



Soda Springs Ranch Open Space Preserve

Draft Initial Study/Mitigated Negative Declaration

City of Cloverdale, Sonoma County, California

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ACRONYMS AND ABBREVIATIONS

°F	degrees Fahrenheit
µg/m ³	micrograms per cubic meter
AAQS	Ambient Air Quality Standard
AB	Assembly Bill
ACC II	Advanced Clean Cars II
ACM	asbestos-containing materials
ADA	Americans with Disabilities Act
ADT	Average Daily Traffic
ADU	accessory dwelling unit
ALUC	Airport Land Use Commission
APN	Assessor's Parcel Number
AR	Agricultural Residential
ARB	California Air Resources Board
ATCM	Airborne Toxic Control Measure
Bay Area Air District	Bay Area Air Quality Management District
BERD	California Built Environment Resource Directory
BMP	Best Management Practice
BRA	Biological Resources Assessment
CAFE	Corporate Average Fuel Economy
CAL FIRE	California Department of Forestry and Fire Protection
CalEEMod	California Emissions Estimator Model
Cal/EPA	California Environmental Protection Agency
CALGreen	California Green Building Standards Code
CalRecycle	California Department of Resources Recycling and Recovery
Caltrans	California Department of Transportation
CALUP	Comprehensive Airport Land Use Plan
CAP	Climate Action Plan
CBC	California Building Standards Code
CDFW	California Department of Fish and Wildlife
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CF	Conservation Feature

CFC	chlorofluorocarbon
CH ₄	methane
CHL	California Historical Landmarks
CI	compression ignition
CNDDDB	California Natural Diversity Database
CNEL	Community Noise Equivalent Level
CNPS	California Native Plant Society
CNPS Inventory	CNPS Inventory of Rare Plants
CO	carbon monoxide
CO ₂	carbon dioxide
CO ₂ e	carbon dioxide equivalent
CPHI	California Points of Historical Interest
CRHR	California Register of Historical Resources
CUSD	Cloverdale Unified School District
CWA	Clean Water Act
dB	decibel
dBA	A-weighted decibel
DBH	diameter at breast height
DBR	daily breathing rate
DOE	United States Department of Energy
DPM	diesel particulate matter
DTSC	California Department of Toxic Substances Control
EIA	United States Energy Information Administration
EMFAC	EMission FACtors mobile source emissions model
EPA	United States Environmental Protection Agency
EV	electric vehicle
FAA	Federal Aviation Administration
FAR	Federal Aviation Regulations
FCS	FirstCarbon Solutions
FEMA	Federal Emergency Management Agency
FHSZ	Fire Hazard Severity Zone
FMMP	Farmland Mapping and Monitoring Program
FTA	Federal Transit Administration
GHG	greenhouse gas
GWP	global warming potential
HASP	Health and Safety Plan

HCP	Habitat Conservation Plan
HFC	hydrofluorocarbon
I&M	Inspection and Maintenance
in/sec	inches per second
IPCC	United Nations Intergovernmental Panel on Climate Change
IS/MND	Initial Study/Mitigated Negative Declaration
ITE	Institute of Transportation Engineers
kBTU	kilo-British Thermal Unit
kW	kilowatt
kWh	kilowatt-hour
kWh/year	kilowatt-hour per year
LAFCo	Local Agency Formation Commission
lbs	pounds
LCFS	Low Carbon Fuel Standard
LCI	California Governor's Office of Land Use and Climate Innovation
L _{dn}	day/night sound level
LDR	Low Density Residential
L _{eq}	equivalent sound level
LEV	Low Emission Standards
LID	Low Impact Development
L _{max}	maximum noise/sound level
L _{min}	minimum noise/sound level
LOS	Level of Service
LRA	Local Responsibility Area
LSI	large spark-ignition
LUST	Leaking Underground Storage Tank
M1	Limited Urban Industrial
MBTA	Migratory Bird Treaty Act
MDR	Medium Density Residential
mgd	million gallons per day
MIR	Maximum Impacted Sensitive Receptor
MLD	Most Likely Descendant
MM	Mitigation Measure
MMT	million metric tons
mph	miles per hour
mph	miles per hour

