefore, inconsistent with ARC-3.1.7. See also ARC-3.1.3. An exception may be authorized, as described under ARC-3.1.3 above.
ARC-3.1.8 (LCP) (EJ) Chemicals Within Sensitive Habitats. Maintain regulations that restrict the use of insecticides, herbicides, or any toxic chemical substance in sensitive habitats, except when the habitat itself is threatened, an emergency has been declared, when a substantial risk to public health and safety exists, including maintenance for flood control by the CDID, or when such use is authorized pursuant to a permit issued by the Agricultural Commissioner. The responsible use of herbicides to eradicate invasive, non-native plants can be an appropriate management action in Sensitive Habitats.	**PROPOSED PROJECT** **Consistent.** The County would maintain regulations that restrict the use of toxic chemicals within and adjacent to sensitive habitats, including Channelized Gallighan Slough within the landfill property, drainages adjacent to the property (e.g., Buena Vista Drive Tributary, Harkins Slough Road Drainage), associated riparian habitats, and oak woodland in the Wildlife Refuge, and north and east of Harkins Slough Road. No proposed toxic chemical applications are planned for the Project area or adjacent land uses. Prior to the onset of construction activities, the County would be required to prepare an erosion control plan and would prepare a SWPPP in accordance with the state NPDES, which would include the implementation of best management practices (BMPs) to ensure toxic substances that may be related to construction activities would not enter sensitive environments adjacent to the trail corridor, as discussed in Section 3.10, Hydrology and Water Quality. **ALTERNATIVE 3** **Consistent.** The County would maintain regulations that restrict the use of toxic chemicals within and adjacent to sensitive habitats, including Channelized Gallighan Slough within the landfill property, drainages adjacent to the property (e.g., Buena Vista Drive Tributary, Harkins Slough Road Drainage), the ditch wetland, and oak woodland immediately south of the combined facilities along Harkins Slough Road, east and southeast of the site along Harkins Slough Road, and in the Wildlife Refuge. No proposed toxic chemical applications are planned for the Alternative 3 site nor adjacent land uses. Prior to the onset of construction activities, the County would be required to prepare an erosion control plan and would prepare a SWPPP in accordance with the state NPDES, which would include the implementation of best management practices (BMPs) to ensure toxic substances that may be related to construction activities would not enter sensitive environments adjacent to the trail corridor, as discussed in Section 6.10, Hydrology and Water Quality.
ARC-3.1.9 (LCP) Biotic Assessments. Within the following areas, require a biotic assessment as part of normal Project review to determine whether a full biotic report should be prepared by a qualified biologist, and require biotic permits as part of application reviews as may be needed: (1) Areas of biotic concern, mapped;	**PROPOSED PROJECT** **Consistent.** The Proposed Project area is within the Coastal Zone and within and adjacent to sensitive habitats including coast live oak woodland, Channelized Gallighan Slough, Buena Vista Drive Tributary, Harkins Slough Road Drainage, and associated riparian habitats. The Wildlife Refuge and Harkins Slough to the east also

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(2) Sensitive habitats, mapped and unmapped; and (3) For sites within the coastal zone, for the presence of Environmentally Sensitive Habitat Area.	support sensitive habitats. Therefore, a Biotic Assessment has been prepared (EcoSystems West 2025). Also refer to Section 3.4, Biological Resources, for further discussion. **ALTERNATIVE 3** **Consistent.** The Alternative 3 site is within the Coastal Zone and within and adjacent to sensitive habitats including coast live oak woodland, the wetland ditch, Channelized Gallighan Slough, Buena Vista Drive Tributary, Harkins Slough Road Drainage, and associated riparian habitats. The Wildlife Refuge and Harkins Slough to the east also support sensitive habitats. Therefore, a Biotic Assessment has been prepared (EcoSystems West 2026). Also refer to Section 6.4, Biological Resources, for further discussion.
ARC-3.1.13 (LCP) Wildlife Resources Beyond Sensitive Habitats. For areas which may not meet the definition of sensitive habitat contained in policy ARC-3.1.2, yet contain valuable wildlife resources (such as migration corridors or exceptional species diversity), protect these wildlife habitat values and species using the techniques outlined in policies ARC-3.1.5 and 3.1.7, or prioritize for open space designation, and use other mitigation measures or strategies identified through the environmental review process or other conservation plans and programs of the County, State and non-profit agencies	**PROPOSED PROJECT** **Consistent.** As discussed in Section 3.4, Biological Resources, the majority of the Proposed Project Study Area and surrounding lands consist of developed and ruderal habitats including the active solid waste landfill, the Rountree Medium (Jail) Facility, and the Buena Vista Migrant Center (farmworker housing and childcare facility) and Tierra Alta housing complex. The aquatic habitats within, along the margins of, and nearby the Study Area constitute more naturalized habitats that support wildlife resources. Another exception to this disturbed landscape includes the Wildlife Refuge that borders the Project area to the east. Non-native ornamental trees including eucalyptus, Monterey cypress, sweetgum, and bottlebrush are found along the margins of the Project area, including by the Rountree Medium (Jail) Facility, and bordering Buena Vista Drive and Harkins Slough Road. Non-native and ruderal grasslands are widespread along the margins of the landfill, in upland portions of the Wildlife Refuge, and on the Old Landfill. These areas contain valuable wildlife resources such as cover, shelter, foraging opportunities, and nesting and roosting substrate as well as movement habitat. As discussed in Section 3.4, potential impacts to wildlife resources would be reduced to a less than significant level with the mitigation measures identified therein. Additionally, the Project includes several enhancement and restoration features that would improve wildlife movement through the landfill property. As described in Section 2.4, these include a wildlife movement corridor between Gallighan Slough and Harkins Slough, wildlife directional features at key locations, and culvert

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	modifications under the driveway at the Main Entrance and under the internal roadway to the Old Landfill that would allow for passage of small wildlife species. **ALTERNATIVE 3** **Consistent.** As discussed in Section 6.4, Biological Resources, much of the lands surrounding the Alternative 3 Project area consist of developed and ruderal habitats, including a commercial plant nursery and horse stables to the north; and the Rountree Medium (Jail) Facility, Buena Vista Migrant Center (farmworker housing and childcare facility), and Tierra Alta housing complex to the south. The open grassland west of the combined facilities site, oak woodland south and east of the site, and aquatic habitats along the margins of and nearby the Project area constitute more naturalized habitats that support wildlife resources. Other exceptions to this disturbed landscape include the Wildlife Refuge that borders the project area to the east. Non-native ornamental trees including eucalyptus, Monterey cypress, sweetgum, and bottlebrush are found along the perimeter of the landfill, and along Buena Vista Drive and Harkins Slough Road. Non-native and ruderal grasslands are widespread along the margins of the landfill, in upland portions of the Wildlife Refuge, and on the Old Landfill. These areas contain valuable wildlife resources such as cover, shelter, foraging opportunities, and nesting and roosting substrate as well as movement habitat. As discussed in Section 6.4, potential impacts to wildlife resources would be reduced to a less than significant level with the environmental enhancement and habitat restoration features included as part of Alternative 3, as well as mitigation measures identified therein. As described in Section 5.2.3, enhancement and restoration features would improve wildlife habitat and wildlife movement features.
ARC-3.2.1 (LCP) Habitat Restoration with Development Approval. Require as mitigation and/or a condition of development approval, restoration of any area of the subject property which is an identified degraded sensitive habitat, with the magnitude of required restoration to be proportional and commensurate with the scope of the project. Restoration and monitoring plans must ensure sufficient detail to guide efforts through the duration of the restoration period and include success criteria. Project conditions may include erosion control measures, removal of non-native or invasive species, planting with characteristic native species, diversion of polluting run-off, water impoundment, and other appropriate means. The objective of habitat restoration activities shall be to enhance the functional capacity and	**PROPOSED PROJECT** **Consistent.** As discussed in Section 3.4*, t*he Project would be required to mitigate for impacts to sensitive habitats. As described in Section 2.4, the Project includes several environmental enhancement and habitat restoration features, including: Restoration of Harkins Slough Road Drainage, Culvert Modification with Small Wildlife Crossing at Main Entrance, Culvert Replacement under Old Landfill Entrance, and a Wildlife Movement Corridor between Gallighan Slough and Harkins Slough. These features would offset potential impacts associated with the Project. The development of these features as well as additional required mitigation, such as off-site creation of

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biological productivity of the habitat(s) and whenever feasible, to restore them to a condition which can be sustained by natural occurrences, such as tidal flushing of lagoons.	oak woodland, would be presented in a Mitigation Plan with sufficient detail to guide efforts through the duration of the restoration period and include performance standards and specific success criteria. Refer to Mitigation Measures BIO-8a through 8d. The Mitigation Plan would be determined in coordination and consultation with the relevant resource agencies, including the County of Santa Cruz, USACE, the Regional Board, USFWS, CDFW, and the Coastal Commission. Therefore, the Project is considered consistent with this policy. **ALTERNATIVE 3** **Consistent.** As discussed in Section 6.4*, t*he Project has been designed to address minimal impacts to a wetland ditch, a sensitive habitat, through the expansion and improvement of this feature. In addition, Alternative 3 includes several other environmental enhancement and habitat restoration features at the Alternative 3 site, including: Creation of Open Drainage along North-South Roadway, and Culvert and Fencing Designed for Wildlife Movement. Alternative 3 also includes enhancement and restoration features at the landfill site, including: Restoration of Harkins Slough Road Drainage, Culvert Modification with Small Wildlife Crossing at Main Entrance, Culvert Replacement under Internal Roadway to Old Landfill, and a Wildlife Movement Corridor between Gallighan Slough and Harkins Slough. These on-site features provide sufficient mitigation for the minimal impacts associated with Alternative 3. The development of these features would be presented in a Mitigation Plan with sufficient detail to guide efforts through the duration of the restoration period and include performance standards and specific success criteria. Refer to Mitigation Measures BIO-8a through 8d. The Mitigation Plan would be determined in coordination and consultation with the relevant resource agencies, including the County of Santa Cruz, USACE, the Regional Board, USFWS, CDFW, and the Coastal Commission. Therefore, Alternative 3 is considered consistent with this policy.
ARC-3.3.3 (LCP) Activities Within Riparian Corridors and Wetlands. Development activities, land alteration, and vegetation disturbance within riparian corridors and wetlands and required buffers shall be prohibited unless an exception permit is granted per the Riparian Corridor and Wetlands Protection ordinance. As a condition of a riparian exception permit, require evidence of compliance with applicable permit or review requirements of the U.S. Army Corps of Engineers, California Department of Fish and Wildlife, and other federal or state agencies that may have regulatory authority over activities within riparian corridors and wetlands.	**PROPOSED PROJECT** **Inconsistent.** The Proposed Project would result in limited impacts to Harkins Slough Road Drainage and its required buffer and, if ODF 2 is selected, minimal impacts to a wetland swale, and is, therefore, inconsistent with ARC-3.3.3. In the Coastal Zone, the Project is required to be consistent with the LCP and conform to the specific requirements in the Coastal Act, which prohibits development in riparian corridors and wetlands and associated buffers. The Project would require a Riparian Corridor and Wetlands Protection Ordinance Exception (SCCC Chapter 16.30). As discussed in

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	Section 3.4, limited impacts and restoration of Harkins Slough Road Drainage would ultimately be beneficial. In addition, two other Environmental Enhancement and Habitat Restoration Features are located within riparian corridors: Culvert Modification with Small Wildlife Crossing at Main Entrance, and Culvert Replacement under Internal Roadway to Old Landfill. These elements would improve the overall ecological functions and values of Channelized Gallighan Slough and the Buena Vista Drive Tributary. While beneficial, these Project components include work within the riparian corridor and would therefore require a Riparian Corridor and Wetlands Protection Ordinance Exception from the County. **ALTERNATIVE 3** **Inconsistent.** Alternative 3 would result in minimal impacts to an irrigation ditch wetland and is, therefore, inconsistent with ARC-3.3.3. In the Coastal Zone, the Project is required to be consistent with the LCP and conform to the specific requirements in the Coastal Act, which prohibits development in riparian corridors and wetlands and associated buffers. Alternative 3 would require a Riparian Corridor and Wetlands Protection Ordinance Exception (SCCC Chapter 16.30). Alternative 3 includes several environmental enhancement and habitat restoration features, including: Reorientation and Expansion of Existing Irrigation Ditch Wetland, which would ultimately improve conditions in the ditch wetland; Re-establishment of Open Drainage along North-South Roadway; Restoration of Harkins Slough Road Drainage; Culvert Modification with Small Wildlife Crossing at Main Entrance; and Culvert Replacement under Internal Roadway to Old Landfill. These elements would improve the overall ecological functions and values of the drainages. While beneficial, these Alternative 3 components include work within the riparian corridor and, therefore, would require a Riparian Corridor and Wetlands Protection Ordinance Exception from the County.
ARC-3.3.5 (LCP) Setbacks from Wetlands. Prohibit development within the 100-foot riparian corridor of all wetlands. Permit exceptions to this setback only where consistent with the Riparian Corridor and Wetlands Protection ordinance, and in all cases, maximize distance between proposed structures and wetlands as feasible and mitigated. Require measures to prevent water quality degradation from adjacent land uses, as outlined in Goal ARC-4: Water Resources.	**PROPOSED PROJECT** **Inconsistent.** The Proposed Project would result in limited impacts to Harkins Slough Road Drainage and its required buffer and, if ODF 2 is selected, minimal impacts to a wetland swale and its buffer, and is, therefore, inconsistent with ARC-3.3.5. In the Coastal Zone, the Project is required to be consistent with the LCP and conform to the specific requirements in the Coastal Act, which prohibits development in riparian corridors and wetlands, and their associated buffers. The Project would require a

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	Riparian Corridor and Wetlands Protection Ordinance Exception (SCCC Chapter 16.30). See ARC-3.3.3 above. **ALTERNATIVE 3** **Inconsistent.** Alternative 3 would result in limited impacts to an irrigation ditch wetland and its required buffer and is, therefore, inconsistent with ARC-3.3.5. In the Coastal Zone, the Project is required to be consistent with the LCP and conform to the specific requirements in the Coastal Act, which prohibits development in riparian corridors and wetlands, and their associated buffers. The Project would require a Riparian Corridor and Wetlands Protection Ordinance Exception (SCCC Chapter 16.30). See ARC-3.3.3 above.
ARC-3.3.6 (LCP) Compatible Uses with Riparian Corridors. Allow compatible uses in and adjacent to riparian corridors that do not impair or degrade the riparian plant and animal systems, or water supply values, such as non-motorized recreation and pedestrian trails, parks, interpretive facilities and fishing facilities. Allow development in these areas only in conjunction with approval of a riparian exception permit. Where the riparian corridor is already developed, support enhancement of riparian corridors with native plantings that increase and/or enhance the buffer qualities adjacent to streams.	**PROPOSED PROJECT** **Inconsistent.** The Proposed Project would result in limited impacts to Harkins Slough Road Drainage and its required buffer and, if ODF 2 is selected, minimal impacts to a wetland swale and its buffer, and is, therefore, inconsistent with ARC-3.3.6. In the Coastal Zone, the Project is required to be consistent with the LCP and conform to the specific requirements in the Coastal Act, which prohibits development in riparian corridors and wetlands, and their associated buffers. The Project would require a Riparian Corridor and Wetlands Protection Ordinance Exception (SCCC Chapter 16.30). See ARC-3.3.3 above. **ALTERNATIVE 3** **Inconsistent.** Alternative 3 would result in limited impacts to an irrigation ditch wetland and its required buffer and, therefore, is inconsistent with ARC-3.3.6. In the Coastal Zone, a project is required to be consistent with the LCP and conform to the specific requirements in the Coastal Act, which prohibits development in riparian corridors and wetlands, and their associated buffers. Alternative 3 would require a Riparian Corridor and Wetlands Protection Ordinance Exception (SCCC Chapter 16.30). See ARC-3.3.3 above.
ARC-3.3.8 (LCP) Environmental Review for Riparian Corridor and Wetland Protection. Require environmental review of all proposed development projects affecting riparian corridors or wetlands and preparation of a Biotic Report for projects that, as proposed, may have a significant effect on the corridors or wetlands. Compliance with County regulations is generally considered to prevent the possibility of significant environmental impacts, and any biotic and/or riparian exception permit process may involve project specifications and/or conditions that would also prevent the possibility of significant environmental impacts**.**	**PROPOSED PROJECT** **Consistent.** This EIR represents the environmental review for the Proposed Project. A Biotic Assessment has been prepared (EcoSystems West 2025). Also refer to Section 3.4 for further discussion on the biological impacts of the Proposed Project.

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	ALTERNATIVE 3 **Consistent.** This EIR represents the environmental review for Alternative 3. A Biotic Assessment has been prepared (EcoSystems West 2026). Also refer to Section 6.4 for further discussion on the biological impacts of Alternative 3.
ARC-3.3.10 (LCP) Development in Wetland Drainage Basins. Require development projects in wetland drainage basins to include drainage facilities or Best Management Practices (BMPs) that will maintain surface runoff patterns and water quality, unless a wetland management plan specifies otherwise, and will minimize erosion, sedimentation, and introduction of pollutants.	**PROPOSED PROJECT** **Consistent.** Prior to the onset of construction activities, the County would prepare an erosion control plan, prepare a SWPPP in accordance with the state Stormwater NPDES program, and implement BMPs to ensure that runoff and erosion that may be related to construction activities would not enter sensitive environments adjacent to the Project, resulting in the addition of toxic materials or sedimentation to wetlands, as discussed in Sections 3.4 and 3.10. Additionally, Section 3.4 identifies mitigation measures that would reduce potential impacts to wetlands to a less than significant level. **ALTERNATIVE 3** **Consistent.** Prior to the onset of construction activities, the County would prepare an erosion control plan, prepare a SWPPP in accordance with the state Stormwater NPDES program, and implement BMPs to ensure that runoff and erosion that may be related to construction activities would not enter sensitive environments adjacent to Alternative 3, resulting in the addition of toxic materials or sedimentation to wetlands, as discussed in Sections 6.4 and 6.10. Additionally, Section 6.4 identifies mitigation measures that would reduce potential impacts to wetlands to a less than significant level.
ARC-4.1.14 (LCP) Water Pollution from Urban Runoff. Review proposed development projects for their potential to contribute to water pollution via increased storm water runoff. Require all development and redevelopment projects to be designed to minimize the generation, transport, and discharge of stormwater pollutants by maintaining natural discharge and groundwater recharge rates. Design strategies shall include minimization of impervious areas, pollution prevention strategies, retention and percolation of stormwater, filtration or treatment of stormwater, or other appropriate stormwater best management practices.	**PROPOSED PROJECT** **Consistent.** As discussed in Section 3.10, Hydrology and Water Quality, implementation of the Proposed Project would alter the onsite drainage pattern. The Proposed Project includes filtration measures to prevent unwanted solid waste or contaminated stormwater from entering the stormwater system, including Stormceptors or filtration inlet bags. Refer to Section 3.10, Hydrology and Water Quality, for additional discussion on stormwater runoff reduction. **ALTERNATIVE 3** **Consistent.** As discussed in Section 6.10, Hydrology and Water Quality, implementation of Alternative 3 would alter the onsite drainage pattern. As described in Section 5.2.3, Alternative 3 includes a drainage system with onsite stormwater ponds and filtration measures (e.g., Stormceptors or filtration inlet

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	bags) to prevent unwanted solid waste or contaminated stormwater from entering the stormwater system. Refer to Section 6.10, Hydrology and Water Quality, for additional discussion on stormwater runoff reduction.
ARC-4.2.12 (LCP) Drainage Design. Require retention of stormwater runoff from impervious surfaces for all new development and redevelopment.	**PROPOSED PROJECT** **Consistent.** The Proposed Project includes new stormwater drainage features to accommodate increased runoff from new impervious surfaces. Refer to Section 3.10 for additional discussion on stormwater runoff reduction and treatment. **ALTERNATIVE 3** **Consistent.** Alternative 3 includes new stormwater drainage features to accommodate increased runoff from new impervious surfaces. Refer to Section 5.2.3 and Section 3.10 for additional discussion on stormwater runoff reduction and treatment.
ARC-4.4.1 (LCP) Impacts from New Development on Water Quality. Do not approve new development adjacent to marshes, streams, and bodies of water if such development would cause adverse impacts on water quality that cannot be fully mitigated.	**PROPOSED PROJECT** **Consistent.** As discussed in Section 3.10, the Proposed Project would not cause adverse impacts on water quality. Avoidance and minimization measures would be implemented to protect water quality. Additionally, as discussed in Section 3.4, several mitigation measures would be required to protect biological resources, and these include specific actions that protect aquatic features during construction (Mitigation Measures BIO-8a, BIO-8b, BIO-8c). **ALTERNATIVE 3** **Consistent.** As discussed in Section 6.10, Alternative 3 would not cause adverse impacts on water quality. Avoidance and minimization measures would be implemented to protect water quality. Additionally, as discussed in Section 6.4, several mitigation measures would be required to protect biological resources, and these include specific actions that protect aquatic features during construction (Mitigation Measures BIO-8a, BIO-8b, BIO-8c).
ARC-4.4.4 (LCP) Protecting Riparian Corridors and Coastal Lagoons. Require drainage facilities to infiltrate, filter, or treat stormwater runoff as needed to protect water quality for all new development within 1,000 feet of riparian corridors or coastal lagoons. Encourage vegetative-based treatments where feasible.	**PROPOSED PROJECT** **Consistent.** The Proposed Project area is not located within 1,000 feet of a coastal lagoon. However, the Project is located within County-defined riparian corridors. The Project includes filtration measures to prevent unwanted solid waste or contaminated stormwater from entering the stormwater system, including Stormceptors or filtration inlet bags. Additionally, as discussed in Section 3.4, several mitigation measures would be required to protect biological resources, and these include specific actions that protect aquatic features during construction and

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	mitigate for direct and indirect impacts to these features (Mitigation Measures BIO-8a, BIO-8b, BIO-8c). **ALTERNATIVE 3** **Consistent.** Alternative 3 is not located within 1,000 feet of a coastal lagoon. However, some of the environmental enhancement and restoration features included as part of Alternative 3 are located within County-defined riparian corridors. Alternative 3 includes filtration measures to prevent unwanted solid waste or contaminated stormwater from entering the stormwater system, including Stormceptors or filtration inlet bags. Additionally, as discussed in Section 6.4, several mitigation measures would be required to protect biological resources, and these include specific actions that protect aquatic features during construction and mitigate for direct and indirect impacts to these features (Mitigation Measures BIO-8a, BIO-8b, BIO-8c).
ARC-5.1.2 (LCP) Development Within Visual Resource Areas. Recognize that designated visual resources of Santa Cruz County possess diverse characteristics that are worthy of protection. Require projects in visual resource areas to be evaluated against the context of their unique environments and regulate structure height, setbacks, materials, and design to protect these resources consistent with the objectives and policies of this section.	**PROPOSED PROJECT** **Consistent.** As discussed in Section 3.1, Aesthetics and Scenic Resources, the Proposed Project area is characterized as a highly disturbed environment from historical and current landfill operations, with no notable scenic resources or vistas available to the public. The ongoing operation of heavy machinery, accumulation of debris, and continuous addition of waste have resulted in a landscape with irregular terrain, extensive modifications, and low visual quality. Implementation of the Proposed Project would not substantially degrade the existing visual context of the area or otherwise adversely affect scenic resources compared to existing conditions. Views from Buena Vista Drive (a County-designated scenic roadway) would not be substantially changed and would be improved once the landfill is closed. Refer to Section 3.1 for further discussion on existing scenic and visual resources, including views from public roadways. **ALTERNATIVE 3** **Consistent.** As discussed in Section 6.1, Aesthetics and Scenic Resources, the Alternative 3 area is disturbed by historical agricultural activities and is occupied with three large greenhouses, a packing shed, a boiler house, a bathroom/lunchroom, and several other miscellaneous structures associated with previous cattle grazing and greenhouse uses that are no longer occurring. The western portion is undeveloped grassland, and the far eastern portion is undeveloped oak woodland with a residence occupied by the property owners. Implementation of Alternative 3 would change

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	some views from one public roadway (Harkins Slough Road) but would not substantially degrade the existing visual context of the area or otherwise adversely affect scenic resources compared to existing conditions. Views from Buena Vista Drive (a County-designated scenic roadway) would not be substantially changed and would be improved once the landfill is closed. The Alternative 3 site, where the combined facilities would be located, is not visible from Buena Vista Drive. Refer to Section 6.1 for further discussion on existing scenic and visual resources, including views from public roadways.
ARC-5.1.3 (LCP) Protection of Public Vistas and Scenic Assets. Protect significant public vistas and public scenic assets as identified in Policy ARC-5.1.1, even those that are not mapped and designated as visual resource areas, scenic roads, coastal special scenic areas, or other unique features, by minimizing disruption of landform and aesthetic character caused by grading operations, timber harvests, utility wires and poles, signs, inappropriate landscaping and structure design. Provide necessary landscaping to screen development that is unavoidably sited within these vistas. Proposed landscaping within public vistas should be sited and designed to retain existing public views of vistas and scenic assets especially for coastal designated visual resources.	**PROPOSED PROJECT** **Consistent.** As stated above, the Proposed Project area is characterized as a highly disturbed environment from historical and current landfill operations, with no notable scenic resources or vistas available to the public. The ongoing operation of heavy machinery, accumulation of debris, and continuous addition of waste have resulted in a landscape with irregular terrain, extensive modifications, and low visual quality. There are no publicly accessible viewpoints of a scenic resource or vista within, adjacent to, or of the Project area. Refer to Section 3.1 for further discussion on existing scenic and visual resources, including views from public vistas and roadways. **ALTERNATIVE 3** **Consistent.** As discussed in Section 6.1, the Alternative 3 area is disturbed by historical agricultural activities and is occupied with three large greenhouses, a packing shed, a boiler house, a bathroom/lunchroom, and several other miscellaneous structures associated with previous cattle grazing and greenhouse uses that are no longer occurring. The western portion is undeveloped grassland, and the far eastern portion is undeveloped oak woodland with a residence occupied by the property owners. There are no publicly accessible viewpoints of a scenic resource or vista within, adjacent to, or of the Alternative 3 site. Refer to Section 6.1 for further discussion on existing scenic and visual resources, including views from public vistas and roadways.

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ARC-5.1.6 (LCP) Preserving Ocean Vistas. Where public ocean vistas exist, require these vistas be retained to the maximum extent possible as a condition of approval for any new development.	**PROPOSED PROJECT** **Consistent.** There are no public views of the ocean from the Proposed Project area. **ALTERNATIVE 3** **Consistent**. There are no public views of the ocean from the Alternative 3 site.
ARC-5.1.7 (LCP) Open Beaches and Blufftops. Do not permit or allow the placement of new permanent structures that would be visible from a public beach, except where allowed on existing parcels of record, or for shoreline protection, public beach access, or public ocean viewing, and where consistent with Santa Cruz County Code, Chapter 13.11. Use the following criteria: (1) Allow infill structures (typically residences and accessory structures on existing lots of record) where compatible with the pattern of existing development. (2) Require shoreline protection and access structures to use natural materials and finishes to blend with the character of the area and integrate with the landform.	**PROPOSED PROJECT** **Consistent.** The Proposed Project would not permit or allow the placement of any new permanent structures that would be visible from a public beach. **ALTERNATIVE 3** **Consistent**. Alternative 3 would not permit or allow the placement of any new permanent structures that would be visible from a public beach.
Policies ARC-5.2.1 (LCP) Designation of Scenic Roads.[1] The following roads and highways are valued for their vistas.[1] The public vistas from these roads shall be afforded the highest level of protection. (1) State Highways • Highway 1 – from San Mateo County to Monterey County (2) County Roads • Bonita Drive and San Andreas Road – from Highway 1 to Beach Road • Buena Vista Drive – from San Andreas Road to Larkin Valley Road	**PROPOSED PROJECT** **Consistent.** Regional access to the existing Buena Vista Landfill is primarily from Highway 1, and the main entrance to the landfill is from Buena Vista Drive, which operates as a two-way street with one lane in each direction. The proposed road realignment to accommodate Transfer Station A would occur on Harkins Slough Road, which is a public roadway not designated as a scenic route by the County. The Buena Vista Landfill is located approximately one mile south of SR-1. The Proposed Project area and SR-1 are separated by intervening topography, including hills and vegetation, which block any direct line of sight between the two locations. Thus, the Project area, including the highest portion of the landfill, is not visible from SR-1; and the scenic qualities of and views from SR-1 would not be affected by the Project. A portion of Buena Vista Drive, from San Andreas Road to Larkin Valley Road, is a County-designated scenic roadway (Santa Cruz County 2024a). This designated portion extends along the west side of the Buena Vista Landfill. A small portion of the organics diversion facility (ODF) Option 2, which would be located on top of the Old Landfill, could be visible from Buena Vista Drive. However, as discussed in Section 3.1, the views from the roadway below are limited and fleeting as drivers navigate the windy road. San Andreas Road is also a County-designated scenic road, but it is located 1 mile southwest of the landfill, and views are obstructed by intervening topography and vegetation.

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	As discussed in Section 3.1, the Proposed Project aligns with the existing industrial landscape of the Buena Vista Landfill, thus maintaining visual consistency with the site's disturbed and industrial character and would not substantially degrade the existing visual quality of the views or otherwise adversely affect scenic resources compared to existing conditions. Further, any views of the Project components from designated scenic roads would be distant, elevated, and fleeting to passing motorists. Finally, as stated in Section 2.4, Project Components (under Additional Information for ODF Options 1 and 2, Vegetation Removal and Landscaping), the County would install large shrubs or trees in containers along the northern perimeter of the facility if needed to screen views of ODF 2 from Buena Vista Drive. **ALTERNATIVE 3** **Consistent**. The Alternative 3 site is located approximately one mile south of SR-1. The Alternative 3 site and SR-1 are separated by intervening topography, including hills and vegetation, which block any direct line of sight between the two locations. Due to the site's location and the surrounding landscape features, the Alternative 3 site is not visible from SR-1. Vehicles transporting solid waste from the transfer stations to the regional facility would travel on SR-1. The use of SR-1 would be similar to existing conditions, whereby solid waste collection trucks and other large trucks use the highway for transportation; and there would be no effect on resources within or views from SR-1. Views from Buena Vista Drive (a County-designated scenic roadway) would not be substantially changed and would be improved once the landfill is closed. The Alternative 3 site, where the combined facilities would be located, is not visible from Buena Vista Drive. Consequently, the scenic resources within SR-1 and the scenic views motorists enjoy from SR-1 and Buena Vista Drive would not be adversely affected by Alternative 3.
ARC-6.1.1 (LCP) Protection and Designation of Significant Resources. Protect significant geological features such as caves, large rock outcrops, inland cliffs and special formations of scenic or scientific value, hydrological features such as karst topography, major waterfalls or springs, and paleontological features, through the environmental review process. Designate such sites on the General Plan/LCP Resources and Constraints Maps where identified.[2]	**PROPOSED PROJECT** **Consistent.** The Proposed Project would not be located near currently identified hydrological, geological, or paleontological features. Further, compliance with existing regulations regarding hydrological, geological, and paleontological resources, and implementation of mitigation measures pertaining to these resources would ensure that the Proposed Project would not result in significant impacts to such resources. For a full discussion on hydrological, geological, and paleontological resources and the mitigation measures contained therein, refer to Section 3.7 and Section 3.10.

Table 6.11-2. Santa Cruz County General Plan/Local Coastal Program Policy Consistency Analysis

Santa Cruz County General Plan Policy	Consistency Discussion (Provides both Proposed Project & Alternative 3 for Comparison)
	ALTERNATIVE 3 **Consistent**. Alternative 3 would be the same as the Proposed Project. For a full discussion on hydrological, geological, and paleontological resources and the mitigation measures contained therein, refer to Section 6.7 and Section 6.10.
ARC-8.1.1 (LCP) Evaluation of Native American Cultural Sites. Protect all archaeological resources until they can be evaluated. Prohibit any disturbance of Native American Cultural Sites, archaeological sites, or identified tribal cultural resources without an appropriate permit. Maintain the Native American Cultural Sites ordinance.	**PROPOSED PROJECT** **Consistent.** As described below for Policy ARC-8.1.2 and in Section 3.5, the cultural resources studies found that the Project Area does not contain intact or significant cultural deposits, and that no further archaeological investigation would be warranted. However, as part of the Native American tribal outreach conducted, Native American representatives requested monitoring during subsurface construction activities in Areas 1, 2, and 3. Therefore, given this request and the proximity of important cultural resources to the Project Area, all initial ground-disturbing activities associated with Areas 1, 2, and 3 would be monitored by a qualified archaeologist and a representative from the local Native American community (Mitigation Measure CR-2b). **ALTERNATIVE 3** **Consistent.** As described below for Policy ARC-8.1.2 and in Section 3.5, the cultural resources studies found that the Alternative 3 site does not contain intact or significant cultural deposits, and that no further archaeological investigation would be warranted. Although no TCRs have been identified within the Alternative 3 site nor the Proposed Project area, the positive Sacred Lands File results received from the NAHC indicate that Santa Cruz County in general has a high sensitivity to containing Native American habitation sites; and during Tribal consultation, the Tribal representative conveyed the area is generally highly sensitive for cultural resources. Ground disturbance during Project construction has the potential to encounter unknown TCRs. Therefore, given the proximity of important cultural resources to the Alternative 3 site, all initial ground-disturbing activities would be monitored by a qualified archaeologist and a representative from the local Native American community (Mitigation Measure CR-2b).
ARC-8.1.2 (LCP) Site Surveys. Require an archaeological site survey (surface reconnaissance) as part of the environmental review process for all projects with very high site potential within the Archaeological Sensitive Areas, as designated on the General Plan/LCP Resources and Constraints Maps (Appendix F).	**PROPOSED PROJECT** **Consistent.** As described in Section 3.5, a qualified archaeologist conducted a database search with the Northwest Information Center; conducted archaeological site field surveys; prepared a Phase I Cultural Resources Inventory; and based on the results of the Phase I, prepared an Extended Phase I Archaeological Assessment of three areas where subsurface excavation is planned to determine the

Table 6.11-2. Santa Cruz County General Plan/Local Coastal Program Policy Consistency Analysis

Santa Cruz County General Plan Policy	Consistency Discussion (Provides both Proposed Project & Alternative 3 for Comparison)
	presence/absence of cultural resources in the Proposed Project area. The three areas include: the culvert beneath the Main Landfill entrance driveway (Area 1), the Transfer Station A site in the northeast corner of the Project area (Area 2), and the optional equipment parking and storage area on the south side of Rountree Lane (Area 3). The study concluded that the majority of excavated soils were identified as disturbed fill layers, no intact significant cultural deposits were found, and no further investigation is warranted. However, based on the proximity of important cultural resources to the project area and recommendations of Native American representatives (as described above for Policy ARC-8.1.1), the archaeologists identified required mitigation measures to reduce potential impacts to a less than significant level. These include stopping work if resources are discovered during construction and monitoring during construction in Areas 1, 2, and 3 (Mitigation Measures CR-2a and CR-2b). **ALTERNATIVE 3** **Consistent**. As described in Section 6.5, based on research conducted and documented in the 2026 Cultural Resources Desktop Review for the Buena Vista Landfill Redevelopment Project, Alternative 3 (Albion 2026a), the Alternative 3 site is not sensitive for historic-era archaeological resources. In addition, the study found that the Alternative 3 site appears to have low sensitivity for buried precolonial archaeological sites. Although there is low potential that cultural resources will be identified within the Alternative 3 site, Tribal input during AB 52 consultation noted that the Buena Vista Landfill and surrounding areas are highly sensitive for cultural resources. Therefore, the archaeologists identified required mitigation measures to reduce potential impacts to a less than significant level. These include stopping work if resources are discovered during construction and monitoring during construction (Mitigation Measures CR-2a and CR-2b).
ARC-8.1.5 Accidental Discovery of Archaeological Resources. If archaeological resources or human remains are discovered accidentally during grading or construction, the activity shall cease and the property owner shall notify the proper authority in accordance with the Native American Cultural Sites ordinance.	**PROPOSED PROJECT** **Consistent.** To ensure compliance with this policy, the Proposed Project includes a legally binding Mitigation Measure CR-2a, requiring the construction contractor to cease activities immediately and notify the County if archaeological resources or human remains are discovered accidentally during grading or construction. Refer to Section 3.5 for further discussion.

Table 6.11-2. Santa Cruz County General Plan/Local Coastal Program Policy Consistency Analysis

Santa Cruz County General Plan Policy	Consistency Discussion (Provides both Proposed Project & Alternative 3 for Comparison)
	ALTERNATIVE 3 **Consistent**. To ensure compliance with this policy, Alternative 3 includes a legally binding Mitigation Measure CR-2a, requiring the construction contractor to cease activities immediately and notify the County if archaeological resources or human remains are discovered accidentally during grading or construction. Refer to Section 6.5 for further discussion.
ARC-8.1.6 (LCP) Environmental Review. Environmental review shall be required for any project with the potential to significantly impact archaeological or tribal cultural resources.	**PROPOSED PROJECT** **Consistent.** Environmental review for the Proposed Project is being conducted as part of this EIR (Section 3.5), including preparation of the 2024 Phase I Cultural Resource Inventory for the Buena Vista Landfill Redevelopment Project (Albion 2024), and the 2025 Extended Phase I Archaeological Assessment (Albion 2025). Refer to Section 3.5 for further discussion. **ALTERNATIVE 3** **Consistent**. Environmental review for Alternative 3 is being conducted as part of this EIR (Section 6.5), including preparation of the 2026 Cultural Resources Desktop Review for the Buena Vista Landfill Redevelopment Project, Alternative 3 (Albion 2026a). Refer to Section 6.5 for further discussion.
ARC-8.1.7 (LCP) Consultation for Discretionary Projects. The County shall consult with any California Native American tribe that requests notice of projects in the geographic area traditionally affiliated with the tribe prior to the release of a Negative Declaration or Environmental Impact Report, pursuant to Public Resources Code sections 21073 and 21080. If tribal cultural resources are identified, the County shall work with the affected tribe to identify appropriate mitigation measures to protect the resource.	**PROPOSED PROJECT** **Consistent.** AB 52 consultation notification letters were mailed in June 2025 for the Proposed Project. One response was received from the Amah Mutsun Tribal Band requesting consultation on the Project. The consultation meeting was conducted on August 4, 2025. No tribala cultural resources were identified within the Project Area during the consultation process or as part of the cultural resource studies prepared for the Proposed Project. However, the Tribe expressed a need for monitoring in areas where cultural resources are present and where they are likely to be present. Mitigation Measure CR-2b requires that all initial ground-disturbing activities associated with Areas 1, 2, and 3 shall be monitored by a qualified archaeologist and a representative from the local Native American community. Refer to Section 3.18, Tribal Cultural Resources, for further discussion. **ALTERNATIVE 3** **Consistent.** In addition to the notification letters sent to the tribes for the Proposed Project, as described above, the County mailed letters to the tribes on the list in May 2026 and met with the tribes on July 14, 2026. No tribal cultural resources were

Table 6.11-2. Santa Cruz County General Plan/Local Coastal Program Policy Consistency Analysis

Santa Cruz County General Plan Policy	Consistency Discussion (Provides both Proposed Project & Alternative 3 for Comparison)
	identified within the Alternative 3 site during the consultation process or as part of the cultural resources studies (Albion 2025 and 2026a).
ARC-8.2.3 Development Activities. For development activities on property containing historic resources require protection, enhancement, and/or preservation of the historic, cultural, architectural, engineering, or aesthetic values of the resource consistent with regulations in the Historic Preservation ordinance as determined by the Historic Resources Commission.	**PROPOSED PROJECT** **Consistent.** The Proposed Project area does not contain historic resources, as documented in the cultural resources report prepared to support this EIR (Albion 2024). Refer to Section 3.5 for further discussion. **ALTERNATIVE 3** **Consistent**. The Alternative 3 site does not contain historic resources, as documented in the cultural resources report and historic resources report (which evaluated several structures) prepared to support this EIR (Albion 2026a and Albion 2026b). Refer to Section 6.5 for further discussion.
ARC-8.2.8 Environmental Review. Environmental review shall be required for any project with the potential to significantly impact historic resources.	**PROPOSED PROJECT** **Consistent.** The Proposed Project area does not contain historic resources, as documented in the cultural resources report prepared to support this EIR (Albion 2024). Refer to Section 3.5 for further discussion. **ALTERNATIVE 3** **Consistent.** The Alternative 3 site does not contain historic resources, as documented in the cultural resources report and historic resources report (which evaluated several structures) prepared to support this EIR (Albion 2026a and Albion 2026b). Refer to Section 6.5 for further discussion.
Public Safety Element	
6.1.3 (LCP) Engineering Geology Report for Public Facilities in Fault Zones. Require a full engineering geology report by a certified engineering geologist whenever a significant potential hazard is identified by a Geologic Hazards Assessment or Preliminary Geologic Report, and prior to the approval of any new public facility or critical structure within the designated fault zones.	**PROPOSED PROJECT** **Consistent.** The Proposed Project area is not zoned under the Alquist-Priolo Fault Rupture Zone Act. In addition, there are no known active faults located in the Project area (**Appendix H1**). However, the Project area is located in a highly seismic region near several major fault zones (**Appendix H1**). All proposed structures would be designed and constructed in conformance with the most recently adopted California Building Code design parameters, which are specifically tailored to minimize the risk of structure failure due to seismic hazards. Once capacity of the current active landfill area is reached, the landfill closure and revegetation plan would be implemented. A landfill closure cover system, commonly called a cap, would be installed. The final cover design would be required to comply with the U.S. Environmental Protection Agency Seismic Design Guidance for

Table 6.11-2. Santa Cruz County General Plan/Local Coastal Program Policy Consistency Analysis

Santa Cruz County General Plan Policy	Consistency Discussion (Provides both Proposed Project & Alternative 3 for Comparison)
	Municipal Solid Waste Landfill Facilities requirements for design of landfills located in seismic impact zones (**Appendix D**). Refer to Section 3.7 for additional discussion. **ALTERNATIVE 3** **Consistent.** Same as the Proposed Project. Refer to Section 6.7, as well as **Appendix Q**, for additional discussion.
6.1.4 (LCP) Site Investigation Regarding Liquefaction Hazard. Require site-specific investigation by a certified engineering geologist and/or civil engineer of all development proposals of more than four residential units in areas designated as having a high or very high liquefaction potential. Proposals of four units and under and non-residential projects shall be reviewed for liquefaction hazard through environmental review and/or geologic hazards assessment, and when a significant potential hazard exists a site-specific investigation shall be required.	**PROPOSED PROJECT** **Consistent.** Geotechnical reports to identify subsurface conditions were prepared for the Proposed Project to support this EIR (refer to **Appendix H**). ODF Option 2 would be located on the "top deck" of the Old Landfill in the southwest portion of the Project area. Portions of the Old Landfill are underlain by Terrace deposits and the Aromas formation; however, stream channel deposits are present along Gallighan Slough, which is located to the northeast and below the Old Landfill (**Figure 2-1**). The area along Gallighan Slough, including the Old Landfill site where ODF Option 2 would be located, is susceptible to liquefaction, which could pose a risk to people as a result of the structures not being able to support themselves (**Appendix H2**). As discussed in Section 3.7, Mitigation Measure GEO-2 requires the preparation of a Liquefaction Evaluation as part of the final design, if ODF Option 2 is selected and approved; identify the potential effect on the Old Landfill and the development of ODF Option 2; and identify any design measures to reduce the effect and minimize the risk of loss, injury, and death. Refer to Section 3.7 for additional discussion. **ALTERNATIVE 3** **Consistent**. A geotechnical report to identify subsurface conditions was prepared for the Alternative 3 site to support this EIR (refer to **Appendix Q**). The near-surface soils encountered at the Alternative 3 site are not considered susceptible to liquefaction due to such factors as depth to the groundwater table, soil density, and grain-size distribution. Refer to Section 6.7 for additional discussion.
6.1.8 Design Standards for new Public Facilities. Require all new public facilities and critical structures to be designed to withstand the expected ground shaking during the design earthquake on the San Andreas Fault.	**PROPOSED PROJECT** **Consistent.** As stated in Section 2.6.2, General Methodology, all proposed structures would be designed and constructed in conformance with the most recently adopted California Building Code design parameters, which are specifically tailored to minimize the risk of structure failure due to seismic hazards. Once capacity of the current active landfill area is reached, the landfill closure and revegetation plan would be implemented. A landfill closure cover system, commonly

Table 6.11-2. Santa Cruz County General Plan/Local Coastal Program Policy Consistency Analysis

Santa Cruz County General Plan Policy	Consistency Discussion (Provides both Proposed Project & Alternative 3 for Comparison)
	called a cap, would be installed. The final cover design would be required to comply with the U.S. Environmental Protection Agency Seismic Design Guidance for Municipal Solid Waste Landfill Facilities requirements for design of landfills located in seismic impact zones. **ALTERNATIVE 3** **Consistent.** As stated in Section 5.2.3 under Construction/Structures, all structures would be designed and constructed in conformance with the most recently adopted California Building Code design parameters, which are specifically tailored to minimize the risk of structure failure due to seismic hazards. Landfill closure would be the same as described for the Proposed Project above.
6.3.4 Erosion Control Plan Approval Required for Development. Require approval of an erosion control plan for all development, as specified in the Erosion Control ordinance. Vegetation removal shall be minimized and limited to that amount indicated on the approved development plans, but shall be consistent with fire safety requirements.	**PROPOSED PROJECT** **Consistent.** As stated in Section 2.6.2, the Proposed Project would comply with the requirements to prepare an erosion control plan for new development. The Proposed Project would disturb over 1 acre; therefore, it would be subject to the NPDES Construction General Permit (Order No. 2012-0006-DWQ) adopted by the State Water Resources Control Board. Compliance with the permit requires each qualifying development project to file a Notice of Intent with the State Water Resources Control Board. Permit conditions require development of a SWPPP, which must describe the site, the facility, erosion and sediment controls, runoff water quality monitoring, means of waste disposal, implementation of approved local plans, control of construction sediment and erosion control measures, maintenance responsibilities, and non-stormwater management controls. Additionally, inspection of construction sites before and after storms is required to identify stormwater discharge from the construction activity and to identify and implement erosion controls, where necessary. Further, the Project includes BMPs identified in Section 2.6.5, Best Management Practices, in Chapter 2 to be implemented during construction. **ALTERNATIVE 3** **Consistent**. As stated in Section 5.2.3 under Construction/Water Quality Protection and like the Proposed Project described above, Alternative 3 would prepare an erosion control plan, be subject to the NPDES General Permit, prepare a SWPPP, and implement BMPs during construction.
6.3.8 On-Site Sediment Containment. Require containment of all sediment on the site during construction and require drainage improvements for the completed development that will provide runoff control, including onsite retention or detention	**PROPOSED PROJECT** **Consistent.** As described in Section 2.6.2, prior to construction, the Proposed Project would prepare a SWPPP, which must describe the site, the facility, erosion and

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Santa Cruz County General Plan Policy	Consistency Discussion (Provides both Proposed Project & Alternative 3 for Comparison)
where downstream drainage facilities have limited capacity. Runoff control systems or Best Management Practices shall be adequate to prevent any significant increase in site runoff over pre-existing volumes and velocities and to maximize on-site collection of non-point source pollutants.	sediment controls, runoff water quality monitoring, means of waste disposal, implementation of approved local plans, control of construction sediment and erosion control measures, maintenance responsibilities, and non-stormwater management controls. Additionally, inspection of construction sites before and after storms is required to identify stormwater discharge from the construction activity and to identify and implement erosion controls, where necessary. Further, the Project includes BMPs identified in Section 2.6.5 to be implemented during construction. Post-construction, the Project would provide runoff control for the new facilities. For Transfer Station A, stormwater surface runoff from new impervious surfaces built within Transfer Station A facility limits would be collected at the low point on the back (north) side of the transfer station, directed toward the transfer station, and conveyed via storm pipe infrastructure into the landfill's existing stormwater channel. The realigned Harkins Slough Road would drain in the direction of the transfer station facility to prevent an increase of stormwater runoff to the existing perimeter ditch to the north of the property and to the open space east of the property. Stormwater would be conveyed from the new road to the facility via sheet flow, storm pipe, or a combination of both to the proposed stormwater conveyance systems located adjacent to Transfer Station A. For Transfer Station B, stormwater surface runoff at Transfer Station B would be conveyed via curbing and V-ditches to a series of catch basins located within the paved area, similar to current conditions. The ultimate outfall would be the existing outfall located east of the facility into the perimeter ditch. The anticipated increase in runoff volume can be conveyed effectively through the existing or replaced stormwater pipe. If ODF Option 2 is approved, the existing drainage on the top deck of the Old Landfill would be improved and restored so it can (1) convey stormwater as originally designed, (2) accommodate increased stormwater runoff from new impervious surfaces at the ODF Option 2 site, and (3) support native wetland and riparian vegetation. For Landfill Closure, a surface water management system would be implemented which would control flows on the landfill surface after the final cover has been placed; prevent infiltration, inundation, and ponding on the landfill final cover; minimize erosion of final cover; minimize erosion, slope failure, washout, and over-topping of associated surface water conveyances; and minimize sediments carried off site.

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Santa Cruz County General Plan Policy	Consistency Discussion (Provides both Proposed Project & Alternative 3 for Comparison)
	For the optional equipment parking and storage area, Project design would maintain the existing grade, which slopes gently from north to south with surface runoff entering the existing drainage swale. Project design would maintain the existing grade and capture stormwater runoff with a bioswale, underground recharger chambers, or use of a Stormceptor system to capture debris and oils while allowing stormwater to flow efficiently. Other measures that may be implemented include gravel disconnect areas, level spreaders, or check dams to dissipate the runoff to a non-erosive flow. **ALTERNATIVE 3** **Consistent**. As stated in Section 5.2.3 under Construction and like the Proposed Project described above, Alternative 3 would prepare a SWPPP, which must describe the site, the facility, erosion and sediment controls, runoff water quality monitoring, means of waste disposal, implementation of approved local plans, control of construction sediment and erosion control measures, maintenance responsibilities, and non-stormwater management controls. Additionally, inspection of construction sites before and after storms is required to identify stormwater discharge from the construction activity and to identify and implement erosion controls, where necessary. Further, the Project includes BMPs identified in Section 5.2.3 to be implemented during construction. As stated in Section 5.2.3 under Additional Design Information, the combined facilities would include stormwater management to meet State regulatory compliance requirements. As shown in the stormwater management plan on the site plan (**Figure 5-12d**), stormwater surface runoff would be directed through grading, inlets, pipelines, and culverts to new stormwater management ponds located at the site's low point, south of the transfer station and west of the scale house. Filtration measures would be installed in the collection system and pond to prevent unwanted solid waste or contaminated stormwater from entering the stormwater system; and best management practices such as paved surface sweeping and drain inlet filter monitoring and maintenance would be employed.
6.5.8 Public Facilities within Critical Fire Hazard Areas. Discourage location of public facilities and critical utilities in Critical Fire Hazard Areas. When unavoidable, special precautions shall be taken to ensure the safety and uninterrupted operation of these facilities.	**PROPOSED PROJECT** **Consistent.** The Proposed Project is not located in a critical fire area. Also refer to Section 3.20, Wildfire.

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	ALTERNATIVE 3 **Consistent.** Alternative 3 is not located in a critical fire area. Also refer to Section 6.20, Wildfire.
6.6.1 Hazardous Materials Ordinance. Maintain the County's Hazardous Materials Ordinance, placing on users of hazardous and toxic materials the obligation to eliminate or minimize the use of such materials wherever possible, and in all cases to minimize the release, emission, or discharge of hazardous materials to the environment, and properly to handle all hazardous materials and to disclose their whereabouts. Further, maintain the County's ordinance relating to ozone-depleting compounds. Ensure that any amendment of existing ordinance provisions is based on a finding that the amendments will provide protection to the environment and the community against toxic hazards that is equal to or stronger than the existing provisions.	**PROPOSED PROJECT** **Consistent.** As discussed fully in Section 3.9, Hazards and Hazardous Materials, small quantities of potentially toxic substances (e.g., petroleum and other chemicals used to operate and maintain construction equipment) would be used within the Proposed Project area and transported to and from the site during construction. However, the Project contractor would be required to comply with California Health and Safety Code, Chapter 6.95, which would ensure that risks from routine use, transport, handling, storage, disposal, and release of hazardous materials would be minimized. Compliance with existing regulations would ensure that impacts related to hazardous materials are avoided and minimized to the extent feasible. The County would continue to collect household hazardous waste at the Buena Vista Landfill facility consistent with current operations and regulatory requirements. **ALTERNATIVE 3** **Consistent**. As discussed fully in Section 6.9, Hazards and Hazardous Materials, and like the Proposed Project described above, Alternative 3 would use and transport small quantities of potentially toxic substances during construction in compliance with California Health and Safety Code, Chapter 6.95; and the County would continue to collect household hazardous waste at the Buena Vista Landfill facility consistent with current operations and regulatory requirements.
Parks, Recreation, Public Facilities Element	
PPF-4.1.2 (LCP) Written Commitments Confirming Water Service Required for Permits. Concurrent with project application, or prior to issuance of a building permit as authorized by the Planning Director, require a written commitment from the water agency that verifies the capability of the system to serve the development. Projects shall not be approved, or building permits shall not be issued, in areas that do not have a proven, adequate water supply. A written commitment is a letter from the agency guaranteeing that the required level of service for the project will be or is available, prior to the issuance of building permits, or in the case of a subdivision, prior to filing the Final Map or Parcel Map. The County decision-making body shall not approve any development project unless it determines that such Project has adequate water supply available.	**PROPOSED PROJECT** **Consistent.** Operation of the Proposed Project would require permanent demand for water at Transfer Stations A and B, which would include conference/break rooms, restrooms, hose bibs for periodic washing of interior transfer station walls, and fire suppression. The amount of water required would not be substantial, and a portion that would be required is already being used for operation of the existing maintenance facility, which has a conference/breakroom and restrooms. In addition, water would be needed at both ODF Option 1 and Option 2. Option 1 is status quo; therefore, it would continue to use water for dust suppression to manage fugitive dust and debris from compost preprocessing operations. If ODF Option 2 is selected, additional water would be needed to provide process water for composting materials on site. As discussed in Section 3.19, Utilities and Service Systems**,** water for

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	operating the transfer stations would be provided from the existing well and water tanks located at the neighboring Rountree Medium (Jail) Facility. The on-site well provides adequate water to support the Project fire suppression and water supply needs (Schaaf & Wheeler 2025). **ALTERNATIVE 3** **Consistent.** As described in Section 5.2.3 under Utilities, operation of the Alternative 3 combined facilities would require permanent demand for water at the office (break room and restrooms), hose bibs for periodic washing of the building interiors, and fire suppression. The amount of water required would not be substantial, and a portion that would be required is already being used for operation of the existing maintenance facility, which has a conference/breakroom and restrooms, and recycling area. As discussed in Sections 5.2.3 and 6.19, Utilities and Service Systems, water would be provided from the on-site water well, and there is sufficient water to serve the combined facilities.
PPF-4.4.1 (LCP) New Development and Redevelopment. Require runoff levels to be maintained at predevelopment rates for a minimum design storm as determined by County Design Criteria by requiring projects to provide both on and off-site improvements, including on-site percolation methods. Utilize on-site detention methods only where percolation methods are not feasible. In addition, development and use permits shall comply with any and all relevant stormwater program requirements under the State Water Resources Control Board Agriculture, Cannabis Cultivation, Wastewater, and other regulatory programs.	**PROPOSED PROJECT** **Consistent.** Implementation of the Proposed Project is anticipated to increase the volume of stormwater runoff from new impervious surfaces associated with the development of Transfer Station A and possibly ODF Option 2 and the optional equipment parking and storage area. However, stormwater features as described in Section 2.4 would effectively convey the stormwater through the site and would ensure runoff rates are maintained similar to existing conditions. **ALTERNATIVE 3** **Consistent.** Implementation of Alternative 3 would increase the volume of stormwater runoff from new impervious surfaces associated with development of the combined facilities. However, the drainage plan and stormwater management features described in Section 5.2.3 and shown in **Figure 5-12d** would effectively convey the stormwater through the site and would ensure runoff rates are maintained similar to existing conditions.
PPF-4.4.3 (LCP) Minimizing Impervious Surfaces. Require new development and redevelopment to limit coverage of lots by parking areas and other impervious surfaces, in order to minimize the amount of post-development surface runoff and maintain groundwater recharge rates.	**PROPOSED PROJECT** **Consistent.** The County minimized the new impervious surface of the Proposed Project to the extent feasible given the operational needs. The existing landfill is designed to prevent groundwater infiltration that could mobilize materials disposed in the waste body and contaminate groundwater. While implementation of the Project would introduce additional paved surfaces, most of those paved areas would

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	be constructed on top of the lined or capped landfill areas that are designed to prevent groundwater recharge or on already paved areas. Therefore, the dispersed nature of the new impervious surfaces would ensure that the infiltration capacity would not be substantially altered compared to existing conditions, consistent with the goals to protect groundwater levels and prevent groundwater overdraft. Refer to Section 3.10 for additional discussion. **ALTERNATIVE 3** **Consistent**. The County minimized the new impervious surface of Alternative 3 to the extent feasible given the operational needs. As shown in Section 5.2.3 (**Table 5-3**) and discussed in Section 6.10, Alternative 3 would result in 230,000 square feet of new impervious area. However, the relatively small amount of new impervious surface area that Alternative 3 would introduce relative to the total surface area of the groundwater basin should not impact groundwater recharge in this area. Further, the stormwater management design including the stormwater ponds would ensure that the infiltration capacity would not be substantially altered compared to existing conditions, consistent with the goals to protect groundwater levels and prevent groundwater overdraft. Refer to Section 6.10 for additional discussion.
PPF-4.4.4 (LCP) Downstream Impact Assessments. For any proposed development or redevelopment project within the County, require the applicant to conduct a downstream impact assessment and submit a stormwater management plan. The assessment should analyze the design of any improvements needed to upgrade the storm drain system such that local flooding would be eliminated for the appropriate design rainstorm. Ensure the project is conditioned to make improvements and/or pay fair share of improvement costs.	**PROPOSED PROJECT** **Consistent.** The County prepared a drainage assessment that confirmed the Proposed Project, with the proposed drainage features and modifications, would not exacerbate local flooding. The Proposed Project includes grading and drainage improvements where new facilities are proposed (e.g., Transfer Stations A & B, ODF Option 2, optional equipment parking and storage), connecting new facilities to the existing system, including filtration features, and modifying outfalls as necessary. Additionally, to address localized flooding that occurs along Buena Vista Drive from the Buena Vista Drive Tributary on the west side of the landfill due to agricultural sediment runoff, the Proposed Project includes increasing the size of the culvert downstream in Channelized Gallighan Slough beneath the internal road to the Old Landfill. The County is also planning improvements within the Buena Vista Drive Tributary to reduce localized flooding. **ALTERNATIVE 3** **Consistent**. The County prepared a drainage assessment that confirmed Alternative 3, with the drainage features shown in **Figure 5-12d**, would not exacerbate local flooding. Alternative 3 includes grading and drainage improvements where the

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Santa Cruz County General Plan Policy	Consistency Discussion (Provides both Proposed Project & Alternative 3 for Comparison)
	combined facilities and stormwater ponds are shown, connecting new facilities to the existing system, including filtration features, and modifying culverts and outfalls as necessary. Like the Proposed Project, Alternative 3 would include increasing the size of the culvert downstream in Channelized Gallighan Slough beneath the internal road to the Old Landfill, to address localized flooding that occurs along Buena Vista Drive from the Buena Vista Drive Tributary on the west side of the landfill due to agricultural sediment runoff. The County is also planning improvements within the Buena Vista Drive Tributary to reduce localized flooding.
PPF-4.4.5 (LCP) Control Surface Runoff. Require new development and redevelopment to reduce the discharge of stormwater pollutants to the maximum extent practicable in order to protect surface and groundwater quality and watersheds. Condition development project approvals to provide ongoing maintenance for the stormwater management facilities associated with their developments.	**PROPOSED PROJECT** **Consistent.** The proposed surface water management systems described in Section 2.4 for all the Proposed Project components would reduce the discharge of stormwater pollutants to the maximum extent practicable. The existing stormwater management system at the landfill would continue to control flows on the landfill surface after the final cover has been placed; prevent infiltration, inundation, and ponding on the landfill final cover; minimize erosion of final cover; minimize erosion, slope failure, washout, and over-topping of associated surface water conveyances; and minimize sediments carried off site. Stormwater is currently managed by routing drainage within the landfill area to a water quality unit using ditches and channels. A water quality unit was installed as part of Module 5 construction to replace the former sedimentation basin that used to occupy the Module 5 area. As the landfill starts to approach final grades, additional water quality units may be installed, as necessary, to manage stormwater. The water quality units would be sized as part of the site's final closure. The water quality units would be part of the ongoing monitoring program already approved by the Regional Water Quality Control Board. The units would be routinely cleaned out to maintain full functionality. Stormwater surface runoff at Transfer Station A would be collected at the low point on the back (northern) side of the transfer station, directed toward the transfer station, and conveyed via storm pipe infrastructure into the landfill's existing stormwater channel. Filtration measures would be taken to prevent unwanted solid waste or contaminated stormwater from entering the stormwater system, including Stormceptors or filtration inlet bags. Stormwater surface runoff at Transfer Station B would be conveyed via curbing and V-ditches to a series of catch basins located within the paved area, similar to current conditions. The ultimate outfall would be the existing outfall located east of the facility into the perimeter ditch. Improvements would be made to this outfall to ensure it is adequate to handle any increase in flow, if needed.