MRZ	Mineral Resource Zone
MS4	Municipal Separate Storm Sewer System
MSL	mean sea level
MT	metric ton
MW	megawatt
N ₂ O	nitrous oxide
NAHC	Native American Heritage Commission
NASA	National Aeronautics and Space Administration
NCEI	National Centers for Environmental Information
NF ₃	nitrogen trifluoride
NFHL	National Flood Hazard Layer
NO ₂	nitrogen dioxide
NOAA	National Oceanic and Atmospheric Administration
NoSoCoAir	Northern Sonoma County Air Pollution Control District
NO _x	nitrogen oxide
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places
NWIC	Northwest Information Center
OPR	California Governor's Office of Planning and Research
PFC	perfluorocarbon
PG&E	Pacific Gas and Electric Company
PHEV	Plug-in Hybrid-Electric Vehicle
PM ₁₀	particulate matter less than 10 microns in diameter
PM _{2.5}	particulate matter less than 2.5 microns in diameter
ppm	parts per million
PPV	peak particle velocity
RCP	Representative Concentration Pathway
ROG	reactive organic gas
RPS	Renewable Portfolio Standard
RRD	Resources and Rural Development
RWQCB	Regional Water Quality Control Board
SB	Senate Bill
SCDEH	Sonoma County Department of Environmental Health
SCS	Sustainable Communities Strategy
SCTA	Sonoma County Transportation Authority
SF ₆	sulfur hexafluoride

SFBAAB	San Francisco Bay Area Air Basin
SLF	Sacred Lands File
SMARA	California Surface Mining and Reclamation Act
SMART	Sonoma-Marín Area Rail Transit
SO ₂	sulfur dioxide
SOI	Sphere of Influence
SORE	Small Off-Road Engine
SO _x	sulfur oxide
SR	State Route
SRA	State Responsibility Area
State Water Board	California State Water Resources Control Board
SVP	Society of Vertebrate Paleontology
SWMP	Storm Water Management Plan
SWPPP	Storm Water Pollution Prevention Plan
TAC	toxic air contaminant
TCR	Tribal Cultural Resource
UCMP	University of California Museum of Paleontology
USACE	United States Army Corp of Engineers
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
UWMP	Urban Water Management Plan
VMT	Vehicle Miles Traveled
VOC	volatile organic compounds
W/m ²	watts per square meter
WDR	Waste Discharge Requirement
WEAP	Worker Environmental Awareness Program
ZEV	Zero-Emission Vehicle

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1 - INTRODUCTION

1.1 - Purpose

The purpose of this Draft Initial Study/Mitigated Negative Declaration (Draft IS/MND) is to identify any potential environmental impacts that would result from implementation of the proposed Soda Springs Ranch Open Space Preserve Project (proposed project), which includes annexation of the site into the City of Cloverdale, California. Pursuant to California Environmental Quality Act (CEQA) Guidelines Section 15367, the City of Cloverdale has discretionary authority over the proposed project and is the Lead Agency in the preparation of this Draft IS/MND and any additional environmental documentation required for the proposed project.

The remainder of this section provides a brief description of the project location and the primary project characteristics. Section 2 includes an environmental checklist that provides an overview of the potential impacts that may result from project implementation, elaborates on the information contained in the environmental checklist, and provides justification for each checklist response. Feasible mitigations are analyzed to reduce all impacts to below a level of significance. Section 3 contains the List of Preparers.

1.2 - Project Location

The project site is located immediately west and north of the City of Cloverdale in Sonoma County, California (Exhibit 1). It is within the Porterfield Creek Watershed and is surrounded by open space to the north, south, and west, as well as residential development to the east. The 208.72-acre project site consists of Assessor's Parcel Numbers (APNs) 115-220-006, 115-220-007, and 115-220-019.

The project site is directly outside and adjacent to the Cloverdale city limits but within the City's Sphere of Influence (SOI) and Urban Growth Boundary.¹ The City's SOI is the area of the City-designated for future annexation, which would require approval from the Sonoma County Local Agency Formation Commission (LAFCo). The City of Cloverdale General Plan (General Plan) designates the entirety of the project site as Conservation Feature (CF). The purpose of the CF land use designation is to manage and preserve valuable biological, visual, and agricultural resources in the Cloverdale Planning Area.²

The project site is located within an Open Space Preserve zoned for natural resource conservation and very low-density residential development. It is currently and has historically been used for open space, recreational, grazing, hunting, and equipment storage purposes. The project site lies north of

¹ Permit Sonoma. 2025. City of Cloverdale. Website: <https://permitsonoma.org/Microsites/Permit%20Sonoma/Documents/Divisions/Administration/GIS/Downloadable%20Map/City-Cloverdale-Urban-Boundaries.pdf>. Accessed March 11, 2025.