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Santa Cruz County General Plan Policy	Consistency Discussion (Provides both Proposed Project & Alternative 3 for Comparison)
	The ODF Option 1 facility would be paved and would include a roof structure for the receiving and preprocessing of organic materials to limit stormwater contact and to control runoff from the facility. Stormwater runoff would be directed by diversion berms into larger stormwater conveyance channels. The area may also include stormwater check dams to slow down the runoff to minimize erosion. ODF Option 2 would be designed to maintain the existing grade sloping southeast towards the existing seasonal wetland and drainage located on the south portion of the landfill top deck. To accommodate increased stormwater runoff from the newly paved area, a new drainage ditch would be installed parallel to the existing seasonal wetland. Paved stormwater berms may be used to direct the stormwater runoff into the new drainage ditch. The new drainage ditch would include an outlet structure at the downgradient end to tie into the existing seasonal wetland. The currently unpaved internal landfill roads would be examined to determine if improvements are necessary to support Project implementation. Similar to existing conditions, stormwater surface runoff from roadway improvements would flow to the adjacent unpaved areas downslope to the existing drainage system, composed of perimeter and bench drainage ditches and culverts, which routes stormwater to an existing water quality unit located at the north end of the entrance facility. Upgrades to the scale house and recycling center, which could include adding scales and expanding the recycling center to accommodate more materials, would occur on existing paved areas and would not increase the amount of impervious surface and stormwater runoff. The equipment parking and storage area would be primarily paved, creating an increase in impervious surface and stormwater runoff. The design would maintain the existing grade, which slopes gently from north to south, and capture stormwater runoff with a bioswale, underground recharge chambers, gravel disconnect areas, level spreaders, or check dams to dissipate the runoff to a non-erosive flow. In addition, a Stormceptor system would be used to capture debris and oils while allowing stormwater to flow efficiently. **ALTERNATIVE 3** **Consistent**. The proposed surface water management system for the landfill surface would be the same as described above for the Proposed Project. Surface water management systems for the combined facilities on the adjacent property to the north would be directed through grading, inlets, pipelines, and culverts to new

Table 6.11-2. Santa Cruz County General Plan/Local Coastal Program Policy Consistency Analysis

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	stormwater management basins/wetlands located at the site's low point, south of the transfer station near the entrance/exit at Harkins Slough Road (refer to F**igure 5-12d)**. The stormwater would first enter a forebay (upper pond) to enable sediment to settle and then flow to a larger pond (lower pond), from which the stormwater would flow to a culvert to the existing drainage along the southern boundary, feeding into the Harkins Slough Road Drainage. The stormwater ponds have been designed and placed at the low spot of the site to provide detention of the runoff and slowly release it into the drainage systems. The ponds would have a clay lining to minimize infiltration and protect against liquefaction.
PPF-4.5.1 Materials Recovery. Establish, in conformance with state law, materials recovery through recycling, reuse and composting, as the primary and fundamental strategy of solid waste management by the County, with landfill disposal as a secondary and essential component. Designate materials recovery and reuse projects as a funding priority in allocating capital expenditures for solid waste management.	**PROPOSED PROJECT** **Consistent.** The Buena Vista Landfill is a Class III municipal solid waste landfill that receives non-hazardous solid waste and is a center for waste handling, recycling collection, organics diversion, and other waste reduction activities necessary to comply with state and federal laws. The purpose of the Proposed Project is to ensure an orderly landfill closure program that meets state requirements and provides ongoing solid waste handling capabilities to allow the County to meet state-required waste management goals for waste reduction, source separation, materials recycling, household hazardous waste management, and composting. The Proposed Project includes developing Transfer Stations A and B at the landfill site to collect the solid waste (that cannot be diverted for recycling and composting) and transfer it in trucks to a regional landfill. The County would continue materials recovery at the Buena Vista facility in compliance with state law organics diversion requirements. The County is considering and would implement one of two ODF options for continued organics diversion at the Buena Vista facility, to handle the increase in diverted organic waste requiring processing. The County would also continue to accept household hazardous waste (HHW) and recycling. The Proposed Project includes an option to upgrade the existing recycling center, which could include relocating and expanding it on site to accommodate recovery of more mandated materials. **ALTERNATIVE 3** **Consistent**. The Buena Vista Landfill is a Class III municipal solid waste landfill that receives non-hazardous solid waste and is a center for waste handling, recycling collection, organics diversion, and other waste reduction activities necessary to comply with state and federal laws. Consistent with the purpose of the Proposed

Table 6.11-2. Santa Cruz County General Plan/Local Coastal Program Policy Consistency Analysis

Santa Cruz County General Plan Policy	Consistency Discussion (Provides both Proposed Project & Alternative 3 for Comparison)
	Project, Alternative 3 would ensure an orderly landfill closure program that meets state requirements and provides ongoing solid waste handling capabilities to allow the County to meet state-required waste management goals for waste reduction, source separation, materials recycling, household hazardous waste management, and composting. Alternative 3 includes developing a transfer station as part of the new combined facilities on the adjacent property to the north. The transfer station would serve self-haulers (residents and businesses), franchise haulers, and larger commercial vehicles to collect the solid waste (that cannot be diverted for recycling and composting) and transfer it in trucks to a regional landfill. The County would continue to divert organic materials (e.g., vegetation/yard waste, food waste) for preprocessing and recyclable materials, but these operations would be enclosed structures at the new combined facilities, instead of the current outdoor operations at the landfill site. The new recycling center would accommodate recovery of more materials at a single location, increase transportation efficiency, and include a marketing and storage area for materials diversion and reuse. The County would also continue to accept HHW at the current location near the main landfill entrance.
PPF-4.5.7 Increase Recycling Opportunities. Provide the opportunity for recycling to all residents and businesses in the unincorporated County in a convenient manner to maximize participation, including recycling collection services, curbside drop off, buyback and source separated collection through publicly provided service, as well as non-profit and private independent collection businesses.	**PROPOSED PROJECT** **Consistent.** The County would continue to accept recycling at the Buena Vista facility. The Proposed Project includes an option to upgrade the existing recycling center, which could include relocating and expanding it on site to accommodate recovery of more mandated materials. **ALTERNATIVE 3** **Consistent**. As described above, Alternative 3 includes relocating the recycling center to the new combined facilities on the adjacent property. Compared to the current recycling center, the new Recycling Center would accommodate recovery of more materials at a single location, increase transportation efficiency, and include a marketing and storage area for materials diversion and reuse.
PPF-4.5.9 Meeting State and Local Landfill Diversion Goals. Consider mandatory recycling or material-specific landfill disposal prohibitions if state and local landfill diversion goals are not met through the use of voluntary programs.	**PROPOSED PROJECT** **Consistent.** The County would continue to accept recyclable materials and HHW, and the Proposed Project includes an option to upgrade the existing recycling center, which could include relocating and expanding it on site to accommodate recovery of more mandated materials.

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	Additionally, as described above and below for Policy PPF-4.5.15, the County would continue to divert organic materials (e.g., vegetation/yard waste, food waste) in compliance with state law organics diversion requirements, and the Proposed Project includes two options for improving diversion operations. **ALTERNATIVE 3** **Consistent**. As described above for Policy PPF-4.5.1, the County would continue to divert organic materials and recyclable materials, but the operations would occur in enclosed structures at the new combined facilities on the adjacent property, instead of outdoors at the landfill site. The new Recycling Center would accommodate recovery of more materials at a single location, increase transportation efficiency, and include a marketing and storage area for materials diversion and reuse. The County would continue to divert HHW at the current location near the main landfill entrance.
PPF-4.5.15 (LCP) Organics Waste Diversion. Adopt strategies and continue to conduct planning efforts to remove all organic waste from the waste stream.	**PROPOSED PROJECT** **Consistent.** The County would continue to divert organic materials (e.g., vegetation/yard waste, food waste) at the Buena Vista facility in compliance with state law organics diversion requirements. The County is considering and would implement one of two ODF options for continued organics diversion at the Buena Vista facility, to handle the increase in diverted organic waste requiring processing. ODF Option 1 would continue preprocessing activities in generally the same location with some operational improvements, and preprocessed materials would continue to be transported off site for composting. ODF Option 2 would relocate the ODF to the "top deck" of the Old Landfill in the southern portion of the Buena Vista facility and expand the ODF to include preprocessing, composting, and post-processing steps to produce finished compost on site (within the County-owned landfill property). **ALTERNATIVE 3** **Consistent**. Under Alternative 3, the County would continue to divert and process organic materials (e.g., vegetation/yard waste, food waste) in an enclosed structure at the new combined facilities on the adjacent property to the north, instead of the current outdoor operation on the active landfill, in compliance with State organics diversion requirements.
PPF-4.5.21 (EJ) Land Use Compatibility with Waste Disposal. Ensure compatibility of land uses adjacent to County solid waste disposal and transfer facilities through zoning and the land use permit process.	**PROPOSED PROJECT** **Consistent.** The Proposed Project includes closing the landfill, adding transfer stations (enclosed structures), and improving the organics diversion and other

Table 6.11-2. Santa Cruz County General Plan/Local Coastal Program Policy Consistency Analysis

Santa Cruz County General Plan Policy	Consistency Discussion (Provides both Proposed Project & Alternative 3 for Comparison)
	existing operations within or immediately adjacent to the Buena Vista landfill facility. Thus, the Proposed Project components would be compatible with the existing land uses in the Project area, as well as the adjacent lands zoned for public facilities and agricultural uses. Public facilities are located to the southeast, south, and southwest of the landfill site. These public facilities include the County's Buena Vista Migrant Center (farmworker housing and childcare facility), a publicly owned farmworker housing development and childcare center, and the Tierra Alta affordable housing complex. The County's Rountree Medium (Jail) Facility is located south of the landfill site on Rountree Lane. The City of Watsonville's landfill is located southwest of the County's "Old Landfill" and is accessed from San Andreas Road. The City of Watsonville landfill is used only by Watsonville's city-operated refuse collection trucks. Agricultural uses are located to the northwest, north, and northeast of the landfill site and include greenhouses, landscape nursery, horse stables, row crops, and fallow lands. The land immediately adjacent to the north where Transfer Station A would be located includes greenhouses that have been vacant and unused for several years. The Proposed Project would not adversely affect any existing agricultural uses. Refer to Section 3.2, Agricultural Resources, for a discussion of potential impacts. The open space land east of Harkins Slough Road is a National Wildlife Refuge (ecological preserve) that is managed by the federal government. The potential impacts in this area include tree removal on County land (outside the preserve) for the realignment of Harkins Slough Road. Tree removal has been minimized to the extent possible through design measures to locate the roadway as close to the new transfer station as possible and using a 2:1 slope to support the roadway (instead of a 3:1 slope or retaining wall, which requires much more construction space). Transfer Station A operations would occur within a secure perimeter fence, and Harkins Slough Road would extend between the transfer station and the open space. Refer to Section 3.4, Biological Resources, for a discussion of potential impacts. **ALTERNATIVE 3** **Consistent.** Alternative 3 includes closing the landfill and developing combined facilities on adjacent land to the north. The combined facilities include a new transfer station, which would redirect solid waste from the Buena Vista landfill to the regional landfill; and an organics diversion facility and recycling center, which would relocate those operations from the outdoor landfill area to enclosed structures. Alternative 3 also includes environmental enhancement and habitat restoration features, such as

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Santa Cruz County General Plan Policy	Consistency Discussion (Provides both Proposed Project & Alternative 3 for Comparison)
	reorienting and expanding an existing wetland ditch via a stormwater management pond. Alternative 3 is considered compatible with the existing surrounding uses (described above for the Proposed Project) for the following reasons. Although the combined facilities would be close to the landscape nursery to the north, which includes a rural residence, the facilities would be within enclosed structures and surrounded by a secure perimeter fence. Additionally, a solid board fence and vegetative buffer would be required along the northern property line. Locating the operations within structures is considered an improvement for surrounding agricultural operations, compared to existing conditions. Refer to Section 6.2, Agricultural Resources, for a discussion of potential impacts. Alternative 3 was designed to avoid removal of oak woodland to the east and south, and to provide unencumbered space on the south side between the combined facilities and Harkins Slough Road. This allows wildlife movement between the open space to the west and east, as well as access to the stormwater management ponds (water feature), during the evening when the combined facilities are closed. Refer to Section 6.4, Biological Resources, for a discussion of potential impacts. Finally, Alternative 3 would locate ongoing facility operations further from the more densely populated residential public facilities to the south, including the Buena Vista Migrant Center (farmworker housing and childcare facility), Tierra Alta affordable housing complex, and the Rountree Medium (Jail) Facility.
PPF-4.5.22 Landfills and Environmental Protection. Ensure protection of the local environment, including air, groundwater and surface water resources through proper landfill design, construction, operation and ongoing environmental monitoring.	**PROPOSED PROJECT** **Consistent.** As stated in Section 2.1, Overview, the Buena Vista Landfill is nearing capacity, and the purpose of the Proposed Project is to ensure an orderly landfill closure program and provide ongoing solid waste handling capabilities. During continued operations of the landfill until it can no longer accept solid waste, the landfill will continue to operate in accordance with relevant regulations. As described in Section 2.4 under subsection Landfill Closure and Revegetation, the landfill would be closed in accordance with the Buena Vista Landfill Preliminary Closure and Post-closure Maintenance Plan (2021), developed in accordance with federal and state standards (Appendix D). Protective measures associated with closure of the landfill include installation of foundation, barrier, drainage, and vegetative cap layers, grading, a surface water management system, environmental monitoring and control systems, and habitat restoration. **ALTERNATIVE 3** **Consistent.** Same as for the Proposed Project.

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Santa Cruz County General Plan Policy	Consistency Discussion (Provides both Proposed Project & Alternative 3 for Comparison)
PPF-4.5.23 Hazardous Wastes and Environmental Damaging Compounds in Landfills. Prohibit the disposal of radioactive waste, hazardous waste and ozone depleting compounds in County landfills.	**PROPOSED PROJECT** **Consistent.** Consistent with current operations, the Buena Vista facility would continue to accept household hazardous waste (e.g., cleaning products, automotive products, batteries), but would not accept waste that is defined as hazardous by the RCRA or CCR Title 22. Hazardous waste, asbestos (friable and non-friable), radioactive waste, and untreated medical waste (biohazardous or infectious waste) are not currently allowed and would not be allowed for disposal with Proposed Project implementation. Additionally, although current operations accept soil, no soil of any kind would be accepted (Santa Cruz County 2024b). **ALTERNATIVE 3** **Consistent.** Same as described for the Proposed Project above.
PPF-4.5.25 Access to Landfills and Materials Recovery Facilities. Continue to provide access to individual self-haul vehicles either at the Ben Lomond Transfer Station, the Buena Vista Landfill or at future Materials Recovery Facilities for refuse disposal, household hazardous waste drop - off and recycling and other materials recovery	**PROPOSED PROJECT** **Consistent.** The Proposed Project would enable the County to continue providing access to individual self-haul vehicles at the Buena Vista facility Landfill through the proposed redevelopment, which includes two new waste transfer stations. Transfer Station A would serve self-haulers (residents and businesses). In addition, the County would continue to accept household hazardous waste (HHW) and recycling. The Project includes an option to upgrade the existing recycling center, which could include relocating and expanding it on site to accommodate recovery of more mandated materials. The Proposed Project does not include any modifications to the Ben Lomond Transfer Station. **ALTERNATIVE 3** **Consistent**. Alternative 3 would enable the County to continue providing access to individual self-haul vehicles at the Buena Vista facility with development of the combined facilities on the adjacent property to the north. The new transfer station would serve individual self-haulers (residents and businesses), as well as franchise haulers and larger commercial vehicles, to collect the solid waste (that cannot be diverted for recycling and composting) and transfer it in trucks to a regional landfill. The County would continue to divert and process organic materials (e.g., vegetation/yard waste, food waste) and recyclable materials at the new combined facilities, instead of the current operations in the landfill area. In addition, the County would continue to accept HHW at the current location near the main landfill entrance. Compared to the current recycling center, the new Recycling Center at the combined facilities would accommodate recovery of more materials at a single

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	location, increase transportation efficiency, and include a marketing and storage area for materials diversion and reuse. Alternative 3 does not include any modifications to the Ben Lomond Transfer Station.
PPF-4.5.27 Reuse of Closed Landfill Sites. Provide for rehabilitation and reuse of closed landfill sites consistent with environmental protection requirements, while planning for the future solid waste needs of the County. Rehabilitation shall include mitigation of resource degradation, where possible.	**PROPOSED PROJECT** **Consistent.** The Proposed Project would provide for the rehabilitation and reuse of the Buena Vista Landfill once it reaches capacity and closes, as described in Section 2.4 and Appendix D, Preliminary Closure Plan. The purpose of the Proposed Project is to ensure an orderly landfill closure program that meets state requirements and provides ongoing solid waste handling capabilities to allow the County to meet state-required waste management goals for waste reduction, source separation, materials recycling, household hazardous waste management, and composting. As part of the Proposed Project, Transfer Stations A and B would be developed at the Buena Vista facility to collect the solid waste that cannot be diverted for recycling and composting and transfer it in trucks to a regional landfill. In accordance with the California and federal landfill closure regulations, the Proposed Project includes installation of a landfill closure cover system, commonly called a cap, that consists of four layers: foundation, barrier, drainage, and vegetative. Like other portions of the landfill that have been closed and capped, the existing environmental monitoring and control systems would continue to monitor and control groundwater, leachate, surface water, and landfill gas control and monitoring. In addition to the required cap and vegetative cover, as described in Section 2.4, the Proposed Project includes the following environmental enhancement and habitat restoration features at the Buena Vista facility: Restoration of Harkins Slough Road Drainage, Culvert Modification with Small Wildlife Crossing at Main Entrance, Culvert Replacement under Internal Roadway to Old Landfill, Wildlife Movement Corridor between Gallighan Slough and Harkins Slough, and Wildlife Directional Features at Key Locations. Finally, as identified in Chapter 3 of this EIR (including Sections 3.4 and 3.5), the Proposed Project would include mitigation for potential degradation of biological resources, cultural resources, and other resources. **ALTERNATIVE 3** **Consistent**. As described in Section 5.2.3, Alternative 3 would include the same landfill closure activities as described above for the Proposed Project. Additionally, Alternative 3 would include the same environmental enhancement and habitat

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Santa Cruz County General Plan Policy	Consistency Discussion (Provides both Proposed Project & Alternative 3 for Comparison)
	restoration features as the Proposed Project, as well as the following additional features: Creation of Open Drainage along North-South Roadway, Reorientation and Expansion of Existing Wetland Ditch, and Culvert and Fencing Designed for Wildlife Movement. Finally, as identified in Chapter 6 of this EIR (including Sections 6.4 and 6.5), Alternative 3 would include mitigation for potential degradation of biological resources, cultural resources, and other resources.
Noise Element	
Policy 9.2.1. Require acoustical studies for all new development projects that may affect the existing noise environment affecting sensitive land uses and receptors and that may not conform to the Normally Acceptable Noise Exposure in Table 9-2.	**PROPOSED PROJECT** **Consistent.** A noise analysis of the Proposed Project was prepared as part of this EIR. The potential impacts to adjacent sensitive receptors, including people residing at the adjacent Rountree Medium (Jail) Facility, Buena Vista Migrant Center (farmworker housing and childcare facility), and Tierra Alta affordable housing complex, would be less than significant with mitigation (Mitigation Measures N-1, N-2a, N-2b). Refer to Section 3.13, Noise. **ALTERNATIVE 3** **Consistent.** A noise analysis of Alternative 3 was prepared as part of this EIR. Construction and daily operation of equipment at the combined facilities (under the worst-case combined noise levels) would have the potential to expose residential and non-residential structures to noise exceeding the County General Plan Noise Element daytime noise compatibility standard. These potentially significant impacts would be reduced to a less than significant level (to below the Normally Acceptable Noise Exposure in Table 9-2) by requiring noise-reducing measures for construction equipment and noise shielding design features at the transfer station, ODF, and recycling center (Mitigation Measures N-1 and N-2d). Refer to Section 6.13, Noise.
Policy 9.2.2. Require site-design and noise reduction measures for any project, including transportation projects, that would cause significant degradation of the noise environment due to project effects that could: (a) Increase the noise level at existing noise-sensitive receptors or areas by 5 dB or more, where the post project CNEL or DNL will remain equal to or below 60 dB; (b) Increase the noise level at existing noise-sensitive receptors or areas by 3 dB or more, where the post project CNEL or DNL would exceed 60 dB; This policy shall not be interpreted in a manner that would limit the ability of the County to require noise related mitigation measures or conditions of approval for projects that may generate lesser increases than the above. Special consideration may also be applied to special events or	**PROPOSED PROJECT** **Consistent.** As discussed in Section 3.13, the Proposed Project would result in potential noise impacts to nearby sensitive receptors during construction of the optional equipment parking and storage area and operation of Transfer Station B and ODF Option 2. The closest sensitive receptors to the equipment area are residences at the north end of Tierra Alta Drive, and the temporary impact would be reduced to less than significant with noise-reducing measures for construction equipment (Mitigation Measure N-1). The closest sensitive receptor to both Transfer Station B and ODF Option 2 is the Rountree Medium (Jail) Facility. The worst-case operation of both Transfer Station B and ODF Option 2 would potentially exceed the County Noise Ordinance standard. This impact would be reduced by requiring noise shielding

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activities subject to permit requirements, or to land use development permits for uses and activities exempted from County noise control regulations.	features for preprocessing grinder operation. The implementation of Mitigation Measures N-2a and N-2b would reduce impacts to sensitive receptors to below the County General Plan Noise Element standards. No other Project components would cause a significant degradation to the noise environment. Refer to Section 3.13 for further discussion. **ALTERNATIVE 3** **Consistent**. As discussed above for Policy 9.2.1 and in Section 6.13, Alternative 3 would result in potential noise impacts to nearby sensitive receptors during construction and operation. Construction and daily operation of equipment at the combined facilities (under the worst-case combined noise levels) would have the potential to expose residential and non-residential structures to noise exceeding the County General Plan Noise Element daytime noise compatibility standard. These impacts would be reduced to a less than significant level (to below the Normally Acceptable Noise Exposure in Table 9-2) by requiring noise-reducing measures for construction equipment and noise-reducing design features at the transfer station, ODF, and recycling center (Mitigation Measures N-1 and N-2d). Refer to Section 6.13, Noise, for further discussion.
Policy 9.2.4. For all new commercial and industrial developments which would increase noise levels above the normally acceptable standards in Table 9-2 or the maximum allowable standards in Table 9-3, the best available control technologies shall be used to minimize noise levels. In no case shall the noise levels exceed the standards of Table 9-3.	**PROPOSED PROJECT** **Consistent.** As described above for Policy 9.2.2 and discussed in Section 3.11, Proposed Project operation would result in potential noise impacts to nearby sensitive receptors. The closest sensitive receptor to both Transfer Station B and ODF Option 2 is the Rountree Medium (Jail) Facility. The worst-case operation of Transfer Station B and ODF Option 2 would potentially exceed the County Noise Ordinance standard. This impact would be reduced by requiring noise shielding features for preprocessing grinder operation. The implementation of Mitigation Measures N-2a and N-2b would reduce impacts to sensitive receptors to below the County General Plan Noise Element standards. No other Project components would cause a significant degradation to the noise environment. Refer to Section 3.13 for further discussion. **ALTERNATIVE 3** **Consistent**. As described above for Policy 9.2.2 and discussed in Section 6.11, Alternative 3 operation would result in potential noise impacts to nearby sensitive receptors. This impact would be reduced by requiring noise-reducing design features. Implementation of Mitigation Measure N-2d would reduce impacts to below the

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	Normally Acceptable Noise Exposure in Table 9-2. Refer to Section 6.13, Noise, for further discussion.
Policy 9.2.5. The following noise mitigation strategies are preferable to construction of conventional masonry noise barriers where these strategies are a feasible option to reduce impacts on sensitive uses: ▪ Avoid placement of noise sensitive uses in noisy areas. ▪ Avoid placement of significant noise generators in noise sensitive areas. ▪ Increase setbacks between noise generators and noise sensitive uses. ▪ Orient buildings such that the noise sensitive portions of a Project (e.g. bedrooms) are shielded from noise sources (such as through careful design of floor plan). ▪ Use sound-attenuating architectural design and building features. ▪ Employ technologies that reduce noise generation, such as alternate pavement materials on roadways, when appropriate. ▪ Employ traffic calming measures where appropriate.	**PROPOSED PROJECT** **Consistent.** Refer to the discussion above for Policies 9.2.2 and 9.2.4, as well as Section 3.13, Noise. **ALTERNATIVE 3** **Consistent.** Refer to the discussion above for Policies 9.2.2 and 9.2.4, as well as Section 6.13, Noise.
Policy 9.2.6. Require mitigation and/or best management practices to reduce construction noise as a condition of Project approvals, particularly if noise levels would exceed 75 dB at neighboring sensitive land uses or if construction would occur for more than 7 days.	**PROPOSED PROJECT** **Consistent.** As discussed in Section 3.13, average construction noise levels for the Proposed Project would have the potential to exceed the County Noise Ordinance and General Plan Policy 9.2.6 standard of 75 dBA up to approximately 200 feet from the construction area. This impact would be reduced by implementing Mitigation Measure N-1. Refer to discussions above and in Section 3.13 for further discussion. **ALTERNATIVE 3** **Consistent.** As discussed in Section 6.13, average construction noise levels under Alternative 3 would have the potential to exceed the County Noise Ordinance and General Plan Policy 9.2.6 standard of 75 dBA up to approximately 200 feet from the construction area. This impact would be reduced by implementing Mitigation Measure N-1. Refer to discussions above and in Section 6.13 for further discussion.

Notes:

[1] Although the General Plan/LCP includes a comprehensive list of roadways throughout the County, this table only includes those visible or within 1 mile of the Project area.

[2] Although the General Plan/LCP includes a comprehensive list of identified sites of hydrological, geological, or paleontological features, they are located in the Bonny Doon Planning Area, which is located in north County and not near the Project area.

BMP = best management practice; CDID = Community Development & Infrastructure Department; CNEL = community noise level equivalent; DNL = day-night average noise level; LCP = Local Coastal Program; NPDES = National Pollutant Discharge Elimination System; RCRA = Resource Conservation and Recovery Act; SWPPP = Stormwater Pollution Prevention Plan; VMT = vehicle miles traveled

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6.12 Mineral Resources

This section describes existing mineral resource use, outlines the regulatory framework applicable to mineral resources, and evaluates impacts related to mineral resources as a result of Alternative 3, Combined Facilities on Adjacent Property (Alternative 3) construction and operation. **Table 6.12-1** presents a summary of potential impacts related to mineral resources.

Table 6.12-1. Summary of Alternative 3 Impacts Related to Mineral Resources

Impact	Significance before Mitigation	Mitigation	Significance after Mitigation
MIN-1. Alternative 3 would not result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state.	Less than Significant	None required	Less than Significant
MIN-2. Alternative 3 would not result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan.	No Impact	None required	No Impact

Note: The impact, significance determination, and mitigation apply to Alternative 3 as a whole, considering all components, unless otherwise noted.

6.12.1 Existing Conditions

The State Geologist classifies mineral lands solely on the basis of geologic factors, and the existing land use, by statute, is not considered. Classification of an area is described in Section 3.12.1.

The Alternative 3 site is located north of the existing Buena Vista Landfill and Harkins Slough Road. It is comprised of 11 acres within Assessor's Parcel Number (APN) 052-011-11 (a 26.95-acre parcel) and 2 acres within APN 052-021-33 (part of the County-owned landfill property).

The Alternative 3 site is not designated by the County as a Mineral Resource Area. Refer to **Figure 3.12-1,** Mineral Resource Area, in Chapter 3, Section 3.12, which shows the areas identified as a Mineral Resource Area within and around the Buena Vista Landfill, including the Alternative 3 site to the north.

Several active mining operations in Santa Cruz County provide important mineral resources for industry and construction, including sand and granitic rock (Santa Cruz County 2024). Eight quarries exist in the county, four of which are currently closed. There are no active quarries located near the Alternative 3 site.

6.12.2 Regulatory Setting

This section describes the federal, state, and local plans, policies, and laws relevant to mineral resources for Alternative 3.

Federal

No federal regulations related to mineral resources are applicable to Alternative 3.

State

The relevant state plans, policies, and laws are described in Section 3.12.2, Regulatory Setting, under the following:

- Surface Mining and Reclamation Act

Local

The relevant local plans, policies, and laws are described in Section 3.12.2, under the following:

- Santa Cruz County General Plan/Local Coastal Program (LCP)

6.12.3 Methodology and Significance Thresholds

Methodology

The analysis of mineral resources impacts follows the guidance and methodologies recommended in Appendix G of the California Environmental Quality Act (CEQA) Guidelines.

Significance Thresholds

As stated in the Chapter 6 introduction, the significance thresholds used in this analysis are based on Appendix G of the CEQA Guidelines, which provides a sample Initial Study checklist that includes a number of factual inquiries related to the subject of mineral resources and the other environmental topics.

For the purposes of this Environmental Impact Report (EIR) and consistent with the analysis for the Proposed Project, a significant impact would occur if implementation of Alternative 3 would result in the:

A. Loss of availability of a known mineral resource that would be of value to the region and the residents of the state, or

B. Loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan.

6.12.4 Alternative 3 Impact Analysis

For each impact, the conclusion or significance determination is presented at the end of the discussion, as well as in parentheses at the end of the numbered impact statement.

As described in Section 5.2.3, Alternative 3. Combined Facilities on Adjacent Property (in Chapter 5, Project Alternatives), Alternative 3 includes the following components:

- Transfer Station
- Organics Diversion Facility
- Recycling Center
- Scale House
- General Plan/Local Coastal Program Land Use Designation and Zoning Map Amendments

Additionally, Landfill Closure and Revegetation, including the Environmental Enhancement and Restoration Features, would be implemented as described in Chapter 2, Section 2.4, Project

Components; and the potential impacts of those features are included in the analysis in Section 3.12.4. The additional enhancement and restoration features included as part of Alternative 3 (described in Section 5.2.3 under *Additional Design Information*) are considered in the evaluation below.

Threshold A:	Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state.

Impact MIN-1 ALTERNATIVE 3 WOULD NOT RESULT IN THE LOSS OF AVAILABILITY OF A KNOWN MINERAL RESOURCE THAT WOULD BE OF VALUE TO THE REGION AND THE RESIDENTS OF THE STATE. (LESS THAN SIGNIFICANT IMPACT)

As stated in Section 6.12.1 above, the Alternative 3 site is not designated by the County as a Mineral Resource Area (**Figure 3.12-1**).

Additionally, as described in **Table 5-3,** Alternative 3 Construction (Earth Movement) Estimates, implementation of Alternative 3 would require approximately 11,500 cubic yards of imported aggregate and 2,600 cubic yards of concrete. Aggregate base is actively mined in the Monterey Bay Area, which is estimated to meet demand for 41 to 50 years (California Geological Survey 2018), and supplies for Alternative 3 are expected to come from local sources in the Watsonville area in south Santa Cruz County. Thus, the demand created by Alternative 3 would not represent a significant impact on that supply.

Therefore, Alternative 3, including the primary components and optional improvements described above, as well as the associated General Plan/LCP land use designation and zoning map amendments, would not result in the loss of availability of a known mineral resource that would be of value to the region or residents of the state. The impact would be **Less than Significant**. No mitigation is required.

Threshold B:	Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan.

Impact MIN-2 ALTERNATIVE 3 WOULD NOT RESULT IN THE LOSS OF AVAILABILITY OF A LOCALLY IMPORTANT MINERAL RESOURCE RECOVERY SITE DELINEATED ON A LOCAL GENERAL PLAN, SPECIFIC PLAN, OR OTHER LAND USE PLAN. (NO IMPACT)

The Alternative 3 site (including 11 acres within APN 052-011-11 and 2 acres within APN 052-021-33) is currently zoned Commercial Agriculture-Airport Influence Area Combining District (CA-AIA), which is not considered to be an Extractive Use Zone (M-3) for mineral resources nor does it have a land use designation with a Quarry Designation Overlay (Q) (Santa Cruz County 2024).

Therefore, Alternative 3, including the primary components and optional improvements described above, as well as the associated General Plan/LCP land use designation and zoning map amendments, would not result in the loss of availability of a known mineral resource or locally important mineral resource recovery (extraction) site delineated on a local general plan, specific plan, or other land use plan. There would be **No Impact**.

6.12.5 Cumulative Impact Discussion

The potential cumulative impacts of Alternative 3 would be similar to those of the Proposed Project, which are presented in Chapter 4, Other CEQA-Required Discussions.

As discussed in Chapter 4, the Sustainability Update EIR concluded that none of the identified cumulative development or growth in the County would occur on lands containing important mineral resources, and thus would not result in cumulative impacts related to loss of availability of mineral resources. Alternative 3 is not considered an Extractive Use Zone for mineral resources nor does it have a land use designation with a Quarry Designation Overlay. Therefore, implementation of Alternative 3 would not result in the loss of availability of a known mineral resource, and the cumulative impact is not significant.

Impact MIN-C: Cumulative development would not result in a significant cumulative impact. Therefore, **the Alternative 3 contribution would not be cumulatively considerable**, which is the same as the Proposed Project.

6.13 Noise

This section describes the existing noise conditions and the regulatory framework applicable to noise and identifies potential noise impacts resulting from Alternative 3, Combined Facilities on Adjacent Property (Alternative 3) construction and operation. **Table 6.13-1** summarizes identified impacts related to noise.

Table 6.13-1. Summary of Alternative 3 Impacts Related to Noise

Impact	Significance before Mitigation	Mitigation	Significance after Mitigation
N-1. Alternative 3 construction may result in a substantial temporary increase in noise levels at residential receptors.	Potentially Significant	N-1	Less than Significant
N-2. Alternative 3 operation may expose persons to or generate excessive noise levels at residential and non-residential receptors.	Potentially Significant	N-2d	Less than Significant
N-3. Alternative 3 construction would not expose persons to or generate excessive groundborne vibration or groundborne noise levels.	Less than Significant	None Required	Less than Significant
N-4. Alternative 3 construction and operation would not expose people residing or working on the Alternative 3 site to excessive noise from aircraft.	Less than Significant	None Required	Less than Significant

Note: The impact, significance determination, and mitigation apply to Alternative 3 as a whole, considering all components, unless otherwise noted.

6.13.1 Existing Conditions

Overview of Noise and Vibration

An overview of how noise and vibration are defined and measured is presented in Section 3.13.1 for the Proposed Project and would be the same for Alternative 3.

Sensitive Receptors

Noise level allowances for various types of land uses reflect the varying noise sensitivities associated with those uses. In general, noise-sensitive land uses (called “sensitive receptors”) are any residence, hospital, school, hotel, library, office, or similar facility where quiet is an important attribute of the environment. Such uses have more stringent noise level allowances than most commercial or agricultural uses that are not subject to impacts such as sleep disturbance.

The nearest sensitive receptors to the Alternative 3 area are residences located north of the Alternative 3 site. The nearest residence is located 115 feet north of the Alternative 3 site boundary, at the east end of the existing landscape nursery (**Figure 5-12a**). There are six additional residences located between 500 feet and 1,500 feet of the Alternative 3 site boundary. The existing residence located within Assessor’s Parcel Number (APN) 052-011-11, within the vegetated area east of where the combined facilities would be located, would be vacated as part of Alternative 3 and thus would not be a sensitive receptor for potential project impacts.

Existing Noise Levels

The Alternative 3 site is developed with several structures supporting former agricultural operations (greenhouses and grazing). However, the site has not been used for agricultural operations since 2016 and is not currently a source of operational noise. The Buena Vista Landfill is currently in active operation directly south of the site, and noise sources within and adjacent to the Alternative 3 area include haul trucks, off-road equipment for tasks such as burying waste, waste handling and processing equipment, and use of bird deterrent noises as required by the California Department of Resources Recycling and Recovery (CalRecycle). Equipment and trucks are in operation during the landfill hours of operation, currently Monday through Saturday, from 7:00 a.m. to 5:00 p.m. Bird deterrent noise is used as a means of vector control to prevent the spread of refuse being carried off site by birds. The three types of loud noises currently used to disperse birds from the active fill area include a loud bang from a starter's pistol (shotgun noise), loud shrill whirling firework noise, and a loud low bang popping noise from a controlled propane explosion (propane cannon). The noise is discharged intermittently, as needed to clear birds from dumped refuse and active landfill burial area during daytime hours (typically 9:00 a.m. to 4:00 p.m.), and as frequently as once every 30 minutes when curbside collected garbage arrives with food waste (typically 10:00 a.m. to 1:00 p.m.).

Existing noise sources in the surrounding area consist primarily of traffic noise from Buena Vista Drive, intermittent aircraft noise (the landfill is in the Watsonville Municipal Airport overflight zone), and intermittent operation of agricultural equipment on surrounding agricultural land. Highway 1 also produces traffic noise, but it generally cannot be heard from the Alternative 3 area due to distance, intervening topography, and noise generated by landfill operations. Calculated existing noise levels for Buena Vista Drive are provided in **Table 6.13-2**. Noise levels are generally consistent with Santa Cruz County's (County's) General Plan normally compatible standard for residential land uses of 60 A-weighted decibels (dBA) Community Noise Equivalent Level (CNEL), as described below, except adjacent to State Route 1.

Table 6.13-2. Existing Buena Vista Drive Vehicle Noise Levels

Segment	Existing Noise Level (dBA CNEL)
State Route 1 Northbound Ramps to State Route 1 Southbound Ramps	62.3
State Route 1 Southbound Ramps to Ranport Road/Fiesta Way	60
Ranport Road/Fiesta Way to Harkins Slough Road	60
Harkins Slough Road to Landfill Entrance	58.8
Landfill Entrance to San Andreas Drive	58.6

Source: Appendix T (traffic data). Refer to **Appendix S** for model input and output.
Notes: dBA CNEL = A-weighted decibel Community Noise Equivalent Level
Noise level calculated at 50 feet from roadway centerline.

6.13.2 Regulatory Setting

This section describes the federal, state, and local plans, policies, and laws relevant to noise.

Federal

Federal Transit Administration Vibration Guidelines

Although the Federal Transit Administration standards are intended for federally funded mass transit projects, the impact assessment procedures and criteria included in the Transit Noise and Vibration Impact Assessment Manual (FTA 2018) are routinely used for projects proposed by local jurisdictions. The manual includes guideline criteria for assessing the impacts of groundborne vibration, presented in **Table 6.13-3**.

Table 6.13-3. Federal Transit Administration Groundborne Vibration Impact Criteria

	Impact Levels (VdB)		
Land Use Category	**Frequent Events[a]**	**Occasional Events[b]**	**Infrequent Events[c]**
Category 1: Buildings where vibration would interfere with interior operations	65	65	65
Category 2: Residences and buildings where people normally sleep	72	75	80
Category 3: Institutional land uses with primarily daytime uses	75	78	83

Source: FTA 2018.
Notes: VdB = vibration decibel
[a] "Frequent Events" are defined as more than 70 vibration events of the same source per day.
[b] "Occasional Events" are defined as between 30 and 70 vibration events of the same source per day.
[c] "Infrequent Events" are defined as fewer than 30 vibration events of the same source per day.
Vibration levels are measured in or near the vibration-sensitive use.

State

As required by Section 65302 of the California Government Code, desirable noise levels are stated in the Noise Element of General Plans prepared by counties and cities. Division 28 of the California Health and Safety Code requires that the California Office of Noise Control in the California Department of Health Care Services develop model elements and model noise ordinances to guide local jurisdictions in developing noise standards. The objective of noise standards is to provide the community with a means of judging the noise environment that it deems to be generally acceptable. The state has also adopted guidelines for land use compatibility and community noise environment in the State of California General Plan Guidelines, published by the Governor's Office of Planning and Research (OPR 2017). Noise levels up to 60 dBA CNEL are considered normally acceptable for low-density residential land use, and noise levels up to 70 dBA CNEL are conditionally acceptable with the incorporation of noise insulation features. Noise levels up to 70 dBA CNEL are normally acceptable for schools and commercial land use.

Local

Santa Cruz County General Plan/Local Coastal Program

According to the County's General Plan Noise Element, noise-sensitive land uses include residential (residences, hotels, and motels), institutional (schools, libraries, museums, hospitals, personal care, meeting halls, and churches), and office (office buildings, business commercial, and professional) land uses. The recommended exterior noise limit for all noise-sensitive land uses is 60 decibels (dB)

day-night average sound level (Ldn) or CNEL, and the recommended maximum interior noise level is 45 dB Ldn or CNEL. The normally acceptable noise limit for commercial facilities is 65 dBA CNEL. The following policies apply to the development of new noise sources and vibration exposure in the County (Santa Cruz County 2024a):

- **Policy 9.1.3.** Noise levels in common outdoor use areas in multi-unit residential development should not exceed 60 dBA CNEL. Where this goal cannot be met by reasonable measures, such as strategic site layout and noise barriers, 65 dBA CNEL might be considered acceptable. [Outdoor noise limits do not apply to private exterior balconies.]
- **Policy 9.2.1.** Require acoustical studies for all new development projects that may affect the existing noise environment affecting sensitive land uses and receptors and that may not conform to the Normally Acceptable Noise Exposure in General Plan Noise Element Table 9-2, Acceptable through Unacceptable Ranges of Noise Exposure by Land Use.
- **Policy 9.2.2.** Require site-design and noise reduction measures for any project, including transportation projects, that would cause significant degradation of the noise environment due to project effects that could:
  - □ Increase the noise level at existing noise-sensitive receptors or areas by 5 dB or more, where the post-project CNEL will remain equal to or below 60 dB;
  - □ Increase the noise level at existing noise-sensitive receptors or areas by 3 dB or more, where the post-project CNEL would exceed 60 dB.

  This policy shall not be interpreted in a manner that would limit the ability of the County to require noise-related mitigation measures or conditions of approval for projects that may generate lesser increases than the above. Special consideration may also be applied to special events or activities subject to permit requirements, or to land use development permits for uses and activities exempted from County noise control regulations.
- **Policy 9.2.3.** Incorporate noise considerations into the site plan review process, particularly with regard to parking and loading areas, ingress/egress points and refuse collection areas.
- **Policy 9.2.4.** For all new commercial and industrial developments which would increase noise levels above the normally acceptable standards in General Plan Table 9-2, Acceptable through Unacceptable Ranges of Noise Exposure by Land Use, or the maximum allowable standards in Table 9-3, the best available control technologies shall be used to minimize noise levels. In no case shall the noise levels exceed the standards of General Plan Noise Element Table 9-3, Maximum Allowable Noise Exposure.
- **Policy 9.2.5.** The following noise mitigation strategies are preferable to construction of conventional masonry noise barriers where these strategies are a feasible option to reduce impacts on sensitive uses:
  - □ Avoid placement of noise sensitive uses in noisy areas.
  - □ Avoid placement of significant noise generators in noise sensitive areas.
  - □ Increase setbacks between noise generators and noise sensitive uses.
  - □ Orient buildings such that the noise sensitive portions of a project (e.g., bedrooms) are shielded from noise sources (such as through careful design of floor plan).
  - □ Use sound-attenuating architectural design and building features.

  - Employ technologies that reduce noise generation, such as alternate pavement materials on roadways, when appropriate.
  - Employ traffic calming measures where appropriate.
- **Policy 9.2.6.** Require mitigation and/or best management practices to reduce construction noise as a condition of project approvals, particularly if noise levels would exceed 75 dB at neighboring sensitive land uses or if construction would occur for more than 7 days.

County General Plan Table 9-2, Acceptable through Unacceptable Ranges of Noise Exposure by Land Use, establishes noise levels normally considered compatible or incompatible with various land uses. Noise levels up to 60 dBA CNEL are considered normally compatible with residential land uses, and noise levels up to 75 dBA CNEL are conditionally acceptable with residential uses if residential development includes adequate noise insulation features to meet the interior noise standard of 45 dBA CNEL. Noise levels up to 70 dBA are considered normally acceptable for agricultural, industrial, and utility uses.

County General Plan Table 9-3, Maximum Allowable Noise Exposure Stationary Noise Sources, includes noise standards for stationary noise sources, as detailed in **Table 6.13-4**.

Table 6.13-4. Maximum Allowable Noise Exposure Stationary Noise Sources

	Daytime[a] (7:00 a.m. to 10:00 p.m.)	Nighttime[a,b] (10:00 p.m. to 7:00 a.m.)
Hourly Leq – Average Hourly Noise Level, dB[c]	50	45
Maximum Level, dB[c]	70	65
Maximum Level dB – Impulsive Noise[d]	65	60

Source: Santa Cruz County 2024a.
Notes: dB = decibel; Leq = equivalent continuous sound level
As determined at the property line of the receiving land use. When determining the effectiveness of noise mitigation measures, the standards may be applied on the receptor side of noise barriers or other property line noise mitigation measures.
[a] Allowable levels shall be raised to the ambient noise levels where the ambient levels exceed the allowable levels. Allowable levels shall be reduced by 5 dB if the ambient hourly Leq is at least 10 dB lower than the allowable level.
[b] Applies only where the receiving land use operates or is occupied during nighttime hours.
[c] Sound level measurements shall be made with "slow" meter response.
[d] Sound level measurements shall be made with "fast" meter response.

Santa Cruz County Code

Chapter 8.30, Noise, and Chapter 13.15, Noise Planning, of the County Code establish noise regulations in Santa Cruz County. Section 8.30.010 of the County Code states that "offensive noise" shall not be permitted between 10:00 p.m. and 8:00 a.m. Section 8.30.010 of the County Code states that daytime noise exceeding 75 dB at the property line from which the sound is broadcast should be considered offensive. The ordinance also states that the necessity of the noise should be taken into consideration in determining if a noise violates the code (Section 8.30.010[C][5]) (Santa Cruz County 2024b). Section 13.15.050 states that all uses, except temporary construction, shall conform to the noise parameters established in Tables 9-2 and 9-3 of the General Plan, described above. Section 13.15.060 also includes special requirements for heating, ventilation, and air conditioning (HVAC) systems such that noise from HVAC systems may not exceed 55 dBA at any neighboring property line.

6.13.3 Methodology and Significance Thresholds

Methodology

The analysis of noise impacts considers the effects of both temporary construction-related noise and long-term noise associated with the operation of Alternative 3. For construction noise, short-term noise levels are estimated using the Federal Highway Administration (FHWA) Roadway Construction Noise Model (RCNM). The potential for exposure of people to excessive groundborne vibration from construction is evaluated using reference vibration levels provided in the Federal Transit Administration's Transit Noise and Vibration Impact Assessment Manual (FTA 2018). Changes to ambient roadway noise levels are evaluated using standard noise modeling equations adapted from the FHWA noise prediction model. The modeling calculations consider the posted vehicle speed, average daily traffic volume, and estimated vehicle mix. The noise model assumes that roadways would experience a decrease of approximately 3 dBA for every doubling of distance from the roadway. Traffic data, including intersection volumes with and without Alternative 3 implementation and anticipated truck volumes, is provided in the transportation studies prepared for the Proposed Project and Alternative 3 (**Appendix L** and **Appendix T**). Traffic counts conducted by Kimley-Horn were used to estimate daily trip distribution for all daily traffic and truck traffic. The traffic counts were also used to estimate the proportion of truck trips attributable to medium-duty and heavy truck traffic. Refer to **Appendix S** for detailed noise modeling assumptions.

Significance Thresholds

As stated in the Chapter 6 introduction, the significance thresholds used in this analysis are based on Appendix G of the California Environmental Quality Act (CEQA) Guidelines, which provides a sample Initial Study checklist that includes a number of factual inquiries related to the subject of noise and the other environmental topics. Thus, the letters and thresholds presented below correspond with the questions in the Appendix G Initial Study checklist.

For purposes of this Environmental Impact Report (EIR) and consistent with the analysis for the Proposed Project, a significant impact would occur if implementation of Alternative 3 resulted in any of the following conditions:

A. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of Alternative 3 in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.
B. Generation of excessive groundborne vibration or groundborne noise levels.
C. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, exposure of people residing or working in the project area to excessive noise.

6.13.4 Alternative 3 Impact Analysis

For each impact, the discussion is separated into construction, operation, and facility components as needed to describe the potential impact. The overall conclusion or significance determination is presented at the end of the discussion, as well as in parentheses at the end of the numbered impact statement.

As described in Section 5.2.3, Alternative 3. Combined Facilities on Adjacent Property (in Chapter 5, Project Alternatives), Alternative 3 includes the following components:

- Transfer Station
- Organics Diversion Facility (ODF)
- Recycling Center
- Scale House
- General Plan/Local Coastal Program (LCP) Land Use Designation and Zoning Map Amendments

Additionally, Landfill Closure and Revegetation, including the Environmental Enhancement and Restoration Features, would be implemented as described in Chapter 2, Section 2.4, Project Components, and the potential impacts are described in Section 3.13.4. The additional enhancement and restoration features included as part of Alternative 3 (described in Section 5.2.3 under *Additional Design Information*) are considered in the evaluation below.

Threshold A:	Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of Alternative 3 in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.

Impact N-1 ALTERNATIVE 3 CONSTRUCTION MAY RESULT IN A SUBSTANTIAL TEMPORARY INCREASE IN NOISE LEVELS AT RESIDENTIAL RECEPTORS. (LESS THAN SIGNIFICANT WITH MITIGATION)

Impact N-2 ALTERNATIVE 3 OPERATION MAY EXPOSE PERSONS TO OR GENERATE EXCESSIVE NOISE LEVELS AT RESIDENTIAL AND NON-RESIDENTIAL RECEPTORS. (LESS THAN SIGNIFICANT WITH MITIGATION)

This analysis addresses changes to ambient vehicle noise as a result of all components of the combined facilities, followed by a discussion of construction and operational noise sources from individual components.

Changes to Ambient Vehicle Noise

Calculated vehicle noise levels are provided with and without Alternative 3 implementation for interim (Year 2032) conditions in **Table 6.13-5** and for future (Year 2045) conditions in **Table 6.13-6**.

As shown in **Table 6.13-5** and **Table 6.13-6**, Alternative 3 implementation would not result in a noticeable (more than 3 dBA) increase in noise level on any roadway segment. Alternative 3 would not cause noise levels to exceed the most conservative noise compatibility standard of 60 dBA CNEL on any roadway segment. As such, Alternative 3 would not result in a significant increase in ambient traffic noise levels; thus, the impact would be Less than Significant.

Table 6.13-5. Interim (Year 2032) Buena Vista Drive Vehicle Noise Levels

Segment	Interim Noise Level (dBA CNEL)	Interim + Alternative 3 Noise Level (dBA CNEL)	Change Attributable to Alternative 3 (dBA CNEL)
State Route 1 Northbound Ramps to State Route 1 Southbound Ramps	63.2	63.4	+0.2
State Route 1 Southbound Ramps to Ranport Road/Fiesta Way	61	62.1	+1.1
Ranport Road/Fiesta Way to Harkins Slough Road	60.4	61.7	+1.3
Harkins Slough Road to Landfill Entrance	52.4	55.1	+2.7
Landfill Entrance to San Andreas Drive	57.5	57.6	+0.1

Source: Appendix T (traffic data). Refer to **Appendix S** for model input and output.
Notes: dBA CNEL = A-weighted decibel Community Noise Equivalent Level
Noise level calculated at 50 feet from roadway centerline.

Table 6.13-6. Cumulative (Year 2045) Buena Vista Drive Vehicle Noise Levels

Segment	Cumulative Noise Level (dBA CNEL)	Cumulative + Alternative 3 Noise Level (dBA CNEL)	Change Attributable to Alternative 3 (dBA CNEL)
State Route 1 Northbound Ramps to State Route 1 Southbound Ramps	64	64.7	+0.7
State Route 1 Southbound Ramps to Ranport Road/Fiesta Way	62.1	62.8	+0.7
Ranport Road/Fiesta Way to Harkins Slough Road	61	62	+1
Harkins Slough Road to Landfill Entrance	52.4	55	+2.6
Landfill Entrance to San Andreas Drive	59.2	59.2	0

Source: Appendix T (traffic data). Refer to **Appendix S** for model input and output.
Notes: dBA CNEL = A-weighted decibel Community Noise Equivalent Level
Noise level calculated at 50 feet from roadway centerline.

Construction

The operation of heavy equipment during construction of the Alternative 3 components would result in temporary increases in noise within the vicinity of active construction. Expected construction equipment includes excavators, dump trucks, loaders, bulldozers, concrete trucks, concrete pump trucks, cranes, and smooth or sheepsfoot compactors. No pile driving would be required. **Table 6.13-7** provides average noise levels associated with typical equipment that may be required for Alternative 3 construction.

As described in Section 5.2.3, Alternative 3. Combined Facilities on Adjacent Property (in Chapter 5, Project Alternatives), construction is estimated to begin in fall 2028 and would continue until approximately winter 2030. Construction activities would include demolition of existing structures, grading and earthwork, installation of erosion and sediment controls, relocation and extension of utilities, construction of new buildings, and paving around new facilities.

Noise levels from Alternative 3 construction were determined based on typical equipment noise levels determined by the FHWA RCNM. The construction fleet required for Alternative 3 would be the same as the Proposed Project; as such, the construction noise level calculated for the Proposed Project also applies to Alternative 3. The three noisiest pieces of construction equipment with the potential to operate simultaneously in the same location (jackhammer, concrete saw, and pneumatic tools) were modeled using the RCNM and would have the potential to generate combined noise levels up to 89.6 dBA at 50 feet, and hourly average noise levels of 87 dBA at 50 feet from the construction site. This equipment is primarily anticipated to be required during demolition and is a conservative assumption for other construction activities. Noise levels from point sources, such as construction sites, typically attenuate at a rate of about 6 dBA per doubling of distance (Caltrans 2013).

Table 6.13-7. Typical Construction Noise Levels

Equipment	Typical Noise Level (dBA) 50 Feet from Source	Typical Noise Level (dBA) 150 Feet from Source	Typical Noise Level (dBA) 275 Feet from Source
Backhoe	77.6	68	63
Loader	80	71	65
Tractor	84	75	69
Crane	80.6	71	66
Lift	74.7	65	60
Dump Truck	76.5	67	62
Concrete Pump Truck	81.4	72	67
Paver	77.2	68	62
Compactor/Roller	83.2	74	68
Jackhammer	88.9	79	74
Air Compressor	77.7	68	63
Generator	80.6	71	66
Concrete Saw	89.6	80	75
Pneumatic Tools	85.2	76	70

Source: FHWA 2006.
Notes: dBA = A-weighted decibel
FHWA 2006 for noise levels at 50 feet. Noise levels at other distances assume an attenuation rate of 6 dBA for every doubling of distance.

Construction would occur during daytime hours and, therefore, would not be expected to result in sleep disturbance. However, average construction noise levels would have the potential to exceed the County Noise Ordinance and General Plan Policy 9.2.6 standard of 75 dBA up to approximately 200 feet from the construction area. The closest residence to the Alternative 3 site boundary is located approximately 115 feet northeast of the site on APN 052-011-09, at the east end of the landscape nursery (**Figure 5-12a**). The next closest residence is located approximately 540 feet north on APN 052-011-41. Therefore, one residence is located within the 200-foot screening distance for construction.

Implementing noise-reducing measures during construction (Mitigation Measure N-1) would reduce noise at nearby sensitive receptors to below the County Noise Ordinance and General Plan Noise Element standards. Therefore, this construction-related noise impact of Alternative 3 would be **Less than Significant with Mitigation** (Mitigation Measure N-1).

Operation

As described in Section 3.13 (Impact N-2), the existing noises associated with landfill operation, including off-road equipment and loud noises currently used to disperse birds from the active fill area (shotgun noise, loud shrill whirling firework noise, and propane cannon), would cease once the landfill is closed. However, the new combined facilities at the Alternative 3 site would result in the operation of transfer station, recycling center, and ODF equipment at a new location.

Operation of the transfer station, recycling center, and ODF would result in the operation of equipment in a new location and changes to traffic patterns that would have the potential to increase noise exposure during operation. The hours of operation for Alternative 3 components would be Monday through Saturday, from 7:00 a.m. to 5:00 p.m., which are consistent with the current landfill hours of operation. No nighttime operation would occur. As shown in **Table 6.13-5** and **Table 6.13-6**, Alternative 3 traffic would not result in a significant change to vehicle noise levels compared to noise levels without Alternative 3.

The Noise Element establishes standards for operation in County General Plan Table 9-2 and Table 9-3. Table 9-2 establishes maximum ambient community noise levels that are compatible with various land use types. Table 9-3 establishes hourly average and maximum noise level standards for stationary noise sources at new commercial and industrial development. Alternative 3 is a modification of existing municipal infrastructure. It does not propose new commercial or industrial development; however, it would relocate operations to a site north of the existing landfill. As shown in **Table 6.13-2**, ambient vehicle noise levels in the area range from 54 dBA CNEL to 64 dBA CNEL without project implementation. Based on modeled traffic noise levels, existing equipment operation, and Alternative 3's location in the overflight area for Watsonville Municipal Airport, existing noise levels in the Alternative 3 area exceed the hourly noise level limit for new commercial and industrial development of 50 dBA. As such, due to land use type and existing ambient noise level conditions, the Maximum Allowable Noise Exposure standards are not applicable for determining the potential operational impacts of Alternative 3. The noise compatibility standards set forth in Table 9-2 are the most appropriate for Alternative 3. Based on the ambient noise level standards of 60 dBA Ldn for residential uses and 65 dBA Ldn for commercial uses, Alternative 3 would result in a significant impact if it would cause daytime noise levels in excess of 60 dBA at residential land uses and 65 dBA at non-residential uses. Based on Policies 9.1.1, 9.1.2, and 9.1.3 listed in Section 6.13.2, Regulatory Setting, the standards are applied at the nearest occupied building, or outdoor usable space for residential uses, rather than the property line to reflect where noise exposure would occur.

Alternative 3 would result in a new traffic pattern on the site, including new truck traffic. Calculated truck traffic is up to 24 large transfer trucks, which would be spread throughout the day, with a maximum of 8 trips entering the site during the peak hour. As shown in **Table 6.13-5** and **Table 6.13-6**, project traffic on Harkins Slough Road would not exceed 60 dBA CNEL at 50 feet from the roadway. As such, the new traffic pattern on the site would not result in an increase in ambient noise levels at neighboring properties that would exceed the Noise Element compatibility standard. Operation of new equipment is addressed below.

Transfer station, ODF, and recycling center operation would result in noise from trucks, such as backup beeping and tailgate slamming, operation of equipment used on the tipping floor, and a new HVAC system on the transfer station office. It is assumed that some additional small off-road equipment, such as forklifts or loaders, may also be required for operation of each component. Pumping would be required for wastewater collection and hauling. Operation of a pump for wastewater removal would occur intermittently several times per month, consistent with existing landfill wastewater removal operations. Because pump operations would be short-duration and intermittent, wastewater removal would not result in a significant increase in noise exposure and is not further addressed below.

A similar proposed transfer facility in King County, Washington, determined that average interior noise levels for transfer station operations are approximately 84 dBA, including truck dumping, front-end loader operations, backup alarms, and other unloading activities (King County 2024). The interior noise level estimate does not include attenuation from tunnels or buildings. The transfer station would include a full-depth tunnel for transfer trailer loading, and the ODF and recycling center would also be housed within structures. The tunnels and proposed buildings would provide some noise attenuation for truck and equipment noise, consistent with U.S. Environmental Protection Agency recommendations to reduce community noise exposure (USEPA 2001).

To determine the potential screening distance for transfer station impacts, it is conservatively assumed that transfer station operation would generate noise levels of 84 dBA at approximately 50 feet. Specifications for the proposed HVAC system at the transfer station are not yet available; however, typical commercial HVAC systems can reach up to 78 dBA at 3 feet, or 54 dBA at 50 feet. Therefore, transfer station operation would have the potential to result in a combined worst-case daytime noise level of approximately 84 dBA at 50 feet. The ODF and recycling center would result in similar noise from truck dumping, front-end loader operations, backup alarms, and other unloading activities. As such, these components would also have the potential to generate noise levels up to 84 dBA at 50 feet. Conservatively assuming a combined noise level of all three components at 50 feet, combined noise levels would be approximately 89 dBA. This combined noise level would be limited to the roundabout area of the site where all three building entrances are located but is conservatively used as a screening level for potential impacts.