² City of Cloverdale. 2009. General Plan.

West Cherry Creek Road to the south, which extends east via South Cloverdale Boulevard to the U.S. Highway 101 (US-101; Redwood Highway). Specifically, the project site is located on the *Cloverdale, California* United States Geological Survey (USGS) 7.5-minute Topographical Quadrangle, Township 11 North, Range 11 West, Section 13 Mt. Diablo Base and Meridian (Approximately Latitude 38° North 0' 38.78" and Longitude -123° West 0' -123.03").

1.3 - Environmental Setting

The site is developed with trails for recreation and maintenance access. There is an existing open-walled shed in the easternmost portion of the project site in proximity to the site's eastern access point on Foothill Boulevard, as well as an unoccupied trailer, a covered hand well, and real estate signage. An established fuel break³ borders the southeastern corner of the site adjacent to residences on Port Circle. Fencing runs along the northern and eastern boundaries, and an overhead utility line runs along the southern boundary of the site near Cherry Creek Road.

The eastern and southeastern portions of the project site contain grassland and forest habitat lying at 390 mean sea level (MSL) and 473 MSL respectively. The central and western portions of the project site contain rolling, undeveloped land at 780 MSL and 1100 MSL, which are primarily interspersed with oak woodland and forest habitat. Common tree species include Oregon oak (*Quercus garryana*), coast live oak (*Quercus agrifolia*), Douglas fir (*Pseudotsuga menziesii*), and coast redwood (*Sequoia sempervirens*).

There are drainage features on-site that convey stormwater. Manufactured features include 12- to 25-foot ditch relief culverts that exist throughout the project site underneath trail crossings and riparian inlets. Most of the culverts are in operation, with the exception of an inboard ditch relief culvert located in the southern portion of the site (Exhibit 1). Existing steel culverts located in the southeast portion would be removed as a part of the proposed project (Exhibit 2). Natural drainage features include the North Branch of the Porterfield Creek along the site's southwestern boundary and an unnamed tributary to Cloverdale Creek along the project site's northern boundary, which both eventually drain to the Russian River.⁴

Areas surrounding the project site consist of a mixture of low-density residential, public institutional, and undeveloped lands (Exhibit 2). Bordering the project site to the east are single-family homes. To the south and southeast are several institutional facilities, including the Clearwater Ranch Community and the Cloverdale Healthcare Center, in addition to undeveloped lands composed of oak woodland and forest. To the north are undeveloped lands composed of oak woodland and forest habitat. US-101 lies approximately 1.10 miles east of the project site.

³ A block or stirp of land where vegetation and other flammable material is removed to prevent the spread of wildfire.

⁴ Hollis Agricultural Consulting. 2023. Soda Springs Ranch Open Space Preserve Conservation Easement: Baseline Documentation. May.