As such, individual Alternative 3 components would have the potential to exceed the daytime noise threshold of 60 dBA for residential use up to 800 feet from operation, and the non-residential standard of 65 dBA up to 450 feet from operation. Combined noise level from all three components would have the potential to exceed the daytime noise threshold of 60 dBA for residential use up to 1,400 feet from operation, and the non-residential standard of 65 dBA up to 800 feet from operation. Energy-saving features would limit HVAC system operation during nighttime hours. Units may occasionally cycle on during nighttime hours. Based on the ambient noise compatibility standard of 60 dBA CNEL, which is more conservative than Noise Ordinance Section 13.15.060, a nighttime screening level of 50 dBA would apply to nighttime HVAC noise. HVAC operation would have the potential to exceed the nighttime hourly noise level limit of 50 dBA up to 75 feet from operation.

There are no residential or non-residential structures within 75 feet of the site with the potential to be exposed to nighttime HVAC-related impacts. However, there are six residences located within 800 feet of transfer station operation (APN 04612102, 05201109, 05201140, 05201141, 04612103, 04612101). The nearest non-residential structures, besides the existing land use, are located approximately 330 feet north of the Alternative 3 site in APN 05201140 and 05201141. Therefore, residential and non-residential uses would be located within the screening distance for potential daytime impacts from typical transfer station operation.

The screening distance for combined operation of Alternative 3 components does not consider noise attenuation from the proposed buildings that would reduce noise from trucks and equipment. As shown on **Figure 5-12e**, Alternative 3 Circulation Pattern, transfer trailer traffic would load solid waste on the western side of the transfer station, which is the farthest area of site operation from the nearest residence, located near the northeast corner of the site. Additionally, other vehicular traffic for the transfer station, ODF, and recycling center is oriented around the proposed roundabout so that building openings would be oriented away from receptors. Conservatively assuming the proposed buildings and tunnel would provide 5 dBA of noise attenuation for each component, which is typical for a barrier that breaks the line of sight to the noise source (internal transfer station operation), operational noise would be reduced to 79 dBA at 50 feet from each building, or 60 dBA at 450 feet and 65 dBA at 250 feet. Worst-case combined noise levels from all three components would be reduced to 84 dBA at 50 feet, or 60 dBA at 800 feet and 65 dBA at 450 feet. The residential structures at APN 04612102, 05201109, 05201140, and 05201141 would be within these screening distances, as well as non-residential structures north of the site.

As such, daily operation of equipment at the combined facilities (under the worst-case combined noise levels) would have the potential to expose residential and non-residential structures to noise exceeding the County General Plan Noise Element daytime noise compatibility standard. This potentially significant impact would be reduced to a less than significant level by requiring noise shielding design features at the transfer station, ODF, and recycling center. Thus, the impact would be **Less than Significant with Mitigation** (Mitigation Measure N-2d).

In summary, Alternative 3 (Combined Facilities on Adjacent Property), including the associated General Plan/LCP land use designation and zoning map amendments and environmental enhancement/restoration features, may expose persons to a temporary increase in noise levels during construction and excessive noise from operation. However, both would be reduced to a less than significant level by implementing mitigation measures. Therefore, the impact would be **Less than Significant with Mitigation** (Mitigation Measures N-1 and N-2d).

Mitigation Measure N-1: Implement Noise-Reducing Measures for Construction Equipment Used within 200 Feet of Occupied Residences

The County of Santa Cruz shall include the following in the construction specifications. The construction contractor shall employ the following noise-reducing measures where use of construction equipment occurs within 200 feet of an occupied residence:

- Use acoustical shelters around any air compressors, generators, and any other stationary construction equipment not fitted with baffled enclosures
- Use baffling around stationary construction equipment to reduce noise and vibration levels
- Properly muffle and maintain all construction equipment powered by internal combustion engines
- Prohibit unnecessary idling of internal combustion engines
- Whenever feasible, use electrical power to run air compressors and similar power tools

Mitigation Measure N-2d: Implement Noise-Reducing Design Features at Combined Facilities

Before the start of any operations of the transfer station, ODF, or recycling center at the combined facilities, the County of Santa Cruz shall demonstrate that noise shielding features have been incorporated into building design to reduce noise levels to below an hourly average of 65 dBA at the nearest occupied non-residential structure, and 60 dBA at the nearest occupied residential structure. Measures to reduce noise exposure may include, but are not limited to, installation of

industrial sound-proofing panels or curtains on all building walls or individual pieces of equipment to dampen noise.

Threshold B: Generation of excessive groundborne vibration or groundborne noise levels.

Impact N-3 ALTERNATIVE 3 CONSTRUCTION WOULD NOT EXPOSE PERSONS TO OR GENERATE EXCESSIVE GROUNDBORNE VIBRATION OR GROUNDBORNE NOISE LEVELS. (LESS THAN SIGNIFICANT)

Construction

As described previously, expected construction equipment for all Alternative 3 elements includes typical heavy construction equipment, including excavators, dump trucks, loaders, bulldozers, concrete trucks, concrete pump trucks, cranes, and smooth or sheepsfoot compactors. No pile driving would be required for any Alternative 3 component.

The peak particle velocity (PPV) metric, described in Section 3.13.1, Existing Conditions, is most appropriate for evaluating building damage potential associated with vibration. Typical vibration levels for available construction equipment required for Alternative 3 are provided in **Table 6.13-8**. The California Department of Transportation (Caltrans) estimates that vibration levels less than 0.12 PPV do not result in damage to even the most fragile historic buildings (Caltrans 2013). As shown in **Table 6.13-8**, the highest level of construction-related vibration during operation of a vibratory roller would be below 0.12 PPV beyond 35 feet from the source. Other equipment would be below 0.12 PPV within 25 feet of equipment operation. The closest existing receptor to any construction area would be the residence at APN 05201109, located approximately 115 feet from the construction area. As such, vibration from construction would not be expected to result in building damage at nearby structures.

Vibration decibels (VdB), described in Section 3.13.1, are most appropriate to describe vibration relative to human response and are used here to describe human response to groundborne vibration and its corresponding groundborne noise level (FTA 2018). As shown in **Table 6.13-8**, vibration levels would naturally reduce to below 85 VdB more than 50 feet from the construction area, which is the level that may be annoying to daytime noise-sensitive land uses. Construction would be limited to daytime hours. As described above, no existing sensitive receptors would be located within 50 feet of any Alternative 3 construction area. Therefore, the potential vibration impact during construction would be **Less than Significant**.

Table 6.13-8. Vibration Source Levels for Construction Equipment

Construction Equipment	Approximate PPV/VdB at 25 Feet[a]	Approximate PPV/VdB at 35 Feet[a]	Approximate PPV/VdB at 50 Feet[a]
Large Bulldozer	0.089/87	0.050/83	0.031/78
Loaded Truck	0.076/86	0.050/82	0.027/77
Small Bulldozer	0.003/58	0.002/54	0.001/45
Jackhammer	0.035/79	0.020/75	0.010/70
Vibratory Roller	0.210/94	0.120/90	0.074/85

Source: FTA 2018.
Notes: PPV = peak particle velocity; VdB = vibration decibel
[a] Based on the formula VdB = VdB (25 feet)−30log(d/25) provided by the FHWA (2006).

Operation

Alternative 3 operation would result in truck trips and the operation of equipment that may generate some localized groundborne vibration. Equipment and truck operations would be similar to existing operations on the existing landfill, which is currently not a significant source of groundborne vibration. Future operation would not include any new source of vibration that would be expected to exceed levels similar to current landfill operation. Therefore, the potential vibration impact from operation would be **Less than Significant**.

In summary, Alternative 3 (Combined Facilities on Adjacent Property), including the associated General Plan/LCP land use designation and zoning map amendments and environmental enhancement/restoration features, would not expose persons to or generate excessive noise levels at residential and non-residential receptors. The impact would be **Less than Significant**. No mitigation is required.

Threshold C:	For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, exposure of people residing or working in the project area to excessive noise.

Impact N-4 ALTERNATIVE 3 CONSTRUCTION AND OPERATION WOULD NOT EXPOSE PEOPLE RESIDING OR WORKING ON THE ALTERNATIVE 3 SITE TO EXCESSIVE NOISE FROM AIRCRAFT. (LESS THAN SIGNIFICANT)

The Watsonville Municipal Airport is located approximately 1 mile northeast of the Alternative 3 site. A portion of the Alternative 3 area is located within the 60 dBA CNEL contour, and the site is subject to overflight. This noise level is the normally compatible standard for sensitive receptors. Therefore, Alternative 3 would not result in any new receptors within an area with the potential to be exposed to airport noise in excess of the normally compatible standard for sensitive receptors. Additionally, Alternative 3 is not a sensitive receptor and does not include any components that would have the potential to change air traffic patterns or introduce new sources of aircraft noise. Therefore, neither construction nor operation of Alternative 3 would expose people to excessive noise from aircraft. The impact would be **Less than Significant**. No mitigation is required.

6.13.5 Cumulative Impact Discussion

The geographic scope for the analysis of cumulative construction noise, stationary noise, and vibration impacts is generally limited to areas within 0.5 mile of the Alternative 3 site, or less, as described below. Beyond this distance, impulse noise may be briefly audible, and steady noise from construction activity or project operations would generally dissipate such that the level of noise would reduce to below applicable noise standards and blend in with the background noise level. Similarly, vibration is a localized phenomenon that reduces progressively as the distance from the source increases. The geographic scope for ambient vehicle noise levels is the roadways serving the Alternative 3 site and cumulative projects.

The cumulative projects being considered are those listed in **Table 4-1** within 0.5 mile of the existing landfill, which is adjacent to the Alternative 3 site. Several projects would occur within this screening distance, including the Buena Vista Drive Rehabilitation, Watsonville Landfill Expansion, Zero Emission Passenger Rail & Trail Segments 13–20, and Rail Corridor Maintenance Vegetation Trimming and Removal. However, construction noise and groundborne vibration from cumulative projects would be limited to the immediate vicinity of active construction activity. As discussed

above, the noise levels from use of a typical construction equipment fleet would be reduced to below the 75 dBA threshold at 200 feet from equipment, and below the 85 VdB threshold for vibration annoyance at 50 feet from equipment. Construction noise and vibration would be temporary and cease after construction is complete. Construction within 50 feet and 200 feet from the Alternative 3 property line, but not within 200 feet of the construction area for projects identified in **Table 4-1**. It is unlikely that simultaneous construction of any Alternative 3 component and any project in **Table 4-1** would result in combined noise or vibration exposure at any individual receptor and thus would not result in a significant cumulative impact during construction.

The operational noise from cumulative projects would potentially introduce new area noise sources. For example, the City of Watsonville's Landfill Expansion project was completed in 2025 to reestablish the City's active landfill operations within their landfill site southwest of the County's Buena Vista Landfill, and the Zero Emissions Passenger Rail and Trail Segments 13–20 would result in periodic noise from new train trips. However, landfill operation is required to continue to comply with local standards, including applicable local Noise Ordinances. Land uses with the potential to result in noise sources that exceed applicable ordinances would be required to implement noise shielding or other noise attenuating features and thus would not result in a significant cumulative impact. As discussed above, operation noise from Alternative 3 would have the potential to exceed the noise level limit outside the Alternative 3 site boundary prior to mitigation. However, as with construction, due to distance, noise levels from Alternative 3 would not combine with cumulative projects to result in cumulatively higher operational noise exposure. Therefore, Alternative 3's contribution would not be cumulatively considerable.

A cumulative ambient vehicle noise impact would occur if cumulative development would result in an increase in ambient noise of 3 dBA on area roadways compared to existing conditions. Cumulative projects, such as new mixed-use development and warehouse/distribution centers, would likely result in an increase in vehicle trips that could increase traffic noise and ambient noise levels. However, cumulative traffic was incorporated in the vehicle analysis for Alternative 3. As shown in **Table 6.13-5**, Interim (Year 2032) Buena Vista Drive Vehicle Noise Levels, and **6.13-6**, Cumulative (Year 2045) Buena Vista Drive Vehicle Noise Levels, future cumulative noise levels in 2045 would not be more than 2 dBA more than Year 2032 noise levels. Therefore, cumulative development would not result in a significant cumulative impact.

Impact N-C: In summary, cumulative development would not result in significant cumulative impacts related to construction noise and vibration, stationary noise sources, or vehicle noise. Therefore, the **Alternative 3 contribution would not be cumulatively considerable**, which is the same determination as the Proposed Project.

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6.14 Population and Housing

This section describes existing population and housing, outlines the regulatory framework applicable to population and housing, and evaluates impacts related to population and housing as a result of Alternative 3, Combined Facilities on Adjacent Property (Alternative 3) construction and operation. **Table 6.14-1** presents a summary of potential impacts related to population and housing.

Table 6.14-1. Summary of Alternative 3 Impacts Related to Population and Housing

Impact	Significance before Mitigation	Mitigation	Significance after Mitigation
PH-1. Alternative 3 would not induce substantial unplanned population growth in an area, either directly or indirectly.	No Impact	None Required	No Impact
PH-2. Alternative 3 would not displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere.	Less than Significant	None Required	Less than Significant

Note: The impact, significance determination, and mitigation apply to Alternative 3 as a whole, considering all project components, unless otherwise noted.

6.14.1 Existing Conditions

Population

Santa Cruz County (County) had an estimated total population of 263,338 in 2023—with approximately 135,179 living in the incorporated cities and 128,159 living in the unincorporated areas of the County, which includes areas near the Buena Vista Landfill (AMBAG 2026). The Association of Monterey Bay Area Governments (AMBAG) is responsible for projecting regional growth for Santa Cruz, San Benito, and Monterey counties. AMBAG projections indicate the County's total population will be 281,399 in 2050—with approximately 152,837 in the incorporated cities and 128,562 in the unincorporated areas (AMBAG 2026). This indicates 7 percent growth, most of which will be in the incorporated cities.

The Alternative 3 site is within the unincorporated area. There is no population residing within the planned development area. However, as described below, there is an occupied single-family residence to the east and to the north. The surrounding rural area is sparsely populated.

Housing

In 2023, Santa Cruz County had 107,165 housing units with approximately 57,550 housing units in the unincorporated areas (AMBAG 2026). The AMBAG projections show that the total housing units in the County will grow to 120,092 units, with 61,380 units in the unincorporated areas (AMBAG 2026). This indicates 13 percent growth in total.

The 13-acre Alternative 3 site does not include any housing units. However, there is a single-family residence in the far eastern portion of the property (Assessor's Parcel Number [APN] 052-011-11) where the current property owners reside. There is also a nearby single-family residential unit on the property to the north of the Alternative 3 site. The remainder of the surrounding area is rural with very low-density rural residences. Refer to **Figure 5-12a**.

6.14.2 Regulatory Setting

This section describes the federal, state, regional, and local plans, policies, and laws relevant to population and housing for the Project.

Federal

No federal regulations related to population and housing are applicable to the Project.

State

The relevant state plans, policies, and laws are described in Section 3.14.2, Regulatory Setting, under the following:

- California Housing Element Law

Regional/Local

The relevant regional and local plans, policies, and laws are described in Section 3.14.2, under the following:

- Association of Monterey Bay Area Governments 2045 Metropolitan Transportation Plan and Sustainable Communities Strategy
- Santa Cruz County General Plan/Local Coastal Program (LCP)
- Santa Cruz County Housing Element
- Santa Cruz County Code
  - Chapter 13.10, Zoning Regulations
  - Measure J: Chapter 17.01, Growth Management, and Chapter 17.04, Annual Population Growth
  - Chapter 17.10, Affordable Housing Requirements

6.14.3 Methodology and Significance Thresholds

Methodology

The analysis of population and housing impacts follows the guidance and methodologies recommended in Appendix G of the California Environmental Quality Act (CEQA) Guidelines.

Significance Thresholds

As stated in the Chapter 6 introduction, the significance thresholds used in this analysis are based on Appendix G of the CEQA Guidelines, which provides a sample Initial Study checklist that includes a number of factual inquiries related to the subjects of population and housing and the other environmental topics.

For the purposes of this Environmental Impact Report (EIR) and consistent with the analysis for the Proposed Project, a significant impact would occur if implementation of Alternative 3 would result in any of the following conditions:

A. Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

B. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

6.14.4 Alternative 3 Impact Analysis

For each impact, the overall conclusion or significance determination is presented at the end of the discussion, as well as in parentheses at the end of the numbered impact statement.

As described in Section 5.2.3, Alternative 3. Combined Facilities on Adjacent Property (in Chapter 5, Project Alternatives), Alternative 3 includes the following components:

- Transfer Station
- Organics Diversion Facility
- Recycling Center
- Scale House
- General Plan/Local Coastal Program Land Use Designation and Zoning Map Amendments

Additionally, Landfill Closure and Revegetation, including the Environmental Enhancement and Restoration Features, would be implemented as described in Chapter 2, Section 2.4, Project Components, and the potential impacts of those features are included in the analysis in Section 3.14.4. The additional enhancement and restoration features included as part of Alternative 3 (described in Section 5.2.3 under *Additional Design Information*) are considered in the evaluation below.

Threshold A:	Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure).

Impact PH-1 ALTERNATIVE 3 WOULD NOT INDUCE SUBSTANTIAL UNPLANNED POPULATION GROWTH IN AN AREA, EITHER DIRECTLY OR INDIRECTLY. (NO IMPACT)

Alternative 3 would not induce substantial unplanned population growth in the area either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure). Alternative 3 does not propose new homes or other developments that would lead to direct population growth.

As described above, Alternative 3 includes a transfer station, organics diversion facility (ODF), recycling center, and scale house. The ODF, recycling center, and scale house would be relocated from their current location within the Buena Vista Landfill to the adjacent site to the north. There are currently 40–45 staff at the Buena Vista Landfill, and it is anticipated there would be similar staffing levels with implementation of Alternative 3. Therefore, the combined facilities would not lead to new additional employees or direct population growth.

In addition, construction activities would involve a temporary increase in employees; however, employment opportunities associated with construction of Alternative 3 are assumed to be filled by the local workforce and would not result in population growth or the need for additional housing as

the workforce would return to their existing homes at the end of the workday. Therefore, landfill redevelopment would not directly or indirectly induce substantial population growth in an area.

Alternative 3 would not involve extension of roads or other infrastructure that could indirectly lead to population growth. The combined facilities would be accessed from Harkins Slough Road. The existing paved roadway that bisects the property would be used by transfer trailer trucks leaving the site, and a new driveway and internal roadways would be constructed for all other facility traffic. Potential impacts to the local roadways and access are addressed in Section 6.17, Transportation.

Therefore, Alternative 3 (Combined Facilities on Adjacent Property), including the associated General Plan/LCP land use designation and zoning map amendments and environmental enhancement/restoration features, would not directly or indirectly induce population growth. There would be **No Impact**.

Threshold B:	Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere.

Impact PH-2 ALTERNATIVE 3 WOULD NOT DISPLACE SUBSTANTIAL NUMBERS OF EXISTING PEOPLE OR HOUSING, NECESSITATING THE CONSTRUCTION OF REPLACEMENT HOUSING ELSEWHERE. (LESS THAN SIGNIFICANT IMPACT)

There is no housing on the Alternative 3 site. Existing land uses on the site (where the combined facilities would be located) include three large greenhouses, packing shed, boiler house, bathroom/lunchroom, and several other miscellaneous structures associated with previous greenhouse operations and/or cattle grazing uses that are no longer occurring.

There are two single-family residences adjacent to the Alternative 3 site, one to the north and one to the east. The residence to the north is on the adjacent parcel and would not be displaced with implementation of Alternative 3.

The residence to the east is on the same parcel (APN 052-011-11) as the Alternative 3 site, but it is in the far eastern portion of the parcel and outside the Alternative 3 site to be developed with the combined facilities. The residence is occupied by the current property owner, who would vacate the residence if and when the property is sold to the County. Although Alternative 3 includes development of only 11 acres of the 26.95-acre property (APN 052-011-11) for the combined facilities, implementation of Alternative 3 assumes the entire 26.95-acre property would be purchased by the County, and the areas outside the 11 acres used for the combined facilities would remain undeveloped. The County has no plans to demolish or use the structure at this time.

Therefore, Alternative 3 (Combined Facilities on Adjacent Property), including the associated General Plan/LCP land use designation and zoning map amendments and environmental enhancement/restoration features, would not displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere. The impact would be **Less than Significant**. No mitigation is required.

6.14.5 Cumulative Impact Discussion

The potential cumulative impacts of Alternative 3 would be similar to those of the Proposed Project, which are presented in Chapter 4, Other CEQA-Required Discussions.

As discussed in Chapter 4, the Sustainability Update EIR concluded that population and housing impacts are regulated by the County through the implementation of its General Plan/LCP and its

Measure J growth management system, and in other counties and cities within the AMBAG region by their respective general plans. Once adopted, general plans for jurisdictions within the AMBAG region would serve as the new basis for AMBAG's successive population projections, and any existing discrepancies between AMBAG projections and the growth envisioned by these plans would be resolved. Thus, the five-year updates undertaken by AMBAG would account for changes in population trends, and cumulative population growth would not be considered significant.

Alternative 3 would not induce unplanned population growth in the area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure).

I**mpact PH-C:** Cumulative development would not result in a significant cumulative impact. Therefore, **the Alternative 3 contribution would not be cumulatively considerable**, which is the same as the Proposed Project.

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6.15 Public Safety and Services

This section identifies and evaluates impacts related to public safety and services that may arise through implementation of Alternative 3, Combined Facilities on Adjacent Property (Alternative 3). Public services analyzed in this section include fire protection, police protection, parks, and schools. **Table 6.15-1** summarizes identified impacts related to public safety and services.

Table 6.15-1. Summary of Alternative 3 Impacts on Public Safety and Services

Impact	Significance before Mitigation	Mitigation	Significance after Mitigation
PUB-1. Alternative 3 would not result in the need for new or physically altered fire protection facilities.	Less than Significant	None Required	Less than Significant
PUB-2. Alternative 3 would not result in the need for new or physically altered police protection or law enforcement facilities.	Less than Significant	None Required	Less than Significant
PUB-3. Alternative 3 would not result in the need for the construction of new or physically altered school or park facilities.	Less than Significant	None Required	Less than Significant

Note: The impact, significance determination, and mitigation apply to Alternative 3, considering all components, unless otherwise noted.

6.15.1 Existing Conditions

A wide range of state and local government entities provide extensive public services to the County of Santa Cruz (County). These services include fire and police protection, public health and safety, education, parks, and general public resources, including healthcare facilities. Emergency services are provided by emergency responders and nearby hospitals, police departments, and fire stations. Educational institutions are accessible and serve the local community, while various public safety services maintain a secure environment. The area supports the overall well-being and safety of the region's residents.

Refer to Section 3.15, Public Safety and Services, for a description of the existing conditions and providers for:

- Fire Protection Services
- Police Protection Services
- Parks
- Schools

6.15.2 Regulatory Setting

This section describes the federal, state, and local plans, policies, and laws relevant to public safety and services for the Project.

Federal

No federal regulations related to public safety and services are applicable to the Project.

State

The relevant state plans, policies, and laws are described in Section 3.15.2, Regulatory Setting, under the following:

- California Master Mutual Aid Agreement

Local

The relevant local plans, policies, and laws are described in Section 3.15.2, Regulatory Setting, under the following:

- Santa Cruz County General Plan/Local Coastal Program (LCP)
- Santa Cruz County Code

6.15.3 Methodology and Significance Thresholds

Methodology

The assessment of impacts to public safety and services is based on a review of fire and police protection services, parks, and schools and consideration of potential changes in the level of service that may be required as a result of Alternative 3.

Significance Thresholds

The California Environmental Quality Act (CEQA) does not treat impacts on service ratios or response times to be adverse effects on "the environment" (City of Hayward v. Board of Trustees of the California State University [2015] 242 Cal.App.4th 833, 843). Rather, what matters under CEQA is whether, in order to maintain adequate service ratios or response times, a city, county, or other service provider would have to build new or expanded physical facilities, which themselves could result in environmental effects (Id. at pp. 843–844; see also Goleta Union School Dist. v. Regents of University of California [1995] 37 Cal.App.4th 1025, 1032–1033 [CEQA is not concerned with school overcrowding, which is a socioeconomic effect but is concerned with the impacts of school construction needed to alleviate overcrowding.]). Thus, under CEQA, the environmental analysis relating to the provision of the above-mentioned services should be limited to possible construction-related impacts, if any, associated with the services.

As stated in the Chapter 6 introduction, the significance thresholds used in this analysis are based on Appendix G of the CEQA Guidelines, which provides a sample Initial Study checklist that includes a number of factual inquiries related to the subject of public safety and services and the other environmental topics. Thus, the thresholds presented below correspond with the questions in the Appendix G Initial Study checklist.

For purposes of this Environmental Impact Report (EIR) and consistent with the analysis for the Proposed Project, a significant impact would occur if implementation of Alternative 3 would result in any of the following conditions:

A. Substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

- Fire protection
- Police protection
- Schools
- Parks

6.15.4 Alternative 3 Impact Analysis

For each impact, the overall conclusion or significance determination is presented at the end of the discussion, as well as in parentheses at the end of the numbered impact statement.

As described in Section 5.2.3, Alternative 3. Combined Facilities on Adjacent Property (in Chapter 5, Project Alternatives), Alternative 3 includes the following components:

- Transfer Station
- Organics Diversion Facility
- Recycling Center
- Scale House
- General Plan/Local Coastal Program Land Use Designation and Zoning Map Amendments

Additionally, Landfill Closure and Revegetation, including the Environmental Enhancement and Restoration Features, would be implemented as described in Chapter 2, Section 2.4, Project Components; and the potential impacts of those features are included in the analysis in Section 3.15.4. The additional enhancement and restoration features included as part of Alternative 3 (described in Section 5.2.3 under *Additional Design Information*) are considered in the evaluation below.

Threshold A:	Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: Fire protection Police protection Schools Parks

Impact PUB-1 ALTERNATIVE 3 WOULD NOT RESULT IN THE NEED FOR NEW OR PHYSICALLY ALTERED FIRE PROTECTION FACILITIES. (LESS THAN SIGNIFICANT IMPACT)

Alternative 3, including all components, would not result in the need for new or physically altered fire protection facilities, the construction of which could cause environmental impacts, to maintain acceptable service ratios or response times. Alternative 3 would not induce population growth, increase the number of residents, or substantially increase the number of employees in the surrounding area that could require additional fire protection services.

Construction activities would temporarily increase employees in the area, but these positions would likely be filled by the local workforce, would not result in population growth, and are not anticipated to substantially affect the demand for fire protection services.

There are currently 40–45 staff working at the landfill, and it is anticipated there would be similar staffing levels (i.e., no substantial increase, if any, in number of employees) with the implementation of Alternative 3 to operate the transfer station, organics diversion facility, recycling center, scale house, and office at the combined facilities, as well as the other ongoing activities on the landfill property to the south (equipment maintenance, parking, and storage; household hazardous waste collection; and ongoing maintenance of the closed landfill). Therefore, Alternative 3 would not introduce a substantial number of additional employees that could lead to an increased demand for fire protection services.

Further, the combined facilities would be constructed in accordance with fire safety standards and managed in accordance with California Department of Resources Recycling and Recovery (CalRecycle) permit conditions designed to control fire risk. No new structures or uses pose a higher fire risk than current conditions.

Because Alternative 3 would not introduce new residents or a substantial number of new employees to the area, and given the controlled environment of the combined facilities and the current and planned safety measures in place, Alternative 3 would not require new or expanded fire protection facilities to maintain existing response times, service ratios, or performance standards.

In summary, Alternative 3 (Combined Facilities on Adjacent Property), including the associated General Plan/LCP land use designation and zoning map amendments and environmental enhancement/restoration features, would not result in the need for new or physically altered fire protection services that could cause physical impacts on the environment. Therefore, the impact would be **Less than Significant**. No mitigation is required.

Impact PUB-2 ALTERNATIVE 3 WOULD NOT RESULT IN THE NEED FOR NEW OR PHYSICALLY ALTERED POLICE PROTECTION OR LAW ENFORCEMENT FACILITIES. (LESS THAN SIGNIFICANT IMPACT)

Alternative 3 would not result in the need for new or physically altered police protection or law enforcement facilities, the construction of which could cause environmental impacts, to maintain acceptable service ratios or response times. Alternative 3 would not induce substantial population growth or increase the number of employees or residents in the area that could require additional law enforcement services.

Construction activities would temporarily increase the number of employees, but these positions would likely be filled by the local workforce, would not result in population growth, and are not anticipated to substantially affect the demand for police services.

As stated above, there are currently 40–45 staff working at the landfill, and it is projected that staffing levels would remain similar with implementation of Alternative 3 to operate the transfer station, organics diversion facility, and other ongoing activities. Therefore, Alternative 3 would not introduce a substantial number of additional employees that could increase the need for police protection and law enforcement services.

Further, as described in Section 5.2.3 and shown in Figure 5-12d, the new combined facilities would be enclosed with security (perimeter) fencing, and all the facilities would be within the security fencing.

Because Alternative 3 would not introduce new residents or a substantial number of new employees to the area, and because the new combined facilities would be within security fencing, there would be no need for expanded police facilities or additional law enforcement resources that could cause physical impacts on the environment.

Therefore, the impact of Alternative 3 (Combined Facilities on Adjacent Property), including the associated General Plan/LCP land use designation and zoning map amendments and environmental enhancement/restoration features, would be **Less than Significant**. No mitigation is required.

Impact PUB-3 ALTERNATIVE 3 WOULD NOT RESULT IN THE NEED FOR NEW OR PHYSICALLY ALTERED SCHOOL OR PARK FACILITIES. (LESS THAN SIGNIFICANT IMPACT)

Alternative 3 would enhance existing public facilities to manage waste, would not result in the need for new or physically altered school or park facilities, and thus would not be subject to school and/or park fees. As described under Impacts PUB-1 and PUB-2, Alternative 3 would not induce population growth, increase the number of residents, nor substantially increase the number of employees in the surrounding area. Therefore, Alternative 3 would not generate a need for school or park facilities, nor be subject to school and/or park fees. As a result, there would be no environmental impacts from the construction of new or altered schools or park facilities.

Further, Alternative 3 would not result in adverse impacts to the adjacent U.S. Fish and Wildlife Service (USFWS) National Wildlife Refuge to the east nor the California Department of Fish and Wildlife (CDFW) Ecological Preserve to the south because protective measures would be implemented during construction and with design, such as ensuring there would be no contaminated storm water runoff entering the sloughs. Refer to Section 6.4, Biological Resources, for additional information.

Therefore, Alternative 3 (Combined Facilities on Adjacent Property), including the associated General Plan/LCP land use designation and zoning map amendments and environmental enhancement/restoration features, would not result in the need for new or physically altered school or park facilities. The impact would be **Less than Significant.** No mitigation is required.