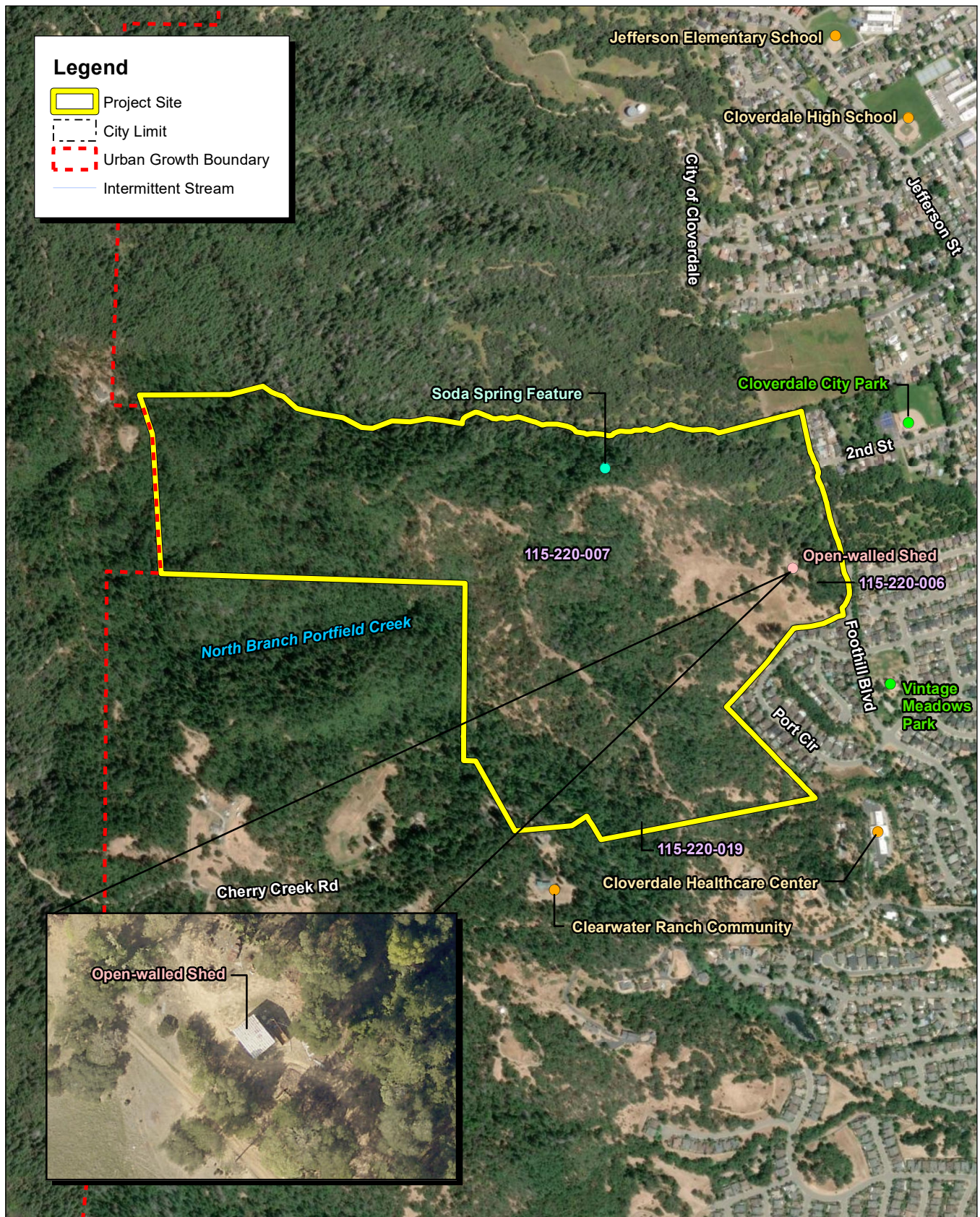


Source: Census 2000 Data, The California Spatial Information Library (CaSIL).



Exhibit 1 Regional Location Map

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Source: ESRI Aerial Imagery. County of Sonoma. Permit Sonoma. Sonoma Local Agency Formation Commission (LAFCO; May 2003, updated December 2024)



Exhibit 2 Local Vicinity Map

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1.4 - Exhibit General Plan and Zoning Designations

The Sonoma County General Plan designates the entirety of the project site as both Resources and Rural Development (RRD)⁵ and B8. The purpose of the RRD designation is to protect lands needed for commercial timber, wildlife habitat, and certain agricultural production activities, as well as allowing for very low-density residential development and recreational and visitor-serving uses. The RRD B8 designation is intended to “freeze” parcels that are:

- 1) Designated Rural Residential in the General Plan and subject to a Williamson Act Contract;
- 2) Within the City’s designated urban service boundary where the City intends to limit urban growth upon annexation or a similar occurrence; or
- 3) Within a specific plan or plan policy where the City intends to limit urban development.

None of the parcels are subject to a Williamson Act Contract.⁶

The County of Sonoma Zoning Code classifies the parcels comprising the project site under the following classifications:

- Parcel 115-220-006: RRD B8, NONE
- Parcel 115-220-007: RRD B8, RC50/50 VOH
- Parcel 115-220-019: RRD B8 Z, RC50/50

APN 115-220-006 is zoned RRD B8 Z, where Z provides for the exclusion of accessory dwelling units (ADUs) in areas with inadequate water supply, potential for sewer or groundwater contamination, potential traffic hazards, or significant fire hazard.

APN 115-220-007 is zoned Valley Oak Habitat Combining District (VOH), demarcating the preservation of valley oak woodlands.

Both APN 115-220-019 and APN 115-220-007 are zoned RC50/50, or Riparian Corridor Combining Zone, indicating a 50-foot setback requirement for critical biotic habitats along riparian corridors.

The General Plan designates the entirety of the site as CF. The purpose of this designation is to manage and preserve valuable biological, visual, and agricultural resources in the Cloverdale Planning Area. The primary uses intended under this designation include river/stream-related recreation, open space buffers, and agricultural production. Since the project site is located outside of the city limits, the site does not currently have City-designated zoning.

⁵ County of Sonoma. 2025. ArcGIS Web Map Viewer: Zoning & Land Use Map. Website: <https://sonomacounty.maps.arcgis.com/apps/webappviewer/index.html?id=06ac7fe1b8554171b4682dc141293962>. Accessed February 20, 2025.

⁶ Ibid.

1.5 - Project Description

The project is an Open Space Preserve, located at 600 Cherry Creek Road (APN 115-220-007, -006, and -019). The proposed project would establish a conservation easement over the site, resulting in the closure of unnecessary trails, the repair of existing roads, the development of multiuse trails, and additional proposed improvements, as further described below.

1.5.1 - Annexation into the City

The proposed project is located in an unincorporated area of Sonoma County immediately west of the City of Cloverdale. The proposed project would include annexation of the entire project site into the City. The project site would be pre-zoned as Conservation.

1.5.2 - Trail/Road Closures, Demolition, and Removal

The proposed project would result in the closure of eight existing roads, which are also used as hiking trails, resulting in the closure of approximately 0.90 mile of existing trails/roads and the removal of associated signage, fencing, and equipment. The proposed project would also involve the demolition of several on-site structures, including an open-walled shed, a trailer adjacent to the West Second Street access gate at the eastern edge of the site, a culvert on the southeastern corner of the site, and a culvert in the eastern portion of the site. The proposed project would include vegetation removal (including brush clearance) as needed, consistent with annual maintenance for fire safety.

1.5.3 - Land Uses

The proposed project would include the development of three new multiuse trails, resulting in the development of approximately 0.94 mile of new trail, as well as the development of 11 new picnic sites and a new 2,000-square-foot parking site (Exhibit 3). The project applicant would also incorporate site-specific improvements, including the installation of new fencing, signage, and a buffer areas alongside site boundaries and sensitive habitat areas.

The proposed project would include the installation of signs, trees, and scattered vegetation to discourage the usage of the closed trails. As part of the 208.66-acre conservation easement that would cover the entirety of the site, the proposed project would preserve existing open space adjacent to the proposed improvements; these areas would not contain any new trails or facilities. The proposed project would also include coordination with the Northern Sonoma County Fire Department to maintain an existing shaded fuel break between the conservation space and the residences along Port Circle. The proposed project components are summarized in Table 1.



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Table 1: Development Summary

Parcel	Gross Acreage (includes street dedication area)	Development	Open Space/Conservation Area (acres)
115-220-006	6.36 acres	One new parking area	6.30
115-220-007	199.05 acres	Three new multiuse trails, 11 picnic sites	199.05
115-220-019	3.31 acres	None	3.31
Total	208.72 acres	One new parking area, three new multiuse trails, 11 new picnic sites	208.66
Sources: Hollis Agricultural Consulting. 2023.			

Circulation

Access to the project site is currently provided by a gated dirt road at the western terminus of West Second Street. The proposed project would implement accessibility improvements, including curbside improvements and signage as well as repair improvements to existing roads within the project site. Eight underutilized trails would be closed and three new trails for bike and pedestrian use would be created. An additional access point to the site, along its eastern flank, would be incorporated at Foothill Boulevard, and proposed curbside improvements and right-of-way improvements, including signage and fencing, would increase visibility (Exhibit 3).

Parking

The proposed project would include a total of up to seven open-air parking spaces within the approximately 2,000-square-foot proposed parking area (Exhibit 3). These would be located adjacent to the Preserve's entrance on West Second Street and Foothill Boulevard.