6.15.5 Cumulative Impact Discussion

The potential cumulative impacts of Alternative 3 would be similar to those of the Proposed Project, which are presented in Chapter 4, Other CEQA-Required Discussions.

As discussed in Chapter 4, the Sustainability Update EIR concluded that cumulative growth would not result in significant impacts to the provision and maintenance of public services. Alternative 3 would not introduce new residents or a substantial number of new employees to the area; and given the controlled environment of the landfill and combined facilities (within security fencing) and the current and planned safety measures in place (e.g., construction and operation in accordance with fire safety standards), Alternative 3 is not expected to affect response times or generate a need for fire or police protection personnel that warrants expansion of existing facilities or construction of new facilities nor generate a need for school or park facilities.

Impact PUB-C: Cumulative development would not result in a significant cumulative impact. Therefore, **the Alternative 3 contribution would not be cumulatively considerable**, which is the same as the Proposed Project.

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6.16 Recreation

This section describes existing recreational uses, outlines the regulatory framework applicable to recreation, and evaluates impacts related to recreation as a result of Alternative 3, Combined Facilities on Adjacent Property (Alternative 3) construction and operation. **Table 6.16-1** presents a summary of potential impacts related to recreation.

Table 6.16-1. Summary of Alternative 3 Impacts Related to Recreation

Impact	Significance before Mitigation	Mitigation	Significance after Mitigation
REC-1. Alternative 3 would not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.	No Impact	None	No Impact
REC-2. Alternative 3 would not include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.	No Impact	None	No Impact

Note: The impact, significance determination, and mitigation apply to Alternative 3 as a whole, considering all components, unless otherwise noted.

6.16.1 Existing Conditions

The Santa Cruz County Parks, Open Space, and Cultural Services Department (County Parks) manages 43 parks and open space properties totaling nearly 1,600 acres and 29 miles of coastline (Santa Cruz County 2018). The County Parks system serves the County in two ways: regional facilities that serve the entire County's population and local parks (e.g., neighborhood, rural, and community parks) that serve unincorporated neighborhoods that are outside an independent recreation and park district boundary. The County's park system includes 890 acres of County-operated public parks as well as 710 acres of open space (Santa Cruz County 2024a). The County's parks are classified primarily as neighborhood, community, rural, and regional.

The closest County park to the Project area is Pinto Lake County Park located approximately 3.4 miles to the northeast. The park provides a playground, open space areas with trails, soccer fields, baseball/softball fields, picnic areas, fitness equipment, bike pump track, fishing areas, dog parks, disc golf course, and wildlife viewing areas.

In addition, there are several existing park and recreation facilities located outside the County Parks system that are located within 4 miles of the Project area. These include several neighborhood and community parks and trail facilities in the City of Watsonville (City), including but not limited to the following:

- Pacific Golf Center, located approximately 0.4 miles to the northeast, is a golf practice facility that provides synthetic turf hitting stations and chipping, pitching, and putting surfaces. It is located on City-owned airport property that is leased to Pacific Golf Center.
- Hazelwood Park, located 1.2 miles to the east, is a City pocket park that provides a green area.
- Watsonville City Trails, located approximately 1.5 miles to the east, is an extensive trail system with more than seven miles of trails providing public access to the Watsonville Slough System.

- Peace Drive Park, located approximately 1.5 miles to the east, is a City pocket park that provides a basketball court, picnic tables, and a children's playground.
- Ramsay Park, located approximately 2 miles to the east, is a City community park that provides baseball/softball fields, basketball courts, bicycle pump track, children's playground, tennis courts, trails, skate park, soccer fields, and volleyball courts.

Additionally, the California State Parks' Sunset State Beach and Manresa State Beach, located approximately 2.4 miles and 3 miles to the west, respectively, provide beach access and camping along the Pacific Ocean.

6.16.2 Regulatory Setting

This section describes the federal, state, and local plans, policies, and laws relevant to recreation.

Federal

No federal regulations related to recreation are applicable to the Project.

State

The relevant state plans, policies, and laws are described in Section 3.16.2, Regulatory Setting, under the following:

- Quimby Act (1975)

Local

The relevant local plans, policies, and laws are described in Section 3.16.2, under the following:

- Santa Cruz County General Plan/Local Coastal Program (LCP)
- Santa Cruz County Code
  - Chapter 15.01, Park Land Dedication or In-Lieu Fees
  - Chapter 15.03, Parks and Recreation Development Impact Fees

6.16.3 Methodology and Significance Thresholds

Methodology

The analysis of recreation impacts follows the guidance and methodologies recommended in Appendix G of the California Environmental Quality Act (CEQA) Guidelines.

Significance Thresholds

As stated in the Chapter 6 introduction, the significance thresholds used in this analysis are based on Appendix G of the CEQA Guidelines, which provides a sample Initial Study checklist that includes a number of factual inquiries related to the subject of recreation and the other environmental topics.

For the purposes of this Environmental Impact Report (EIR) and consistent with the analysis for the Proposed Project, a significant impact would occur if implementation of Alternative 3 would:

A. Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.

B. Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.

6.16.4 Alternative 3 Impact Analysis

For each impact, the overall conclusion or significance determination is presented at the end of the discussion, as well as in parentheses at the end of the numbered impact statement.

As described in Section 5.2.3, Alternative 3. Combined Facilities on Adjacent Property (in Chapter 5, Project Alternatives), Alternative 3 includes the following components:

- Transfer Station
- Organics Diversion Facility
- Recycling Center
- Scale House
- General Plan/Local Coastal Program Land Use Designation and Zoning Map Amendments

Additionally, Landfill Closure and Revegetation, including the Environmental Enhancement and Restoration Features, would be implemented as described in Chapter 2, Section 2.4, Project Components; and the potential impacts of those features are included in the analysis in Section 3.16.4. The additional enhancement and restoration features included as part of Alternative 3 (described in Section 5.2.3 under *Additional Design Information*) are considered in the evaluation below.

Threshold A:	Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.

Impact REC-1 ALTERNATIVE 3 WOULD NOT INCREASE THE USE OF EXISTING NEIGHBORHOOD AND REGIONAL PARKS OR OTHER RECREATIONAL FACILITIES SUCH THAT SUBSTANTIAL PHYSICAL DETERIORATION OF THE FACILITY WOULD OCCUR OR BE ACCELERATED. (NO IMPACT)

Alternative 3 does not include the development of uses, such as residential dwellings or office employment, that would place demands on or result in the use of nearby parks and recreation facilities. Therefore, Alternative 3 (Combined Facilities on Adjacent Property), including the associated General Plan/LCP land use designation and zoning map amendments and environmental enhancement/restoration features, would not increase the use of existing neighborhood and regional parks or recreational facilities such that substantial physical deterioration of the facilities would occur or be accelerated. There would be **No Impact**.

Threshold B:	Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.

Impact REC-2 ALTERNATIVE 3 WOULD NOT INCLUDE RECREATIONAL FACILITIES OR REQUIRE THE CONSTRUCTION OR EXPANSION OF RECREATIONAL FACILITIES WHICH MIGHT HAVE AN ADVERSE PHYSICAL EFFECT ON THE ENVIRONMENT. (NO IMPACT)

Alternative 3 does not propose the construction of new or expanded recreational facilities, which could result in adverse physical effects to the environment. Furthermore, because implementation

of Alternative 3 would not contribute to increased population or dwelling units that would drive demand for recreational facilities in the County, Alternative 3 would not result in the need for the construction or expansion of recreational facilities.

Therefore, Alternative 3 (Combined Facilities on Adjacent Property), including the associated General Plan/LCP land use designation and zoning map amendments and environmental enhancement/restoration features, would not include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment. There would be **No Impact**.

6.16.5 Cumulative Impact Discussion

The potential cumulative impacts of Alternative 3 would be similar to those of the Proposed Project, which are presented in Chapter 4, Other CEQA-Required Discussions.

As discussed in Chapter 4, the Sustainability Update EIR concluded that cumulative growth would not result in significant impacts to the provision and maintenance of park and recreation services. Alternative 3 does not include the development of uses, such as residential dwellings or office employment, that would result in the use of nearby parks and recreation facilities or drive the demand for new or expanded recreational facilities.

Impact REC-C: Cumulative development would not result in a significant cumulative impact. Therefore, **the Alternative 3 contribution would not be cumulatively considerable**. This impact is similar to the Proposed Project.

6.17 Transportation

This section evaluates the potential environmental impacts of implementing Alternative 3, Combined Facilities on Adjacent Property (Alternative 3), on existing transportation. Existing transportation facilities within and near the Alternative 3 site are identified to assess the impacts that Alternative 3 could have on the circulation system. Portions of the impact analysis contained herein are based on the Traffic Impact Assessment (TIA) prepared by Kimley-Horn dated July 2025 (**Appendix L**) for the Proposed Project and on the Buena Vista Project Alternatives Traffic Analysis Memo prepared by Kimley-Horn dated June 2026 (**Appendix T**). A summary of the potential impacts related to transportation for Alternative 3 is presented in **Table 6.17-1**.

Table 6.17-1. Summary of Alternative 3 Impacts Related to Transportation

Impact	Significance before Mitigation	Mitigation	Significance after Mitigation
T-1. Alternative 3 would not conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities.	Less than Significant	None Required	Less than Significant
T-2. Alternative 3 would meet the screening criteria set by Santa Cruz County and thus would not conflict or be inconsistent with CEQA Guidelines, Section 15064.3(b).	Less than Significant	None Required	Less than Significant
T-3. Neither construction nor operation of Alternative 3 would substantially increase hazards due to a geometric design feature or incompatible use.	Less than Significant	None Required	Less than Significant
T-4. Alternative 3 would not result in inadequate emergency access.	Less than Significant	None Required	Less than Significant

Notes: The impact, significance determination, and mitigation apply to Alternative 3 as a whole, considering all components, unless otherwise noted.

6.17.1 Existing Conditions

Roadway Facilities

Regional access to the Alternative 3 site is provided by State Route (SR)-1, located approximately 1 mile east of the site (**Figures 1-1 and 3.17-1,** found in Chapter 1 and Chapter 3, Section 3.17, respectively). SR-1, also called Cabrillo Highway and Highway 1, extends in a north–south direction through Santa Cruz County. SR-1 is a 4-lane highway as it extends from SR-17 in the City of Santa Cruz to approximately SR-129 in the City of Watsonville.

Under existing conditions, the primary access to the Alternative 3 site is a paved driveway from Buena Vista Drive. The far western portion of the driveway at Buena Vista Drive is in poor condition and has poor sight distance of vehicles traveling on Buena Vista Drive when entering and exiting the driveway. There is secondary gated access to the Alternative 3 site from Harkins Slough Road via a paved road extending north to the primary access driveway. Refer to **Figure 5-12a**.

Buena Vista Drive is a County of Santa Cruz two-lane collector street that provides access to rural residential and agricultural land uses, as well as the main entrance of the Buena Vista Landfill. The

roadway has a posted speed limit of 35 mph. There are no sidewalks or bike lanes on either side of the street. The roadway is designated as a major collector street.

Harkins Slough Road is a County of Santa Cruz two-lane collector street that provides access to an employee entrance of the Buena Vista Landfill, the Rountree Medium (Jail) Facility, Tierra Alta Affordable Housing, the Buena Vista Migrant Center (farmworker housing and childcare facility), and several private residential land uses. There is no posted speed limit sign on this road. There are no sidewalks or bike lanes on either side of the street. The roadway is designated as a local street.

Transit Facilities

The Santa Cruz Metropolitan Transit District provides public transit within Santa Cruz County. Although there are bus routes along SR-1, there are no bus stops or transit facilities near the Alternative 3 site, along Buena Vista Drive or Harkins Slough Road, or near the Highway 1/Buena Vista Drive exit (refer to **Appendix L**, Figure 2).

The Monterey Salinas Transit provides service in the Monterey County area to the south, but there are two bus routes (28 and 29) that extend to the Watsonville Transit Center.

Bicycle and Pedestrian Facilities

There are no bicycle lanes or sidewalks along Buena Vista Drive or Harkins Slough Road. The closest bicycle facility to the Alternative 3 site is a Class II Bike Lane on San Andreas Road, approximately 1.5 miles from the Alternative 3 area.

Rail Facilities

The Santa Cruz Branch Rail Line (SCBRL) is located approximately 0.5 miles south of the Alternative 3 site. The SCBRL is owned by the Santa Cruz County Regional Transportation Commission (RTC) and extends along the southern boundary of the Buena Vista Landfill, between the Old Landfill site and the Watsonville Landfill (**Figure 2-1**). The 32-mile SCBRL is designated as active and spans the County from Davenport on the north to Watsonville on the south. There is currently limited operation.

6.17.2 Regulatory Setting

This section describes the federal, state, regional, and local plans, policies, and laws relevant to transportation for Alternative 3. This section also includes technical guidance at the state and local level for evaluating transportation impacts based on vehicle miles traveled, in accordance with Senate Bill 743. The Regulatory Setting for Alternative 3 is the same as for the Proposed Project; therefore, Section 3.17 is referenced for additional detail.

Federal

There are no relevant federal regulations related to transportation for Alternative 3, nor for the Proposed Project.

State

The relevant state plans, policies, and laws are described in Section 3.17.2, Regulatory Setting, under the following:

- Senate Bill 743
- Governor's Office of Planning and Research Technical Advisory

- California Code of Regulations, Title 14 (CEQA Guidelines), Section 15064.3
- California Department of Transportation Guidance

Regional

The relevant regional plans, policies, and laws are described in Section 3.17.2, under the following:

- 2045 Association of Monterey Bay Area Governments Metropolitan Transportation Plan/Sustainable Communities Strategy

Local

The relevant local plans, policies, and laws are described in Section 3.17.2, under the following:

- 2045 Santa Cruz County Regional Transportation Plan
- Santa Cruz County General Plan/Local Coastal Program
- County of Santa Cruz VMT Guidelines
- Santa Cruz County Active Transportation Plan

6.17.3 Methodology and Significance Thresholds

Methodology

This analysis considers the potential impacts of Alternative 3 on transportation resources in the area, based on the Significance Thresholds A-D identified below.

To assess potential conflicts with a program, plan, ordinance or policy addressing the circulation system (Threshold A), the analysis considers the relevant plans and policies in the Regulatory Setting above. This includes Policy AM-6.2.1, Level of Service Criteria, in the Access and Mobility Element of the County General Plan/LCP.

To assess conflict or inconsistency with CEQA Guidelines, Section 15064.3(b), which states that generally VMT is the most appropriate measure of transportation impacts (Threshold B), the analysis is based on the County of Santa Cruz VMT Guidelines.

As stated in Section 3.17.2, Regulatory Setting, the County adopted VMT guidelines within the SB 743 Implementation Guidelines for the County of Santa Cruz, Analyzing Vehicle Miles Traveled for CEQA Compliance (Santa Cruz County 2025). Although the County guidelines closely follow the OPR's recommendations, the screening criteria requirements have been tailored to the County as follows:

- **Small Projects:** Projects that generate fewer than 110 net new vehicular trips per day and are also consistent with the SCS, as determined by Santa Cruz County.
- **Projects Near High-Quality Transit:** Projects that are located within one-half mile of an existing major transit stop. The County's 2025 Guidelines note that a major transit stop includes the intersection of two or more major bus routes with a frequency of service interval of 20 minutes or less during the morning and afternoon peak periods.[1] Based on the current Santa Cruz METRO service pattern, the closest major transit stop is the Watsonville Transit Center, located 3–4 miles southeast of the Buena Vista Landfill.

[1] Analyzing VMT for CEQA Compliance, SB 743 Implementation Guidelines for the County of Santa Cruz, Updated July 2025 (Santa Cruz County 2025). Refer to Exhibit 2, Table Note 2, on page 6.

- **Local-Serving Retail:** Projects that include a single store on-site which does not exceed 50,000 square feet and is local-serving as determined by Santa Cruz County. Local-serving retail projects may not be regionally focused, as determined by Santa Cruz County.
- **Affordable Housing**: Projects that provide a high percentage of affordable housing. Projects do not need to be 100% affordable housing, but a high percentage must be affordable as determined by the City or County Planning Department.
- **Local Essential Service:** Projects that include local essential services such as a daycare center, public K–12 school, police or fire facility, local-serving medical/dental office, or government office. Local essential services projects may not be regionally focused, as determined by Santa Cruz County.
- **Map-Based Screening:** Projects located within an area of development that is under the VMT threshold as shown on a County screening map and as allowed by Santa Cruz County.
- **Redevelopment Projects:** Projects that replace an existing VMT-generating land use and do not result in a net overall increase in VMT.

To assess increases in design hazards due to a geometric design feature or incompatible use (Threshold C), the analysis considers if Alternative 3 would introduce features that could increase hazards in the area.

To assess impacts to emergency access (Threshold D), the analysis considers changes to the existing emergency access routes.

Significance Thresholds

As stated in the Chapter 6 introduction, the significance thresholds used in this analysis are based on Appendix G of the CEQA Guidelines, which provides a sample Initial Study checklist that includes a number of factual inquiries related to the subject of transportation along with the other environmental topics. Thus, the letters and thresholds presented below correspond with the questions in the Appendix G Initial Study checklist.

For the purposes of this EIR and consistent with the analysis for the Proposed Project, a significant transportation impact would occur if implementation of Alternative 3 would result in any of the following conditions:

A. Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities.
B. Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b).
C. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).
D. Result in inadequate emergency access.

6.17.4 Alternative 3 Impact Analysis

For each impact, the discussion is separated into construction, operation, and components as needed to describe the potential impact. The overall conclusion or significance determination is presented at the end of the discussion, as well as in parentheses at the end of the numbered impact statement.

As described in Section 5.2.3, Alternative 3. Combined Facilities on Adjacent Property (in Chapter 5, Project Alternatives), Alternative 3 includes the following components:

- Transfer Station
- Organics Diversion Facility

- Recycling Center
- Scale House
- General Plan/Local Coastal Program Land Use Designation and Zoning Map Amendments

Additionally, Landfill Closure and Revegetation, including the Environmental Enhancement and Restoration Features, would be implemented as described in Chapter 2, Section 2.4, Project Components; and the potential impacts of those features are included in the analysis in Section 3.17.4. The additional enhancement and restoration features included as part of Alternative 3 (described in Section 5.2.3 under *Additional Design Information*) are considered in the evaluation below.

Threshold A:	Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities.

Impact T-1 ALTERNATIVE 3 WOULD NOT CONFLICT WITH A PROGRAM, PLAN, ORDINANCE OR POLICY ADDRESSING THE CIRCULATION SYSTEM, INCLUDING TRANSIT, ROADWAY, BICYCLE AND PEDESTRIAN FACILITIES. (LESS THAN SIGNIFICANT IMPACT)

2045 Santa Cruz County Regional Transportation Plan

As described in Section 3.17.2, the Regional Transportation Plan (RTP) identifies improvements along Buena Vista Drive and Harkins Slough Road that include bike lanes, sidewalks, and transit turnouts. Alternative 3 would not conflict with or otherwise preclude the RTC and County from implementing the improvements identified in the RTP for Buena Vista Drive or Harkins Slough Road. If implemented, the RTC and County Roads would coordinate design and implementation to ensure relevant design and safety requirements are met.

Under current conditions, Buena Vista Drive and Harkins Slough Road are single-lane facilities without any bike lanes or sidewalks. There is currently limited room along these roadways and within the road right-of-way, as well as other constraints (e.g., drainages and sensitive habitat), that complicate adding bike lanes, sidewalks, and other improvements.

The Alternative 3 site is located at 1203 Buena Vista Drive (APN 052-011-11), which is immediately north of the Buena Vista Landfill and Harkins Slough Road. The parcel is 26.95 acres, but only 11 acres on the eastern portion of the property would be used for the combined facilities, which include a Transfer Station, Organics Diversion Facility, Recycling Center, and Scale House. All these facilities would remain on-site without impacting Buena Vista Drive and Harkins Slough Road.

Internal roadways at the combined facilities include the paved driveway along the northern property line, from Buena Vista Drive on the west to the residence on the east; an unpaved roadway extending from the driveway around the two northern greenhouses; and a paved roadway extending from the driveway to Harkins Slough Road to the south, effectively bisecting the property. However, these Alternative 3 components would not exacerbate the existing constraints or otherwise preclude the County from implementing the improvements identified in the RTP.

Additionally, Alternative 3 would not conflict with or otherwise preclude the RTC from implementing the Coastal Rail Trail, which is identified as a top-priority project in the RTP, because the multiuse path would be constructed either within the SCBRL rail corridor south of the Alternative 3 site or along San Andreas Road located approximately 1 mile southwest of the Alternative 3 site. Construction or operation of Alternative 3 would not conflict with the Coastal Rail Trail.

Santa Cruz County General Plan/Local Coastal Program, Access and Mobility Element

Alternative 3 would not conflict with the access and mobility policies for the reasons described in **Table 6.17-2**.

Table 6.17-2. Alternative 3 Consistency with County General Plan/Local Coastal Program Access and Mobility Element

County General Plan/Local Coastal Program Access and Mobility Element Policies	Project Consistency
AM-5.1.1 Corridor Design Guidelines. Incorporate the Santa Cruz County Design Guidelines as well as any location-specific design guidelines in all new development and roadway improvements.	The improvements at the main entrance off Harkins Slough Road and internal roadway improvements would be designed and constructed in accordance with Santa Cruz County Design Guidelines and other relevant requirements.
AM-5.2.2 Environmental Alignment. Account for the constraints that affect a project's corridor to minimize impacts to physical environmental conditions. Locate and design public and private roads to avoid or minimize, if necessary, impacts to significant biological, visual and other environmental resources**.**	The proposed main entrance/exit and the transfer truck exit connecting to Harkins Slough Road, as well as the internal roadways, have been designed in coordination with qualified biologists to minimize impacts on adjacent biological and environmental resources.
AM-5.2.4 Commercial Traffic. Whenever feasible, heavy commercial traffic should be routed away from residential neighborhoods.	The traffic in the area, which includes heavy commercial vehicles traveling to and from the area, would be similar to existing conditions. The additional trucks required for transferring solid waste to the regional facility would follow similar patterns using Buena Vista Drive to access SR-1 to the regional facility farther south. These additional trucks would utilize Harkins Slough Road to access the Alternative 3 driveway. Trucks would not be routed near residential neighborhoods.
AM-6.1.1 Fire and Emergency Response Access. Design adequate roadway infrastructure for fire and emergency response safety including safe access by emergency response vehicles, visible street signs, and water supplies for structural fire suppression.	The improvements at the main entrance off Harkins Slough Road and internal roadway improvements would be designed and constructed in accordance with applicable standards allowing for fire and emergency response access. Water service lines for domestic and fire suppression would be provided from on-site water wells. The scale house, transfer station, ODF, recycling center, and office would include fire detection and suppression systems.
AM-6.2.1 Level of Service Criteria. Require development projects to provide multimodal roadway improvements necessary to achieve a minimum level of service (LOS) of "D," except for those where a lesser LOS has been accepted by the County pursuant to the criteria specifically identified in Table 3-2. When development is proposed on roads where a LOS E or F standard has been accepted, require feasible mitigation in the form of road improvements, a fair share contribution to a road improvement program, or other in-lieu mitigation for the transportation system.	As described in **Appendix T**, Buena Vista Project Alternatives Traffic Analysis Memo (June 2026), all study intersections are anticipated to operate at an acceptable LOS during the AM and PM peak hours, and Alternative 3 is not anticipated to create a significant adverse traffic effect, under all the conditions evaluated, including: Existing, Interim (2032), Interim (2032) Plus Project, Cumulative (2045), and Cumulative (2045) Plus Project. Additionally, there is sufficient queuing storage for all movements at study intersections. Alternative 3 is not anticipated to increase the vehicle queue and create an adverse effect to the study intersections during AM and PM peak hours.

In summary, Alternative 3 (Combined Facilities on Adjacent Property), including the associated General Plan/LCP land use designation and zoning map amendments and environmental enhancement and restoration features, would not conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities. The impact would be **Less than Significant**. No mitigation is required.

Threshold B:	Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b).

Impact T-2 ALTERNATIVE 3 WOULD MEET THE SCREENING CRITERIA SET BY SANTA CRUZ COUNTY AND THUS WOULD NOT CONFLICT OR BE INCONSISTENT WITH CEQA GUIDELINES, SECTION 15064.3(B). (LESS THAN SIGNIFICANT IMPACT)

As described in Section 3.17.2, CEQA Guidelines, Section 15064.3(b), states that VMT is the most appropriate measure of transportation impacts; that for land use projects, VMT exceeding an applicable threshold of significance may indicate a significant impact; and that a lead agency has discretion to choose the most appropriate methodology to evaluate a project's VMT. The thresholds of significance, as currently adopted by Santa Cruz County, are summarized in **Table 6.17-3**. The County considers the proposed redevelopment operations (e.g., transfer station with office, ODF, recycling center) to be "Office or Service" land use; thus, the threshold of significance is based on the VMT per employee efficiency metric identified for this land use in **Table 6.17-3**.

Under existing conditions, there are currently 40–45 employees working at the Buena Vista Landfill, working from and reporting to the existing maintenance/office building. With implementation and operation of Alternative 3, the number of employees is expected to remain the same or very similar. However, instead of the employees managing solid waste disposal, they would be managing solid waste transfer (as well as continued operation of the recycling center, household hazardous materials, and organics diversion) from the transfer station office. The schedule of facilities operation is expected to remain unchanged and would be from 7:30 a.m. to 3:30 p.m. (Monday to Tuesday and Thursday to Saturday) and from 7:30 a.m. to 2:30 p.m. on Wednesday. All employees would work on a single shift, arriving in the morning and leaving in the afternoon. Thus, there would be no net increase in employee trips or VMT. Nonetheless, the County applied the screening criteria to identify if Alternative 3 is anticipated to result in a less than significant VMT impact without conducting a more detailed VMT analysis. In accordance with the applicable VMT metric, transfer truck trips are not included in the VMT calculation for this analysis.

Table 6.17-3. Vehicle Miles Traveled Analysis Inputs

Land Use	VMT Threshold	Basis
Residential	8.9 VMT/capita	15% below existing County-wide average VMT per capita
Office or Service	7.4 Work VMT/Employee	15% below existing County-wide average Work VMT per employee
Retail	Net regional change	Using the County as the basis (instead of the Tri-County region)
Other Employment	Work VMT/Employee	15% below existing County-wide average Work VMT per employee for similar land uses
Other Customer	Net regional change	Using the County as the basis

Source: Appendix L.

Vehicle Miles Traveled Screening

A VMT screening was conducted for Alternative 3. The County's VMT Guidelines provide details on appropriate screening thresholds that can be used to identify when a proposed land use project is anticipated to result in a less than significant VMT impact without conducting a more detailed VMT analysis. Screening thresholds are broken down into different project types under the presumption that they would result in a less than significant transportation impact. The following applicable screening thresholds were evaluated for Alternative 3.

Small Projects

This screening criteria apply to projects with low trip generation per existing CEQA exemptions. Projects generating less than 110 net new trips per day are presumed to have a less than significant VMT impact.

Alternative 3 can be screened out of VMT analysis based on Small Projects screening criteria and presumed to have a less than significant impact based on the office space within the Transfer Station (4,800 square feet). The employee daily trip estimates from the Institute of Transportation Engineers (ITE), 11th Edition for Small Office Building (ITE 712) are summarized in **Table 6.17-4**.

As per ITE 11th Edition, the Alternative 3 office is expected to generate approximately 78 daily trips related to office space. This threshold indicates a level of vehicle activity unlikely to result in significant transportation impacts. It should be noted that this is a conservative estimate because there are currently 40–45 staff working at the Buena Vista site, and it is anticipated there would be similar staffing levels with Alternative 3 implementation.

Since the number of net new daily employee trips is less than 110 daily trips, Alternative 3 is presumed to result in a Less than Significant transportation impact concerning VMT related to employee trips and is screened from further analysis based on the number of employee vehicle trips generated.

Table 6.17-4. Alternative 3 Trip Generation – Based on Office Square Footage

Land Use/Description[1,2]	Project Size		Weekday Total Daily Trips
Trip Generation Rates (ITE)			
Small Office Building (ITE 712)	Per	1,000 sq ft	16.19
Future Vehicle-Trips			
Alternative 3 (Transfer Station Office)	4,500	1,000 sq ft	78
		Project Vehicle Trips	**78**

Source: Appendix L.
Notes:
[1] Based on the Alternative 3 description in Section 5.2.3.
[2] Daily, a.m. and p.m. trips based on average land use rates from the Institute of Transportation Engineers (ITE) Trip Generation 11th Ed.

The other trips associated with Alternative 3 involve transfer trucks, which are commercial semi-trucks hauling 40- to 55-foot enclosed trailers. The purpose of the transfer trucks is to consolidate waste into larger trucks and reduce the total truck VMT required for disposal, whereas without the transfer station, there would be more individual truck trips by self-haulers and franchise haulers (refer to Chapter 5, Project Alternatives, under Alternative 2, No Project). These transfer trucks would transfer the consolidated large solid waste from the Alternative 3 site to the ReGen Monterey Landfill facility located

19 miles south in the City of Marina. The amount of anticipated waste arriving at the Alternative 3 site is expected to increase with the increase in population and employment within Santa Cruz County. This increase in waste would be associated with an increase in trips to the Alternative 3 site. However, it should be noted that Alternative 3 itself would not generate this additional traffic and as such would not cause any increase in VMT. Therefore, no VMT transportation impacts are anticipated with Alternative 3, and the truck trips below are provided for informational purposes.

The primary goal of using VMT in CEQA is to assess the environmental impact of light-duty and passenger vehicle traffic generated by a project, not the impact of commercial trucks. As discussed above, since the number of employees would not change as a result of Alternative 3, resulting in less than 110 net new daily employee trips, Alternative 3 has been screened from further analysis based on the number of employee vehicle trips generated. The following transfer truck information is being provided for informational purposes only. During the Interim (2032) Conditions, a total of approximately 472 tons of waste is anticipated to arrive at the Alternative 3 site; and during Cumulative (2045) Conditions, a total of approximately 450 tons of waste is anticipated. The waste would be transferred to the regional facility (ReGen Monterey Landfill in Marina) using 24 daily transfer trucks during the Interim (2032) Conditions and 23 daily trucks during the Cumulative (2045) Conditions. The number of daily truck trips during the Interim (2032) Conditions and during Cumulative (2045) Conditions can be found in **Appendix T** (Table 13).

In summary, Alternative 3 (Combined Facilities on Adjacent Property), including the associated General Plan/LCP land use designation and zoning map amendments and environmental enhancement/restoration features, meets the VMT screening criteria set by Santa Cruz County and thus is anticipated to result in a less than significant VMT impact without conducting a more detailed VMT analysis. Therefore, Alternative 3 would not conflict or be inconsistent with CEQA Guidelines, Section 15064.3(b). The impact would be **Less than Significant**. No mitigation is required.