Open Space and Recreational Facilities

The proposed project would preserve a total of 208.66 acres of open space, including oak woodland, chaparral, grasslands, fir forest, redwood groves, and riparian vegetation surrounding creeks. This would include preservation of key riparian corridors and landmark features, including the North Branch of Porterfield Creek, a General Plan-designated Priority Riparian Corridor, and Soda Springs, a natural soda water spring along the site's northern boundary. Upon installation of new picnic areas and multiuse trails as shown on Exhibit 3, the site would incorporate necessary setbacks along site boundaries and maintain an existing shaded fuel break along the site's southeastern boundary near Port Circle.

Utilities

Proposed modifications to the existing on-site storm drainage system would consist of culverts, inlets, and basins to detain waters on-site and provide natural filtration and pre-treatment.

The proposed project would not require any modification to existing sewer lines, electricity, or natural gas lines. Electricity and natural gas would continue to be provided by Pacific Gas and Electric Company (PG&E), which provides electricity and natural gas to the City of Cloverdale.⁷ Sonoma Clean Power would provide any electric generation service, while PG&E would deliver electricity through the existing grid.⁸

Demolition and Construction Activities

The proposed project would include the demolition of an open-sided shed and trailer, the removal and replacement of two culverts, widening of the West Second Street access entry area to accommodate fire trucks, construction of a parking area including Americans with Disabilities Act (ADA) spaces, and the construction of new trails. Construction equipment would include a box grader and excavator. Demolition and construction activities are anticipated to begin as soon as all permits and mitigation activities allow and would have a duration of approximately 3 months.

1.5.4 - Proposed General Land Use Designation and Zoning District

The project site is designated by the City's General Plan as CF. The proposed project would not require changes to the existing General Plan land use designation. As part of the proposed annexation, the City proposes to pre-zone the site as Conservation. The proposed project would be consistent with the proposed Conservation zoning.

1.6 - Required Discretionary Approvals

As mentioned previously, the City of Cloverdale has discretionary authority over the proposed project and is the CEQA Lead Agency for the preparation of this Draft IS/MND. In order to implement the proposed project, the City of Cloverdale would need to secure the following permits/approvals:

- Site Plan Design Review
- Annexation of County parcels to the City of Cloverdale (approval by LAFCo.)

1.7 - Intended Uses of This Document

This Draft IS/MND has been prepared to document the potential significant adverse environmental impacts associated with the proposed project and identify feasible mitigation that would reduce impacts to below a level of significance. This document will also serve as a basis for soliciting comments and input from members of the public and public agencies regarding the proposed project. The Draft IS/MND will be circulated for a minimum of 30 days, during which comments concerning the analysis contained in the Draft IS/MND should be sent to:

⁷ City of Cloverdale. 2008. General Plan Update Draft EIR. October.

⁸ Sonoma Clean Power. 2025. Who We Are. Website: <https://sonomacleanpower.org/whoweare>. Accessed February 14, 2025.

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Photograph 1: View of the firebreak along the site's southeastern boundary near Port Circle.



Photograph 2: View of the existing open-walled shed and trailer along the site's northeastern boundary. The shed will be demolished and the trailer will be removed by the City.



Photograph 3: Cut wood in field and 25-inch ditch relief culvert near the site's eastern boundary. The culvert will be removed by the City.



Photograph 4: View of utility line and Cherry Creek Road running adjacent to site's southwestern boundary.

Source: Hollis Ag, April 2023.

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Soda Springs Ranch Open Space Preserve
Initial Study/Mitigated Negative Declaration

2 - ENVIRONMENTAL CHECKLIST AND ENVIRONMENTAL EVALUATION

Environmental Factors Potentially Affected		
The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.		
☐ Aesthetics	☐ Agriculture and Forestry Resources	☐ Air Quality
☒ Biological Resources	☒ Cultural Resources and Tribal Cultural Resources	☐ Energy
☒ Geology and Soils	☐ Greenhouse Gas Emissions	☒ Hazards and Hazardous Materials
☐ Hydrology and Water Quality	☐ Land Use and Planning	☐ Mineral Resources
☐ Noise	☐ Population and Housing	☐ Public Services
☐ Recreation	☐ Transportation	☒ Mandatory Findings of Significance
☐ Utilities and Services Systems	☐ Wildfire	
Environmental Determination		

On the basis of this initial evaluation:

- ☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- ☒ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- ☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- ☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measure based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- ☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Date: 7-31-25 Signed: Rafael Miranda

Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
2.1 Aesthetics				
<i>Except as provided in Public Resources Code Section 21099, would the project:</i>				
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☒
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic building 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 publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☐	☐	☐	☒
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☐	☒

Environmental Evaluation

Setting

This section provides a description of existing visual conditions near the project site and an assessment of changes to those conditions that would occur from implementation of the proposed project. Effects of the proposed project on the visual environment are generally defined in terms of the following: a project's physical characteristics and potential visibility, the extent to which the proposed project's presence would change the perceived visual character and quality of the environment where it would be located, and the expected level of sensitivity that the viewing public may have in areas where project facilities would alter existing views.

The aesthetic quality of a community is composed of visual resources, which are those physical features that make up the visible landscape, including land, water, vegetation, and the built environment (e.g., buildings, roadways, and structures).

The City is located in a small, flat valley running roughly north to south following the Russian River and is surrounded by gently rolling hills covered with oak trees, grassland, and other vegetation. The Redwood Highway provides both northbound and southbound views of the City. Views in the City consist of the Russian River northbound, and views southbound consist of Fitch Mountain and the Mayacamas Mountains, which are in prominent view in the background. Views of the surrounding foothills and open space areas, agricultural lands, creeks, and oak woodlands can be seen from a number of public vantage points throughout the City.

The project site is located to the west of the urbanized City and adjacent to rural unincorporated Sonoma County lands to the north, west, and south. The project site is almost entirely undeveloped (except for one open-walled shed, trailer, and on-site drainage features). There are substantial natural wooded hillsides throughout a majority of the project site. The western and northern areas of the project site are surrounded by undeveloped, primarily natural woodlands. The southern and eastern portions of the site are primarily composed of natural woodland and grassland.

Visual Setting

Views of the site are unobstructed from Foothill Boulevard east of the project site. All other public views, including those from Port Circle, are obstructed by either residential development or trees, and views from West Cherry Creek Road are obstructed by trees, including oak woodland.

The General Plan Conservation, Design, and Open Space Element has goals and policies that aim to preserve scenic resources that include natural features such as woodland areas, foothills, and agricultural land. General Plan Exhibit 6-1, Conservation Element Map, designates “prominent ridgeline buffers” and “river/creek buffers” throughout the City of Cloverdale.⁹ Prominent ridgelines are designated in the northwestern corner of the project site, and river/creek buffers are designated, to include the North Branch of Porterfield Creek and an unnamed tributary of Cloverdale Creek which runs along the site’s northern boundary. There are no other designated scenic resources on or adjacent to the project site. The project site consists of foothills above the 400-foot elevation contour throughout the northern, central, and western portions of the project site as well as relatively flat grasslands areas to the east and south.

Sources of daytime glare from the adjacent residential uses to the east include direct beam sunlight and reflections from windows, architectural coatings, glass, and other reflective surfaces. Nighttime illumination and associated glare are generally divided into two sources: stationary and mobile. Stationary sources include structure lighting and decorative landscaping, lighted signs, solar panels, and streetlights. Mobile sources are primarily headlights from motor vehicles. There is no stationary lighting located within the Open Space Preserve. Limited lighting from City-owned and maintenance staff vehicle headlights may occur at the site.

⁹ City of Cloverdale. 2009. General Plan.

The City of Cloverdale Urban Lighting Element protects light resources through goals, policies, and programs that aim to preserve nighttime sky and reduce light spillage. General Plan Policy UL 1-2 requires projects to minimize light spillage off-site.

Would the project:

a) Have a substantial adverse effect on a scenic vista?

No impact. The General Plan Exhibit 6-1, Conservation Element Map, designates “prominent ridgeline buffers” and “river/creek buffers” throughout the City of Cloverdale, including within the project site. The project would not result in the construction of new structures or features that could obstruct these scenic resources. In fact, the proposed project would enhance public access to these features via recreational improvements in the form of new trails. Therefore, no impact would occur.

b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic building within a State Scenic Highway?

No impact. There is one California Department of Transportation (Caltrans) “Eligible” State Scenic Highways along the northern boundary of the City of Cloverdale, State Route (SR) 128, located approximately 0.80 mile north of the project site.¹⁰ Residential development located between the northern ridgeline of the project site and SR-128 either partially or completely obstructs views of scenic resources. Since the proposed project would not entail structural development and the proposed project would not occur within the vicinity of State Scenic Highway, the proposed project would not substantially damage scenic resources within a State Scenic Highway. No impact would occur.