Threshold C:	Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).

Impact T-3 NEITHER CONSTRUCTION NOR OPERATION OF ALTERNATIVE 3 WOULD SUBSTANTIALLY INCREASE HAZARDS DUE TO A GEOMETRIC DESIGN FEATURE OR INCOMPATIBLE USE. (LESS THAN SIGNIFICANT IMPACT)

The combined facilities at the Alternative 3 site would be accessed from Harkins Slough Road, as shown in **Figures 5-12b, 5-12d, and 5-12e.** The existing paved roadway extending from Harkins Slough Road would be used for transfer trailers exiting the site, and a new main entrance/exit would be added on the east side of the existing driveway. These driveways would be designed in accordance with the County's design guidelines. The existing driveway from Buena Vista Drive would not be used but would remain available for emergency access.

Alternative 3 includes improvements to the existing internal roadways (e.g., paving currently unpaved roads), as well as new roadways for operation, which would be implemented in accordance with applicable County design and safety standards to avoid creating a geometric design hazard or incompatible uses.

This impact discussion focuses on potential sight distance limitations for the transfer trucks exiting the Alternative 3 site, as well as other vehicles entering and exiting from Harkins Slough Road, and transfer truck queues at the Buena Vista Drive/SR-1 ramps extending to the freeway mainline. The other Alternative 3 components would not increase hazards due to a geometric design feature or incompatible use.

Sight Distance at Harkins Slough Road/Combined Facilities Driveway

As described, Alternative 3 would include new combined facilities on the adjacent property, located immediately north of the Buena Vista Landfill on the north side of Harkins Slough Road. A preliminary stopping sight distance (SSD) and intersection sight distance (ISD) analysis was conducted to determine the feasibility of the Alternative 3 driveway locations on Harkins Slough Road.

For vehicles entering Harkins Slough Road from the combined facilities driveways, the American Association of State Highway and Transportation Officials (AASHTO) method evaluates sight distance from a vehicle exiting the driveway to a vehicle approaching from either direction. The intersection sight distance is defined along intersection approach legs and across their included corners known as departure sight triangles. These specified areas should be clear of obstructions that might block a driver's view of potentially conflicting vehicles. Intersection sight distance is measured from a point 3.5 feet above the existing grade (driver's eye) along the potential driveway to a 3.5-foot object height in the center of the approaching lane on the roadway. A vehicle setback of 14.5 ft in a stopped position from the edge of shoulder was assumed for determining intersection sight distance.

Minimum sight distance criteria for the driveways were determined from the AASHTO Geometric Design of Highways and Streets 7th Edition (Green Book). For the purposes of this analysis, a design speed of 25 mph was assumed along Harkins Slough Road, although there is no posted speed limit. AASHTO standard time gap variables for passenger cars stopped on the driveways were used for Case B2 (right-turn); however, time gap was increased by 0.5 seconds for Case B1 (left-turn) to account for the potential wait for passing vehicles. Based on the existing traffic control, the minimum sight distance was calculated for the following scenarios:

- Stopping Sight Distance on Harkins Slough Road
- Intersection Sight Distance Case B – Stop control at the proposed Alternative 3 driveways
  - Case B1 – Left turn from the minor road
  - Case B2 – Right turn from the minor road

Minimum SSD and ISD values were obtained from Table 9-7 and Table 9-9 of the AASHTO Green Book. A site visit was taken to measure the available sight distance and departure sight triangles at the driveway locations. From a 14.5-foot setback from the edge of travel way, the measured available sight distance varies in each direction of Harkins Slough Road. Alternative 3 driveway locations satisfy the minimum stopping sight distance required for all approaches on Harkins Slough Road. Vehicles on the road would have sufficient sight distance to react and stop safely if a vehicle from the driveway enters or exits the road. Vehicles entering Harkins Slough Road from the driveway would also have sufficient intersection sight distance to make a left or right turn onto the road per AASHTO scenario. Alternative 3 Driveway Sight Distance is shown in **Table 6.17-5** below.

Table 6.17-5. Alternative 3 Driveway – Sight Distance

Type	Design Speed (mph)	Required Sight Distance (ft)	Actual Sight Distance (ft)	Sufficient Sight Distance (Yes/No)
Harkins Slough Road & Combined Facilities Driveway				
SSD on Primary Road	30	200	> 355	Yes
ISD Case B1 (Left Turn)	30	355	> 355	Yes
ISD Case B2 (Right Turn)	30	290	> 355	Yes

Notes: ISD = intersection sight distance; SSD = stopping sight distance

Buena Vista Drive/State Route 1 Ramp Queuing

The trucks transferring waste from the Alternative 3 site to the ReGen Monterey Landfill facility would use the Caltrans SR-1 ramp intersections with Buena Vista Drive. Therefore, ramp queuing analysis was conducted to verify queues do not extend to the freeway mainline. Ramp queuing analysis was performed for the weekday AM peak hour analysis only, as no trucks are added during the PM peak hour. The current working timings at the Buena Vista Landfill are from 7:30 AM to 3:30 PM and are expected to remain unchanged under Alternative 3.

No change in ramp queues at the SR-1 ramp intersections is anticipated for Alternative 3. All ramp queuing under Existing Conditions, Interim (2032) Conditions, Interim (2032) Plus Project Conditions, Cumulative (2045) Conditions, and Cumulative (2045) Plus Project Conditions is within each ramp's storage capacity and does not extend to the freeway mainline. Therefore, no safety mitigations are required. Refer to Proposed Project Traffic Impact Assessment (TIA) report by Kimley-Horn dated July 2025 (**Appendix L**).

All ramp queuing under Existing Conditions, Interim (2032) Conditions, Interim (2032) Plus Project (Alternative 3) Conditions, Cumulative (2045) Conditions, and Cumulative (2045) Plus Project (Alternative 3) Conditions is within each ramp's storage capacity and does not extend to the freeway mainline. Therefore, no safety mitigations are required for Alternative 3, the same as for the Proposed Project.

In summary, neither construction nor operation of Alternative 3 (Combined Facilities on Adjacent Property), including the associated General Plan/LCP land use designation and zoning map amendments and environmental enhancement/restoration features, would substantially increase hazards due to a geometric design feature or incompatible use. Therefore, the impact would be **Less than Significant**. No mitigation is required.

Threshold D: Result in inadequate emergency access.

Impact T-4 ALTERNATIVE 3 WOULD NOT RESULT IN INADEQUATE EMERGENCY ACCESS. (LESS THAN SIGNIFICANT IMPACT)

During construction of Alternative 3, emergency access along Buena Vista Drive and Harkins Slough Road to surrounding land uses and to the Alternative 3 site would be retained. Emergency vehicles would access the Alternative 3 site from either Buena Vista Drive or Harkins Slough Road, and the existing internal roads are sufficient to provide emergency access within the Alternative 3 site.

Once operational, the emergency access to the combined facilities (Alternative 3 site) and surrounding land uses would be similar to existing conditions.

Therefore, Alternative 3 (Combined Facilities on Adjacent Property), including the associated General Plan/LCP land use designation and zoning map amendments and environmental enhancement/restoration features, would not result in inadequate emergency access during construction or operation. The impact would be **Less than Significant**. No mitigation is required.

6.17.5 Cumulative Impact Discussion

The potential cumulative impacts of Alternative 3 would be similar to those of the Proposed Project, which are presented in Chapter 4, Other CEQA-Required Discussions.

As discussed in Chapter 4 under Significant Impacts in Sustainability Update EIR, there is an existing significant cumulative impact for transportation VMT.

Alternative 3 meets the screening criteria set by Santa Cruz County and thus does not require a more detailed VMT analysis. Therefore, the County determined the Alternative 3 trip would not have a considerable contribution to the significant cumulative development impact.

As stated above, the Alternative 3 office is expected to generate approximately 78 daily trips related to office space, based on the employee daily trip estimates from the ITE, 11th Edition for Small Office Building. It should be noted that this is a conservative estimate because there are currently 40–45 staff working at the Buena Vista site, and it is anticipated there would be similar staffing levels with Alternative 3 implementation. The other trips associated with Alternative 3 involve transfer trucks, which are commercial semi-trucks hauling 40- to 55-foot enclosed trailers. The purpose of the transfer trucks is to consolidate waste into larger trucks and reduce the total truck VMT required for disposal; whereas without the transfer stations, there would be more individual truck trips by self-haulers and franchise haulers. These transfer trucks would transfer the consolidated solid waste from the Alternative 3 site to the ReGen Monterey Landfill facility. The amount of anticipated waste arriving at the Alternative 3 site is expected to increase with the increase in population and employment within Santa Cruz County. This increase in waste would be associated with an increase in trips to the Alternative 3 site. However, it should be noted that Alternative 3 itself would not generate this additional traffic and as such would not cause any increase in VMT. Therefore, no VMT transportation impacts are anticipated with Alternative 3, and the truck trips below are provided for informational purposes.

I**mpact T-C:** Cumulative development would result in a cumulative impact related to transportation (VMT). However, the **Alternative 3 contribution to the existing cumulative impact would not be cumulatively considerable**, which is the same as the Proposed Project.

6.18 Tribal Cultural Resources

This section evaluates potential impacts on tribal cultural resources (TCRs) that could result from the implementation of Alternative 3, Combined Facilities on Adjacent Property (Alternative 3). The analysis of TCRs provided in this section is based on the 2024 Phase I Cultural Resource Inventory for the Buena Vista Landfill Redevelopment Project, Santa Cruz County, California (Albion 2024), the 2025 Extended Phase I Archaeological Assessment for the Buena Vista Landfill Redevelopment Project, Santa Cruz County, California (Albion 2025), and the 2026 Cultural Resources Desktop Review for the Buena Vista Landfill Redevelopment Project, Alternative 3, Santa Cruz County, California (Albion 2026).

A summary of the potential impacts is presented in **Table 6.18-1**.

Table 6.18-1. Summary of Alternative 3 Impacts Related to Tribal Cultural Resources

Impact	Significance before Mitigation	Mitigation	Significance after Mitigation
TCR-1. Alternative 3 may cause a substantial adverse change in the significance of a Tribal Cultural Resource	Potentially Significant	CR-2a, CR-2b	Less than Significant

Notes: The impact, significance determination, and mitigation apply to Alternative 3 as a whole, considering all components, unless otherwise noted.

6.18.1 Existing Conditions

Refer to Section 3.5.1, Existing Conditions, in Section 3.5, Cultural Resources, for a description of the precontact and ethnographic settings. The Alternative 3 site is located in close proximity to Harkins Slough to the east.

6.18.2 Regulatory Setting

Federal

There are no relevant federal regulations related to TCRs, as the term was created by the California State Legislature when Assembly Bill (AB) 52 was approved in 2015 and applies to projects undergoing environmental review under the California Environmental Quality Act (CEQA).

State

Assembly Bill 52

The California State Legislature approved AB 52 in 2015. The intent of AB 52 was to include California Native American Tribes early in the environmental review process and to establish a new category of resources related to Native Americans that require evaluation under CEQA, known as TCRs. AB 52 also established a formal consultation process for California tribes regarding those resources. Refer to Section 3.18.2 for additional information about AB 52.

Local

Santa Cruz County General Plan and Local Coastal Program

The Agriculture, Natural Resources and Conservation Element of the County General Plan includes objectives and policies to protect TCRs. Key policies and implementation strategies from the County General Plan pertaining to TCRs are described in Section 3.18.2.

Santa Cruz County Code

The Santa Cruz County Code (SCCC), Title 16, Environmental and Resource Protection, includes regulations to implement policies in the County General Plan/Local Coastal Program (LCP). Chapter 16.40, Native American Cultural Sites, identifies when archaeological surveys and reports are required and outlines criteria for Native American cultural studies. Section 16.40.040 identifies the necessary actions when Native American cultural sites or human remains are discovered during the review of a proposed project or during excavation or other ground-disturbing activities. Refer to Section 3.5.2, Regulatory Setting, for additional information.

Additionally, refer to Section 3.5.2 for state and local regulations associated with the findings of human remains, including those of Native American origin.

6.18.3 Methodology and Significance Thresholds

Methodology

The analysis of TCRs is based on the cultural resource inventory that was conducted for the Proposed Project vicinity between 2022 and 2024 that included archival research and a background records search at the Northwest Information Center (NWIC) at Sonoma State University, Native American Heritage Commission (NAHC) Sacred Lands File search, and outreach to Native American Tribes identified by the NAHC (Albion 2024).

Based on these results, Albion completed an Extended Phase I study of three areas, and it included a review of the ethnographic setting of the area and a consideration of the results of AB 52 consultation between the County and local Native Americans (Albion 2025). In addition, the analysis considers the 2026 Cultural Resources Desktop Review for the Buena Vista Landfill Redevelopment Project, Alternative 3, Santa Cruz County, California (Albion 2026).

On August 3, 2023, the NAHC provided a list of seven tribal representatives who may have knowledge of TCRs in the Alternative 3 area. The County submitted outreach letters via mail or email to those tribal organizations in 2024 as follows:

- Amah Mutsun Tribal Band of Mission San Juan Bautista
- Amah Mutsun Tribal Band
- Indian Canyon Mutsun Band of Costanoan
- Costanoan Ohlone Rumsen-Mutsen Tribe
- Wuksachi Indian Tribe/Eshom Valley Band

Although Native American outreach was conducted in 2024, Albion also assisted the County with formal AB 52 consultation, which was requested by one of the Tribal representatives. Albion sent AB 52 consultation request letters on June 12, 2025, containing a brief Project description and maps of the Project area of potential effects to the individuals/Tribes on the above list, as identified by the NAHC.

Additionally, on April 21, 2026, in response to the County's request for Senate Bill (SB) 18 support (in light of the proposed General Plan amendments), the NAHC provided a list of 11 tribal representatives who may have knowledge of potential impacts to traditional lands or places located in the geographic area. The County submitted letters via mail and/or email to those Tribal organizations in 2026 as follows:

- Amah Mutsun Tribal Band of Mission San Juan Bautista
- Amah Mutsun Tribal Band
- Indian Canyon Mutsun Band of Costanoan
- Costanoan Rumsen Carmel Tribe
- Costanoan Ohlone Rumsen-Mutsen Tribe
- Wuksachi Indian Tribe/Eshom Valley Band

Significance Thresholds

As stated in the Chapter 6 introduction, the significance thresholds used in this analysis are based on Appendix G of the CEQA Guidelines, which provides a sample Initial Study checklist that includes a number of factual inquiries related to the subject of TCRs and the other environmental topics. Thus, the thresholds presented below correspond with the questions in the Appendix G Initial Study checklist.

For the purposes of this Environmental Impact Report (EIR) and consistent with the analysis for the Proposed Project, a significant impact would occur if implementation of Alternative 3 would:

A. Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:
    1. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or
    2. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

6.18.4 Alternative 3 Impact Analysis

For this impact analysis, the discussion is of all actions, including construction and operation, and components of Alternative 3 were considered. The overall conclusion or significance determination is presented at the end of the discussion, as well as in parentheses at the end of the numbered impact statement.

As described in Section 5.2.3, Alternative 3. Combined Facilities on Adjacent Property (in Chapter 5, Project Alternatives), Alternative 3 includes the following components:

- Transfer Station
- Organics Diversion Facility
- Recycling Center
- Scale House
- General Plan/Local Coastal Program Land Use Designation and Zoning Map Amendments

Additionally, Landfill Closure and Revegetation, including the Environmental Enhancement and Restoration Features, would be implemented as described in Chapter 2, Section 2.4, Project Components; and the potential impacts of those features are included in the analysis in Section 3.18.4. The additional enhancement and restoration features included as part of Alternative 3 (described in Section 5.2.3 under *Additional Design Information*) are considered in the evaluation below.

Threshold A: Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

1. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or
2. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

Impact TCR-1 ALTERNATIVE 3 MAY CAUSE A SUBSTANTIAL ADVERSE CHANGE IN THE SIGNIFICANCE OF A TRIBAL CULTURAL RESOURCE (LESS THAN SIGNIFICANT IMPACT WITH MITIGATION)

As described above, a cultural resource inventory was conducted between 2022 and 2024 that included archival research and a background records search at the NWIC at Sonoma State University, NAHC Sacred Lands File search, and outreach to identified Native American Tribes (Albion 2024). Additionally, a report was prepared for the Alternative 3 site—the 2026 Cultural Resources Desktop Review for the Buena Vista Landfill Redevelopment Project, Alternative 3, Santa Cruz County, California (Albion 2026). The records search results are described in Section 6.5 for Alternative 3, as well as Section 3.5 for the Proposed Project. No known archaeological resources were identified on the Alternative 3 site.

In support of the Tribal Consultation efforts under AB 52 and SB 18, Albion contacted the NAHC, which provided the results of a Sacred Lands File search and list of Tribal stakeholders on August 3, 2023 (Albion 2024) and again on April 21, 2026. According to the NAHC, the Sacred Lands File search was positive. Native American outreach was conducted in three phases. The first phase included the cultural resources inventory completed in 2024, the second phase took place in 2025, and the third phase took place in 2026.

Albion communicated with representatives from four Tribal groups, shared the information that Albion gathered about the archaeology in the area, and documented the Native American community's concerns about the cultural resource sensitivity of the area and potential project impacts. All four Tribal groups provided a variety of recommendations for measures to protect cultural resources, including a cultural resource awareness training, construction monitoring by a qualified archaeologist and member from the local Native American community, and Tribal consultation.

AB 52 consultation notification letters were mailed via the U.S. Postal Service (USPS) on June 12, 2025, containing a brief project description and maps, to the tribes listed above. Follow-up emails

were sent on June 16, 2025. Albion also reached out to the Costanoan Rumsen-Mutsen Tribe (CRMT) via phone on August 12 and 14, 2025; however, no reply was received.

Albion received one response to the letter, which was from the Amah Mutsun Tribal Band requesting consultation. The consultation meeting was conducted on August 4, 2025. Consultation largely covered a description of the Proposed Project, alternatives, and known cultural resources in the vicinity. Additional feedback from the Tribe included that the area is generally highly sensitive for cultural resources. The Tribe expressed that they believe there is a need for monitoring in areas where cultural resources are present and where they are likely to be present.

In April 2026, as part of the SB 18 tribal consultation process, a new tribal contact list was requested from the NAHC, which provided a list of six tribal organizations (as listed above). On May 15, 2026, the County mailed notification letters containing a brief description and map of the Proposed Project and Alternative 3 to the six tribal organizations; and follow-up emails were sent on May 18, 2026. The County received one response to the SB 18 letter from the Indian Canyon Mutsun Band of Costanoan requesting consultation, and a consultation meeting was conducted on July 14, 2026. No TCRs were identified within the area during the consultation process or as part of the cultural resource studies.

Although no TCRs have been identified within the Alternative 3 site or the Proposed Project area, the positive Sacred Lands File results received from the NAHC indicate that Santa Cruz County in general has a high sensitivity to containing Native American habitation sites; and during Tribal consultation, the Tribal representative conveyed the area is generally highly sensitive for cultural resources. Ground disturbance during construction has the potential to encounter unknown TCRs. Therefore, Alternative 3 has the potential to impact TCRs through ground disturbance and subsequent damage that could result in a substantial adverse change in the significance of the resource.

This potentially significant impact would be reduced to a less than significant level by complying with SCCC Section 16.40.040, which identifies the necessary actions when Native American cultural sites or human remains are discovered during ground-disturbing activities, and by implementing Mitigation Measure CR-2a (Stop Work if Inadvertent Encounter of Undiscovered Archaeological Resources during Ground-Disturbing Activities) and Mitigation Measure CR-2b (Archaeologist and Native American Monitoring during Initial Ground-Disturbing Activities in Specific Areas).

In summary, Alternative 3 (Combined Facilities on Adjacent Property), including the associated General Plan/LCP land use designation and zoning map amendments and environmental enhancement/restoration features, would not result in a substantial adverse change in the significance of a TCR, with SCCC Section 16.40.040 compliance and implementation of the mitigation measures to stop work if resources are discovered during construction (Mitigation Measure CR-2a) and to monitor in the three identified areas (Mitigation Measure CR-2b). Therefore, the impact to TCRs would be Less than Significant with Mitigation (Mitigation Measures CR-2a and CR-2b).

The following mitigation measures are described in Section 6.5.4, Project Impact Analysis, under Impact CR-2, Ground-Disturbing Activities during Alternative 3 Construction May Unearth or Adversely Impact Subsurface Archaeological Resources.

Mitigation Measure CR-2a: Stop Work if Inadvertent Encounter of Undiscovered Archaeological Resources during Ground-Disturbing Activities

Refer to the complete description in Section 6.5.4 under Impact CR-2.

Mitigation Measure CR-2b: Archaeologist and Native American Monitoring during Initial Ground-Disturbing Activities in Specific Areas

Refer to the complete description in Section 6.5.4 under Impact CR-2.

6.18.5 Cumulative Impact Discussion

The potential cumulative impacts of Alternative 3 would be similar to those of the Proposed Project, which are presented in Chapter 4, Other CEQA-Required Discussions.

As discussed in Chapter 4, Other CEQA-Required Discussions, the County's Sustainability Update EIR did not identify a significant cumulative impact because cumulative projects are required to comply with SCCC Section 16.40.040, which identifies the necessary actions when Native American cultural sites or human remains are discovered during ground-disturbing activities. Similar to the Proposed Project, no TCRs have been identified at the Alternative 3 site, and potential impacts from inadvertent discovery would be reduced by complying with SCCC Section 16.40.040 and Mitigation Measures CR-2a and CR-2b, which reinforce compliance and require archaeologist and Native American monitoring during construction.

Impact TCR-C: Cumulative development would not result in a significant cumulative impact. Therefore, **the Alternative 3 contribution would not be cumulatively considerable**, which is the same as the Proposed Project.

6.19 Utilities and Service Systems

This section identifies and evaluates potential impacts related to utilities and service systems as a result of Alternative 3, Combined Facilities on Adjacent Property (Alternative 3). Whereas wastewater conveyance and water supply are evaluated in this section, Section 6.10, Hydrology and Water Quality, provides a more detailed analysis of runoff patterns and surface water quality. **Table 6.19-1** presents a summary of potential impacts related to utilities and service systems.

Table 6.19-1. Summary of Alternative 3 Impacts Related to Utilities and Service Systems

Impact	Significance before Mitigation	Mitigation	Significance after Mitigation
UTIL-1. Alternative 3 would require the relocation or replacement of water, wastewater, stormwater, and electricity conveyance infrastructure.	Less than Significant	None Required	Less than Significant
UTIL-2. Sufficient water supplies are available to serve construction and operation of Alternative 3.	Less than Significant	None Required	Less than Significant
UTIL-3. Alternative 3 would not generate wastewater in excess of existing treatment capacity.	Less than Significant	None Required	Less than Significant
UTIL-4. Alternative 3 would not generate solid waste in excess of local landfill capacity and would comply with applicable regulations related to solid waste.	Less than Significant	None Required	Less than Significant

Notes: The impact, significance determination, and mitigation apply to Alternative 3 as a whole, considering all components, unless otherwise noted.

6.19.1 Existing Conditions

Water Supply

Santa Cruz County's (County's) water supply is derived from local surface water (streams and reservoirs – 20 percent of supply) and groundwater (80 percent of supply), which are fed entirely by precipitation and do not receive any imported water. A small amount of recycled water is produced for irrigation (4 percent) (Santa Cruz County 2020).

Domestic supply within the region is provided by five large public agencies, four medium water systems, 115 small water systems, and some 8,000 individual wells (Santa Cruz County 2024). Within the County, drinking and recycled water services are provided by other agencies, including the City of Santa Cruz, Soquel Creek Water District, Scotts Valley Water District, San Lorenzo Valley Water District, Pajaro Valley Water Management Agency (PV Water), City of Watsonville, and Central Water District.

Pajaro Valley Water Management Agency

The Project area is located within the PV Water service area (Division A) (PV Water 2022). PV Water is a state-chartered water management agency formed in 1984 to achieve a sustainable groundwater basin. PV Water aims to efficiently and economically manage existing and supplemental water supplies to prevent further increases in and to accomplish the continuing reduction of long-term groundwater overdraft. PV Water manages about 120 square miles of the

1,300-square-mile Pajaro Valley Watershed (PV Water 2024). The Alternative 3 Project currently receives potable water from an existing well onsite.

Wastewater

County Sanitation, which is part of the Santa Cruz County Community Development & Infrastructure Department (CDI), is responsible for environmental compliance and collection of wastewater (sewage) within three sanitation districts and five County sewer service areas**.** The Alternative 3 site and surrounding area are outside the County Sanitation's service areas and use septic and wastewater holding tanks.

Stormwater Drainage

The County prepares a Stormwater Management Program in response to the National Pollutant Discharge Elimination System (NPDES) General Permit for agencies designated by the State Water Resources Control Board. Under this general permit, the agencies are mandated to implement specific types of urban runoff pollutant control measures and submit annual reports to the Central Coast Regional Water Quality Control Board.

The Alternative 3 site consists of a low-lying terrace in the west portion and a higher terrace in the east portion. The existing drainage patterns are a result of the previous agricultural/greenhouse uses. A ditch was established along the east side of the low-lying terrace to receive piped runoff from the greenhouses positioned upslope to the east. Runoff captured in this ditch is intended to flow through a culvert at the southern property boundary and west into the daylighted Harkins Slough Road Drainage. Stormwater runoff from the property upslope to the north is directed to a buried pipe in the lower terrace which flows to the Harkins Slough Road Drainage. These features are shown in **Figure 5-13a**. Additional detail on stormwater drainage can be found in Section 3.10, Hydrology and Water Quality.

Electricity and Natural Gas

Central Coast Community Energy provides electrical service in the County, including the Alternative 3 site, using infrastructure provided by Pacific Gas & Electric Company (PG&E).

Natural gas service is provided in the County, including the Alternative 3 project site, by PG&E.

It should be noted that, from approximately 2004 to 2026, the County had been working with Ameresco Inc. (Ameresco) to operate a gas-to-renewable energy facility at the Buena Vista Landfill, whereby landfill gas (a byproduct of the natural decomposition of solid waste) is converted to electricity, which Ameresco sold to users outside the County, such as the City of Palo Alto. The County is seeking a new energy reuse partner.

Solid Waste

Recycling and Solid Waste Services, a division of Santa Cruz County CDI, sponsors a range of recycling and waste reduction programs that have resulted in significant diversion of waste from landfill disposal. Recycling and Solid Waste Services is responsible for the operation and administration of solid waste diversion and disposal in the unincorporated areas of Santa Cruz County and operates the County's two solid waste facilities, the Ben Lomond Transfer Station in north County and the Buena Vista Landfill in south County. Both facilities include household hazardous waste collection sites, organics processing and transfer sites, recycling centers, and waste disposal sites for County residents, businesses, and commercial waste haulers. Materials recycling efforts include metals, glass, plastics,

paper, cardboard, mattresses, e-waste, tires, carpets, construction and demolition materials, appliances, paint, and batteries. Organics diversion for reuse includes wood waste, yard waste, food waste, pallets, sheetrock, and other compostable materials. Regulations continue to evolve and expand the materials that must be diverted from the waste stream.

The Ben Lomond Transfer Station was built in 1990 adjacent to the former Ben Lomond Landfill as a resource for north County residents to continue to recycle and dispose of their solid waste after the Ben Lomond Landfill closed. The Ben Lomond Transfer Station also includes a household hazardous waste facility. Recyclables, organics, and solid waste are sorted and transported from the Ben Lomond Transfer Station to a recycling facility, an organics composting facility, or a landfill. Refuse is taken to the Monterey Regional Waste Management District's ReGen Monterey Landfill in Marina, California, under an agreement with the Monterey Regional Waste Management District. ReGen Monterey Landfill is expected to have capacity for approximately 90 more years, and future developments in recycling and diversion are anticipated to extend the life expectancy beyond 90 years (Santa Cruz County 2022).

The Buena Vista Landfill is a Class III municipal solid waste landfill that receives non-hazardous solid waste and is a center for waste handling, recycling collection, organics diversion, and other waste reduction activities necessary to comply with state and federal laws. Additionally, there is a household hazardous waste collection facility that accepts materials to be transferred for appropriate off-site recycling and disposal. Between 2004 and 2026, a landfill gas co-generation facility operated on site to convert landfill gas to electricity, and the County is seeking a new energy reuse partner to continue this operation. As discussed in Chapter 1, Introduction, the Buena Vista Landfill is currently permitted to reach a maximum elevation of 200 feet and, as of November 2022, has an estimated remaining capacity or site life ranging from 6 to 16 years (2028–2038).

6.19.2 Regulatory Setting

This section describes the federal, state, regional, and local plans, policies, and laws relevant to utilities and service systems for the Project.

Federal

The relevant federal plans, policies, and laws are described in Section 3.19.2, Regulatory Setting, under the following:

- Clean Water Act
- National Pollutant Discharge Elimination System
- Safe Drinking Water Act

State

The relevant state plans, policies, and laws are described in Section 3.19.2, under the following:

Water

- Senate Bill (SB) 610 (2002)
- Assembly Bill (AB) 1881

Wastewater

- California Water Code, Section 13260.

Solid Waste

- California Integrated Waste Management Act of 1989 (AB 939)
- SB 1383 Short-lived climate pollutants, methane emissions:… organic waste: landfills

Local

The relevant local plans, policies, and laws are described in Section 3.19.2, under the following:

- Santa Cruz County General Plan/Local Coastal Program (LCP)
- Santa Cruz County Code

6.19.3 Methodology and Significance Thresholds

Methodology

This analysis considers the potential environmental impacts of Alternative 3 on utilities and service systems. Assessment of impacts to utilities and service systems is based on a review of site information, existing conditions, and proposed uses. The analysis presented herein is also based on state and County information regarding the capacity and features of existing utility infrastructure, including potable water, wastewater, and solid waste infrastructure and facility capacity.

Significance Thresholds

As stated in the Chapter 6 introduction, significance thresholds used in this analysis are based on Appendix G of the California Environmental Quality Act (CEQA) Guidelines, which provides a sample Initial Study checklist that includes a number of factual inquiries related to the subject of utilities and service systems, as well as other environmental topics. Thus, the letters and thresholds presented below correspond with the questions in the Appendix G Initial Study checklist.

For the purpose of this Environmental Impact Report (EIR) and consistent with the analysis for the Proposed Project, a significant impact would occur if implementation of Alternative 3 would:

A. Require or result in the relocation or construction of new or expanded water, wastewater treatment, stormwater drainage, electric power, or natural gas facilities, the construction or relocation of which could cause significant environmental effects.

B. Have insufficient water supplies available to serve the Project and reasonably foreseeable future development during normal, dry and multiple dry years.

C. Result in a determination by the wastewater treatment provider which serves or may serve the Project that it has inadequate capacity to serve the Project's projected demand in addition to the provider's existing commitments.

D. Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals.

E. Not comply with federal, state, and local management and reduction statutes and regulations related to solid waste.

6.19.4 Alternative 3 Impact Analysis

For each impact, the overall conclusion or significance determination is presented at the end of the discussion, as well as in parentheses at the end of the numbered impact statement.

As described in Section 5.2.3, Alternative 3. Combined Facilities on Adjacent Property (in Chapter 5, Project Alternatives), Alternative 3 includes the following components:

- Transfer Station
- Organics Diversion Facility
- Recycling Center
- Scale House
- General Plan/Local Coastal Program Land Use Designation and Zoning Map Amendments

Additionally, Landfill Closure and Revegetation, including the Environmental Enhancement and Restoration Features, would be implemented as described in Chapter 2, Section 2.4, Project Components; and the potential impacts of those features are included in the analysis in Section 3.19.4. The additional enhancement and restoration features included as part of Alternative 3 (described in Section 5.2.3 under *Additional Design Information*) are considered in the evaluation below.

Threshold A:	Require or result in the relocation or construction of new or expanded water, wastewater treatment, stormwater drainage, electric power, or natural gas facilities, the construction or relocation of which could cause significant environmental effects.

Impact UTIL-1 ALTERNATIVE 3 WOULD REQUIRE THE RELOCATION OR REPLACEMENT OF WATER, WASTEWATER, STORMWATER, AND ELECTRICITY CONVEYANCE INFRASTRUCTURE. (LESS THAN SIGNIFICANT IMPACT)

Construction of the combined facilities would include the relocation, modification, and/or replacement of existing water, wastewater, stormwater drainage, electricity, natural gas, and telecommunications facilities infrastructure to enable connection to these existing utility systems currently serving the Alternative 3 project site. The new transfer station with office would include a conference/break room, storage/utility room, restrooms, and solid waste collection operations that require utilities. Additionally, all three major structures at the combined facilities (transfer station, organics diversion facility [ODF], recycling center) would require water for periodic cleaning. The entire site includes a stormwater drainage plan, as shown in the site plan (**Figure 5-12d**), that would carry stormwater to the stormwater ponds and ultimately Harkins Slough Road Tributary, similar to existing conditions.

Water

Water service lines for domestic and fire suppression would be provided from on-site water wells. All the structures at the combined facilities (transfer station/office, ODF, recycling center, scale house) would include fire detection and suppression systems.

Wastewater

Wastewater from operations of the combined facilities would be collected in an underground holding tank adjacent to the office and transfer station and pumped out and hauled as needed to a wastewater treatment facility. Wastewater from operations would include any contact water

internal to the transfer station, including the tipping floor where there may be contact water from waste on the floor or from washing the building interior with a pressure washer, as well as periodic washing of the ODF and recycling center as needed. An oil/water separator would be installed to separate any unwanted liquids from wastewater. For restrooms, wastewater would either be collected in a separate holding tank that would be pumped regularly as needed and hauled for wastewater treatment, or would be disposed through an on-site leach field designed to support all on-site domestic water use.

Stormwater

Stormwater surface runoff would be directed through grading, inlets, pipelines, and culverts to new stormwater management ponds located at the site's low point, south of the transfer station and west of the scale house near the facility entrance/exit. The stormwater would first enter a forebay (upper pond) to enable sediment to settle, and then flow to a larger pond (lower pond). The lower pond would include a riser and outlet, from which the stormwater would flow in a culvert to Harkins Slough Road Drainage.

The ponds would have a clay lining to minimize infiltration and protect against liquefaction. The outlet would be sized to control the outflow, so the ponds are emptied within four days, consistent with statewide guidance for mosquito/vector control (CDPH 2012).

Filtration measures would be installed in the collection system and pond to prevent unwanted solid waste or contaminated stormwater from entering the stormwater system. A number of options could be used such as, but not limited to, filter socks or bags, Stormceptor units, drop inlets, and oil/water separators.

Electricity

Electricity would be provided to the Alternative 3 site by connecting to the existing electrical lines. Additionally, there would be a backup diesel generator and/or solar panels at the site. An electrical heating, ventilation, and air conditioning (HVAC) unit would be provided on the roof above the office.

Natural Gas

Alternative 3 would not require natural gas usage and would not involve the relocation, modification, or replacement of natural gas infrastructure.

Summary

The construction and operation of Alternative 3 would require the extension, relocation, replacement, and/or modification (hereinafter called modifications) of existing water, wastewater, stormwater, and electricity infrastructure, the construction of which could cause environmental impacts. These utility modifications are part of Alternative 3, and the potential construction-related impacts are analyzed by topic throughout this EIR. The potential impacts associated with operation of the utilities needed to serve Alternative 3, such as adequate water supply and wastewater capacity, are addressed under Impacts UTIL-2 and UTIL-3, as well as in other analyses in this EIR. Extending and modifying the existing utilities infrastructure to support the combined facilities for Alternative 3 would not cause significant environmental effects. Therefore, the impact of Alternative 3 (Combined Facilities on Adjacent Property), including the associated General Plan/LCP land use designation and zoning map amendments and environmental enhancement/restoration features, would be **Less than Significant**. No mitigation is required.

Threshold B:	Have sufficient water supplies available to serve the Project and reasonably foreseeable future development during normal, dry and multiple dry years.

Impact UTIL-2 SUFFICIENT WATER SUPPLIES ARE AVAILABLE TO SERVE CONSTRUCTION AND OPERATION OF ALTERNATIVE 3. (LESS THAN SIGNIFICANT IMPACT)

Construction

Construction of the combined facilities at the Alternative 3 site would require water usage during construction for dust suppression of disturbed areas. Water would be provided by water truck deliveries from the on-site water well, water storage tanks, or other sources secured by the construction contractor. The amount needed for construction would be minimal, the need would be temporary, and the existing resources would be adequate to support potential needs.

Operation

Operation of the combined facilities would require water for the conference/break rooms and restrooms located in the office attached to the transfer station. Water would also be required for the hose bibs for periodic washing of the transfer station tipping floor, as well as periodic washing of the ODF and recycling center floors as needed, and fire suppression. Water would be provided from the on-site well, which provides adequate water to support the combined facilities operation and fire suppression (PV Water 2022).

In summary, existing water supplies would be sufficient to serve Alternative 3 during normal, dry, and multiple dry years; and there would be no reasonably foreseeable future development at the Alternative 3 site or the landfill. Therefore, the impact for Alternative 3 (Combined Facilities on Adjacent Property), including the associated General Plan/LCP land use designation and zoning map amendments and environmental enhancement/restoration features, would be **Less than Significant**. No mitigation is required.

Threshold C:	Result in a determination by the wastewater treatment provider which serves or may serve the Project that it has adequate capacity to serve the Project's projected demand in addition to the provider's existing commitments.

Impact UTIL-3 ALTERNATIVE 3 WOULD NOT GENERATE WASTEWATER IN EXCESS OF EXISTING TREATMENT CAPACITY. (LESS THAN SIGNIFICANT IMPACT)

Any wastewater generated during construction would be minimal and temporary in nature. Portable toilets provided by a private vendor would be used during the construction.

Wastewater from operation of the combined facilities would be generated from the restrooms located in the office adjacent to the transfer station and from periodic cleaning of the interior transfer station tipping floor and walls where solid waste is collected (called contact water), as well as periodic cleaning of the ODF and recycling center floors as needed. Wastewater from restrooms and contact water would be held in separate holding tanks. Holding tanks would be pumped out regularly and taken to the Watsonville Wastewater Treatment Facility. There are currently 40–45 staff working at the landfill, and it is anticipated there would be similar staffing levels with the implementation of Alternative 3 to operate the combined facilities. Therefore, wastewater volume associated with restroom use is expected to be similar although redistributed to include the new combined facilities, and there would be a nominal amount of additional wastewater from periodic

cleaning of the interior transfer station tipping floor (called contact water), as well as the ODF and recycling center as needed.

In summary, construction and operation would not generate wastewater in excess of existing treatment capacity. Therefore, the impact of Alternative 3 (Combined Facilities on Adjacent Property), including the associated General Plan/LCP land use designation and zoning map amendments and environmental enhancement/restoration features, would be **Less than Significant**. No mitigation is required.

Threshold D:	Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals.
Threshold E:	Not comply with federal, state, and local management and reduction statutes and regulations related to solid waste.

Impact UTIL-4 ALTERNATIVE 3 WOULD NOT GENERATE SOLID WASTE IN EXCESS OF LOCAL LANDFILL CAPACITY AND WOULD COMPLY WITH APPLICABLE REGULATIONS RELATED TO SOLID WASTE. (LESS THAN SIGNIFICANT IMPACT)

Construction

As described in **Table 5-3**, Alternative 3 Construction (Earth Movement) Estimates, in Section 5.2.3, Alternative 3 would generate an estimated 13,000 cubic yards of construction-related waste and 8,000 cubic yards of building demolition materials. This would include primarily vegetation debris from clearing the site; and demolition materials would include lumber, plywood, sheetrock, metal, and other debris from demolishing the existing greenhouses, packing shed, boiler house, bathroom/lunchroom, and several other miscellaneous structures. Of this construction and demolition debris, approximately 65 to 80 percent is likely to be diverted for recycling and composting under the CALGreen program. Even before diversion, the total construction waste generated by Alternative 3 would equal less than 1 percent of the Buena Vista Landfill's remaining daily capacity. Any excess construction waste could be disposed of at the Monterey Peninsula Landfill, which has an even greater remaining capacity than the Buena Vista Landfill. Therefore, Alternative 3 would not generate solid waste in excess of the capacity of local infrastructure or otherwise impair the attainment of solid waste reduction goals. Furthermore, any solid waste receiving facilities that would serve the Project currently operate under California Solid Waste Facilities Permits issued by CalRecycle and, therefore, comply with applicable solid waste statutes and regulations described in Section 3.19.2, Regulatory Setting.

Operation

The purpose of Alternative 3 is to ensure an orderly landfill closure program that meets state requirements and provides ongoing solid waste handling capabilities to allow the County to meet state-required waste management goals for waste reduction, source separation, materials recycling, household hazardous waste management, and composting.

Because the Buena Vista Landfill is nearing capacity for solid waste disposal, the new transfer station at the combined facilities would be developed to collect the solid waste that cannot be diverted for recycling and composting and transfer it in trucks to a regional landfill. As described in Section 5.2.3, the ReGen Monterey Landfill is located 19 miles south in the City of Marina and is used for planning and analysis purposes based on relative proximity and capacity. ReGen Monterey Landfill has capacity to accept solid waste for approximately 90 more years, and future developments in recycling and diversion are anticipated to extend the life expectancy beyond 90 years (Santa Cruz County 2022).

Under Alternative 3, the County would divert and process organic materials (e.g., vegetation/yard waste, food waste) at the new ODF at the combined facilities, instead of the current operation on the active landfill, in compliance with state organics diversion requirements. Similar to the current operation, incoming organic materials would be segregated, as necessary, into appropriate stockpiles (food waste, yard waste, wood waste, wallboard, mixed organics, etc.). The organics diversion operation would preprocess organic materials for off-site composting at the Monterey Bay Regional Waste Management District (ReGen Monterey) and other sites located in the Monterey Bay region.

Additionally, the County would improve the recycling operation by locating it to the new recycling center at the combined facilities, instead of the current operation at the landfill by the main entrance. The County would continue to accept household hazardous materials at its current location at the landfill by the main entrance.

In summary, neither construction nor operation of Alternative 3 would generate solid waste in excess of the capacity of local infrastructure or otherwise impair the attainment of solid waste reduction goals. Furthermore, Alternative 3 would comply with applicable solid waste statutes and regulations described in Section 6.19.2, Regulatory Setting. Therefore, the impact of Alternative 3 (Combined Facilities on Adjacent Property), including the associated General Plan/LCP land use designation and zoning map amendments and environmental enhancement/restoration features, would be **Less than Significant**. No mitigation is required.

6.19.5 Cumulative Impact Discussion

The potential cumulative impacts of Alternative 3 would be similar to those of the Proposed Project, which are presented in Chapter 4, Other CEQA-Required Discussions.

Water. As discussed in Chapter 4, the Sustainability Update EIR concluded that cumulative growth and development would not result in a new significant cumulative impact related to public water utilities except for City of Santa Cruz and Soquel Creek Water District water agencies, which could result in a potentially significant cumulative impact related to water supply. Alternative 3 would not require water from the City of Santa Cruz, Central Water District, or the City of Santa Cruz and Soquel Creek Water District water agencies. Further, Alternative 3 would have a less than significant impact on groundwater use and recharge from a substantial amount of new impervious surface. Cumulative development would not result in a significant cumulative impact.

Wastewater. As discussed in Chapter 4, the Sustainability Update concluded that both the Cities of Santa Cruz and Watsonville have adequate capacities to support growth and development within their service areas. Therefore, no significant cumulative impact to wastewater treatment facility capacities would occur.

Stormwater. As discussed in Chapter 4, any cumulative project disturbing more than 1 acre of land would be subject to the requirements of the Construction General Permit, resulting in the implementation of a Stormwater Pollution Prevention Plan and best management practices (BMPs). The County or relevant city would require adequate drainage facilities for new development through the review of proposed development projects. Therefore, cumulative development would not result in a significant impact. Further, Alternative 3 has incorporated stormwater infrastructure that can convey the anticipated increase in runoff volumes effectively.

Electricity and Natural Gas. As discussed in Chapter 4, cumulative development would raise the demand for electricity and natural gas in the Central Coast Community Energy service area. However, cumulative development would not be expected to result in wasteful, unnecessary, or

inefficient energy use; or energy use that would conflict with the utility provider plans to meet future energy consumption. The Sustainability Update EIR did not identify a significant cumulative impact for energy and natural gas.

Solid Waste. As discussed in Chapter 4, the Sustainability Update EIR concluded that given regulatory requirements related to reuse and recycling, as well as remaining landfill capacities, area landfills (which includes the ReGen Monterey Landfill in the City of Marina) would be expected to have adequate capacity to serve cumulative development. Therefore, cumulative development would not result in a significant impact. Further, Alternative 3 would not generate solid waste in excess of the capacity of local infrastructure or otherwise impair the attainment of solid waste reduction goals.

Impact UTIL-C: Cumulative development could result in a significant cumulative impact concerning water supply, but would not result in significant cumulative impacts to the other utilities and service systems. For potential cumulative impact to water supply, the **Alternative 3 contribution would not be cumulatively considerable**, which is the same as the Proposed Project.

6.20 Wildfire

This section describes existing wildfire risk, outlines the regulatory framework applicable to wildfire, and evaluates impacts related to wildfire as a result of Alternative 3, Combined Facilities on Adjacent Property (Alternative 3) construction and operation. **Table 6.20-1** presents a summary of potential impacts related to wildfire.

Table 6.20-1. Summary of Alternative 3 Impacts Related to Wildfire

Impact	Significance before Mitigation	Mitigation	Significance after Mitigation
WILD-1. Alternative 3 would not substantially impair an adopted emergency response plan or emergency evacuation plan.	Less than Significant	None	Less than Significant
WILD-2. Alternative 3 would not, due to slope, prevailing winds, and other factors, exacerbate wildfire risks and thereby expose Project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire.	Less than Significant	None	Less than Significant
WILD-3. Alternative 3 would not require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment.	Less than Significant	None	Less than Significant
WILD-4. Alternative 3 would not expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes.	Less than Significant	None	Less than Significant

Notes: The impact, significance determination, and mitigation apply to Alternative 3 as a whole, considering all components, unless otherwise noted.

6.20.1 Existing Conditions

Alternative 3 is located amid low-lying hills that gradually slope westward toward the coastline between Highway 1 and the Pacific Ocean and is adjacent to lands zoned for public facilities and agricultural uses.

As described in Section 6.3, Air Quality, Alternative 3 is located in the northwestern sector of the North Central Coast Air Basin (NCCAB), which is dominated by the Santa Cruz Mountains.

California Department of Forestry and Fire Protection (CAL FIRE) has mapped areas of significant fire hazards in the state through its Fire and Resource Assessment Program. These areas are referred to as Fire Hazard Severity Zones (FHSZs) and are identified for Federal Responsibility Areas, where federal agencies have responsibility for wildfire protection; State Responsibility Areas (SRAs), where CAL FIRE has responsibility for wildfire protection; and Local Responsibility Areas (LRAs), where local fire protection agencies have responsibility for wildfire protection. Different FHSZs (moderate, high, and very high) are based on a hazard scoring system using subjective criteria for fuels, fire history, terrain influences, housing density, and occurrence of severe fire weather where urban

conflagration could result in catastrophic losses. The speed and intensity of potential fires within the area, ability of embers to spread and multiply, loading of fuel, topographic conditions, and local climate all culminate to form the fire hazard severity for an area. Very high FHSZs are areas lacking adequate wildland and structural fire protection. In addition to CAL FIRE's FHSZ mapping, the County has also mapped critical and mitigable wildfire hazard areas due to accumulations of wildfire-prone vegetation, steep and dry slopes, and the presence of structures vulnerable to wildland fires.

The risk of significant wildfire exists in Santa Cruz County. The combined influences of local topography, fuels (forest, chaparral, grasslands), and certain weather conditions make Santa Cruz County prone to periodic large wildfire events. The County experiences annual cycles of elevated fire danger, with the wildfire season typically extending from roughly May into late October or early November (Santa Cruz County 2024). For example, in 2008, the Trabing Fire in south County burned 630 acres between Mar Monte Avenue, White Road, Calabasas Road, and Buena Vista Drive in Larkin Valley. In 2020, the CZU Lightning Complex Fire in north County was one of the most destructive fires in the County's history, burning 86,509 acres.

Most of the County's unincorporated area is within the SRA with predominantly moderate to high FHSZs, while very high FHSZs are present within a small area of Bonny Doon and areas along the eastern boundary of the County.

Alternative 3 is not located in the SRA. Alternative 3 is located in the LRA, with the eastern portion in a Very High Fire Severity Zone and the western portion in a High Fire Severity Zone.

6.20.2 Regulatory Setting

This section describes the federal, state, regional, and local plans, policies, and laws relevant to wildfire for the Project.

Federal

The relevant federal plans, policies, and laws are described in Section 3.20.2, Regulatory Setting, under the following:

- Federal Wildland Fire Management Policy
- National Fire Plan

State

The relevant state plans, policies, and laws are described in Section 3.20.2, under the following:

- California Department of Forestry and Fire Protection
- California Department of Forestry and Fire Protection 2018 Strategic Fire Plan
- California Fire Code
- California Health and Safety Code – State Fire Regulations
- California Public Resources Code – Fire Hazard Mapping and Development Standards
- Wildland Urban Interface Building Codes and Standards
- Emergency Response California Emergency Services Act
- California Natural Disaster Assistance Act

Local

The relevant local plans, policies, and laws are described in Section 3.20.2, under the following:

- Santa Cruz County General Plan and Local Coastal Program
- San Mateo – Santa Cruz County Community Wildfire Protection Plan
- Operational Area Emergency Management Plan
- County of Santa Cruz Local Hazard Mitigation Plan
- Santa Cruz County Code, Chapter 7.92, Santa Cruz County Fire Code

6.20.3 Methodology and Significance Thresholds

Methodology

The analysis of wildfire impacts follows the guidance and methodologies recommended in Appendix G of the California Environmental Quality Act (CEQA) Guidelines.

Significance Thresholds

As stated in the Chapter 3 introduction, the significance thresholds used in this analysis are based on Appendix G of the CEQA Guidelines, which provides a sample Initial Study checklist that includes a number of factual inquiries related to the subject of wildfire and the other environmental topics.

For the purposes of this Environmental Impact Report (EIR) and consistent with the analysis for the Proposed Project, a significant impact would occur if implementation of Alternative 3 would result in any of the following conditions, if the Project is located in or near SRAs or lands classified as very high FHSZs:

A. Substantially impair an adopted emergency response plan or emergency evacuation plan.

B. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose Project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire.

C. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment.

D. Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes.

6.20.4 Alternative 3 Impact Analysis

For each impact, the overall conclusion or significance determination is presented at the end of the discussion, as well as in parentheses at the end of the numbered impact statement.

As described in Section 5.2.3, Alternative 3. Combined Facilities on Adjacent Property (in Chapter 5, Project Alternatives), Alternative 3 includes the following components:

- Transfer Station
- Organics Diversion Facility
- Recycling Center

- Scale House
- General Plan/Local Coastal Program Land Use Designation and Zoning Map Amendments

Additionally, Landfill Closure and Revegetation, including the Environmental Enhancement and Restoration Features, would be implemented as described in Chapter 2, Section 2.4, Project Components; and the potential impacts of those features are included in the analysis in Section 3.20.4. The additional enhancement and restoration features included as part of Alternative 3 (described in Section 5.2.3 under *Additional Design Information*) are considered in the evaluation below.

Threshold A:	Substantially impair an adopted emergency response plan or emergency evacuation plan.

Impact WILD-1 ALTERNATIVE 3 WOULD NOT SUBSTANTIALLY IMPAIR AN ADOPTED EMERGENCY RESPONSE PLAN OR EMERGENCY EVACUATION PLAN. (LESS THAN SIGNIFICANT IMPACT)

The County Operational Area Emergency Management Plan addresses the planned response to large-scale emergencies affecting the unincorporated area of the County (County of Santa Cruz 2024). Santa Cruz County is the lead agency for the County operational area and would prepare for, respond to, and recover from emergencies in coordination with other local jurisdictions within the operational area.

Alternative 3 would develop combined waste management facilities on the adjacent property immediately north of the Buena Vista Landfill site. Access to the combined facilities would be from Harkins Slough Road through newly constructed internal driveways and circulation areas, as shown in **Figures 5-12b and 5-12e**. The existing paved roadway bisecting the property would continue to be used by transfer trucks leaving the site, while additional internal roadways would be constructed to support facility circulation. The existing driveway onto the site from Buena Vista Drive would be retained as an emergency access road, but it would not be used for daily operations by employees or the public.

Although there could be temporary lane closures on Harkins Slough Road during construction, there would be no planned road closures. Construction activities would be temporary, and traffic controls would be implemented to maintain emergency access to surrounding properties and roadways during construction. Similar to the Proposed Project, the circulation pattern for Alternative 3 is designed to separate facility traffic from other vehicles entering and exiting the site, maintain traffic flow, and support safe vehicle movement through the facility. Operation of Alternative 3 would not interfere with adopted emergency response or evacuation plans. Emergency access to the site and surrounding properties would remain available through Harkins Slough Road and the retained emergency access connection to Buena Vista Drive. As described in Section 6.17, Transportation (Impact T-3), there would be adequate capacity on Harkins Slough Road and sufficient site distance for vehicles entering/exiting the combined facilities. In addition, Alternative 3 would not alter regional evacuation routes or obstruct emergency vehicle access within the surrounding area.

In summary, Alternative 3 (Combined Facilities on Adjacent Property), including the associated General Plan/Local Coastal Program (LCP) land use designation and zoning map amendments and environmental enhancement/restoration features, would not substantially impair an adopted emergency response plan or emergency evacuation plan. Therefore, the impact would be **Less than Significant**. No mitigation is required.

Threshold B:	Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose Project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire.

Impact WILD-2 ALTERNATIVE 3 WOULD NOT, DUE TO SLOPE, PREVAILING WINDS, AND OTHER FACTORS, EXACERBATE WILDFIRE RISKS AND THEREBY EXPOSE PROJECT OCCUPANTS TO POLLUTANT CONCENTRATIONS FROM A WILDFIRE OR THE UNCONTROLLED SPREAD OF A WILDFIRE. (LESS THAN SIGNIFICANT IMPACT)

CAL FIRE's Fire and Resource Assessment Program assesses the amount and extent of California's forests and rangelands, analyzes their conditions, and identifies alternative management and policy guidelines. Alternative 3 is not located in a CAL FIRE SRA. However, Alternative 3 is located in the County's LRA, with the eastern portion in a Very High Fire Severity Zone and the western portion in a High Fire Severity Zone.

Alternative 3 is the development of combined waste management facilities on the adjacent property immediately north of the Buena Vista Landfill site. The combined facilities would include a transfer station, organics diversion area, recycling center, scale house, and office facilities. Existing conditions on the Alternative 3 site include vacant structures, grassland areas, eucalyptus trees along portions of the site perimeter, and oak woodland areas near Harkins Slough.

Alternative 3 would not include housing or other land uses that would result in permanent residential occupants at the site. Similar to the Proposed Project, Alternative 3 would introduce new operational structures that could require fire protection measures during a fire event. The transfer station and associated operational facilities would include fire detection and fire suppression systems in accordance with the California Fire Code (CFC).

In summary, Alternative 3 (Combined Facilities on Adjacent Property), including the associated General Plan/LCP land use designation and zoning map amendments and environmental enhancement/restoration features, would not exacerbate wildfire risks or expose Project occupants to pollutant concentrations from wildfire or the uncontrolled spread of wildfire. Therefore, the impact would be **Less than Significant**. No mitigation is required.

Threshold C:	Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment.

Impact WILD-3 ALTERNATIVE 3 WOULD NOT REQUIRE THE INSTALLATION OR MAINTENANCE OF ASSOCIATED INFRASTRUCTURE (SUCH AS ROADS, FUEL BREAKS, EMERGENCY WATER SOURCES, POWER LINES OR OTHER UTILITIES) THAT MAY EXACERBATE FIRE RISK OR THAT MAY RESULT IN TEMPORARY OR ONGOING IMPACTS TO THE ENVIRONMENT. (LESS THAN SIGNIFICANT IMPACT)

Alternative 3 includes the installation and maintenance of internal roadways, power lines, emergency water sources, operational access improvements, and utilities. Specifically, water service lines for facility operation and fire suppression would be extended onto the Alternative 3 site. Development of the combined facilities includes construction of a new ingress and egress driveway connection to Harkins Slough Road, internal circulation roadways, utility extensions, and associated infrastructure necessary to support operation of the proposed Transfer Station, Recycling Center, Organics Diversion Facility, office building, and related facilities.

Alternative 3 would also include improvements to internal circulation roadways and operational access areas. The existing paved roadway bisecting the property would continue to be used for transfer truck circulation, while new and improved internal roadways would support circulation throughout the site. Existing access from Buena Vista Drive would remain as an emergency access route, but would not be used regularly by employees or the public.

Installation and maintenance of the Alternative 3 facilities and infrastructure would not exacerbate wildfire risk. The proposed roadways and circulation improvements would improve site accessibility for emergency vehicles and could function as fire breaks within developed portions of the site. In addition, the proposed facilities would include fire detection and fire suppression systems in accordance with the CFC. Utility infrastructure would be constructed and maintained in compliance with applicable fire safety standards and regulations intended to minimize ignition risks.

In summary, Alternative 3 (Combined Facilities on Adjacent Property), including the associated General Plan/LCP land use designation and zoning map amendments and environmental enhancement/restoration features, would not exacerbate wildfire risk or result in temporary or ongoing impacts related to wildfire hazards. Therefore, the impact would be **Less than Significant**. No mitigation is required.

Threshold D:	Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes.

Impact WILD-4 ALTERNATIVE 3 WOULD NOT EXPOSE PEOPLE OR STRUCTURES TO SIGNIFICANT RISKS, INCLUDING DOWNSLOPE OR DOWNSTREAM FLOODING OR LANDSLIDES, AS A RESULT OF RUNOFF, POST-FIRE SLOPE INSTABILITY, OR DRAINAGE CHANGES. (LESS THAN SIGNIFICANT IMPACT)

As described in Section 6.7, Geology and Soils, there are no mapped landslides within the Alternative 3 area, and the potential impact associated with landslides would be Less than Significant. The Alternative 3 site is generally characterized by previously disturbed and relatively gently sloping areas associated with former agricultural operations, with undeveloped grassland and oak woodland areas surrounding portions of the site.

Alternative 3 includes development of a new Transfer Station, Recycling Center, Organics Diversion Facility, office, roadway improvements, and associated operational infrastructure on the property immediately north of the Buena Vista Landfill site. Development of these facilities would include grading, paving, stormwater improvements, bioswales, stormwater ponds, and drainage infrastructure designed to manage runoff from developed areas. As discussed in Section 6.10, Hydrology and Water Quality, Alternative 3 would incorporate stormwater management features intended to reduce runoff rates, control drainage, and minimize erosion and flooding hazards. Proposed drainage improvements would be designed in accordance with applicable regulatory requirements and engineering standards to prevent substantial increases in runoff or downstream flooding conditions.

Alternative 3 would not substantially alter regional drainage patterns or expose people or structures to significant risks associated with post-fire slope instability, debris flows, or landslides. In addition, the Alternative 3 site does not contain steep slopes or hillside terrain that would increase susceptibility to substantial post-fire slope failure. Operational facilities would also be located within developed portions of the site and would not place structures in areas subject to known landslide hazards. Further, the environmental enhancement and habitat restoration features (included as part

of Alternative 3) include drainage improvements that would address and reduce existing flooding along Buena Vista Drive.

In summary, Alternative 3 (Combined Facilities on Adjacent Property), including the associated General Plan/LCP land use designation and zoning map amendments and environmental enhancement/restoration features, would not expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes. Therefore, the impact would be **Less than Significant**. No mitigation is required.

6.20.5 Cumulative Impact Discussion

The potential cumulative impacts of Alternative 3 would be similar to those of the Proposed Project, which are presented in Chapter 4, Other CEQA-Required Discussions.

As described in Chapter 4, the Sustainability Update EIR concluded that cumulative development would not result in a significant cumulative impact related to wildfire hazards. Complying with applicable local and state regulations within the County would avoid the aggregation of individual effects into a significant cumulative impact. Alternative 3 does not include housing or other structures that would result in permanent occupants. Alternative 3 would not impair emergency access or an emergency response/evacuation plan and includes extinguishing equipment to reduce wildfire risk.

Impact WILD-C: Cumulative development would not result in a significant cumulative impact. Therefore, **the Alternative 3 contribution would not be cumulatively considerable**, which is the same as the Proposed Project.

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7 List of Preparers and References

7.1 List of Preparers

This EIR was prepared by the County of Santa Cruz (County) as the lead agency under the California Environmental Quality Act (CEQA).

Project design, development, and engineering was conducted by SCS Engineers.

The technical analyses herein and compilation of the EIR were prepared by Harris & Associates, with subconsultants EcoSystems West EcoSystems West for biological resources, Albion for cultural resources, and Kimley-Horn for transportation.

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7.2 References

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None.

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