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 the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

No impact. The proposed project is in a non-urbanized area designated as RRD and B8. Public views of the project site’s hillsides and ridgelines would primarily be experienced from West Second Street, Foothill Boulevard, and Port Circle. Views of the project site from Foothill Boulevard and Port Circle include views of existing fencing as well as proposed fencing along the eastern boundary of the site, as well as hillsides and ridgelines. Given the project site’s topography and setback from adjacent uses, a small portion of the project site would be visible from public vantage points.

The project would be consistent with General Plan Goal CDO 2 and Policies CDO 2-2 and 2-4 because it would preserve areas above the 400-foot elevation line as open space. Consistent with the Cloverdale Municipal Code Section 18.09.040, Hillside Protection, the proposed project includes

¹⁰ California Department of Transportation (Caltrans), 2025. California State Scenic Highway System Map. Website: <https://caltrans.maps.arcgis.com/apps/webappviewer/index.html?id=465dfd3d807c46cc8e8057116f1aaca>. Accessed February 24, 2025.

preservation of the 400-foot elevation line and would permanently preserve the existing ridgelines and woodland hillsides of the site as open space. Additionally, the proposed project would install setbacks alongside site boundaries and buffer areas alongside sensitive habitat areas, minimizing disruption to hills or forests.

The proposed project would not result in the construction of new structures or features that could degrade the existing visual character and quality of public views of the site. In fact, the proposed project would enhance public access to these features via recreational improvements in the form of new trails. Therefore, no impact would occur.

d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

No impact. Existing sources of light and glare in the vicinity of the project site include the area to the east of the project site, across Foothill Boulevard and Port Circle, which contain single-family homes and existing light and glare from urban infrastructure such as roads, windows, and lighting. However, the majority of the project site and areas to the north, west, and south are mostly undeveloped, aside from the Clearwater Ranch Community, and currently contain few lighting sources. No buildings are proposed and there would be no new stationary sources of light associated with the proposed project. Project-related traffic is not expected to substantially increase mobile sources of light because uses of the proposed project would generally be limited to the daytime. No impact would occur.

Mitigation Measures

None.

Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
2.2 Agriculture and Forestry Resources <i>In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the State's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board.</i> <i>Would the project:</i>				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to nonagricultural 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 nonagricultural use or conversion of forest land to non-forest use?	☐	☐	☒	☐

Environmental Evaluation

Agricultural Resources

The California Department of Conservation Farmland Mapping and Monitoring Program (FMMP) was established by the State Legislature in 1982 to assess the location, quality, and quantity of agricultural lands and conversion of these lands over time. The FMMP has established five farmland categories:

- Prime Farmland is farmland with the best combination of physical and chemical features able to sustain long-term agricultural production. This land must have been used for irrigated agricultural production at some time during the last 4 years before the mapping date and have the ability to store moisture in soil well.
- Farmland of Statewide Importance is similar to Prime Farmland but contains greater slopes and a lesser ability to store soil moisture.
- Unique Farmland is usually irrigated, but may include non-irrigated orchards or vineyards as found in some climate zones in California. This land must still have been cropped some time during 4 years prior to the mapping date.
- Farmland of Local Importance is important to the local agricultural economy as determined by each county's board of supervisors and local advisory committee.
- Grazing Land is land on which the existing vegetation is suited to the grazing 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 FMMP classifies the project site as grazing land. Areas to the east and south of the project site are classified as urban/built-up land. Further south are areas are areas classified as Farmland of Local Importance. There is no Prime Farmland, Unique Farmland, or Farmland of Statewide Importance located within the vicinity of the project site. The project site is zoned for agricultural uses, including crop cultivation and livestock raising.

Forest Resources

The Williamson Act, classified in 1965 as the California Land Conversation Act, allows local governments to enter into contracts with private landowners, offering tax incentives in exchange for an agreement that the land will remain undeveloped or related open space use only for a period of 10 years. There are currently no properties under the Williamson Act within the City of Cloverdale.

CEQA requires the evaluation of forest and timber resources where those resources are present. The project site is within Forested Lands as described in Public Resources Code Section 12220(g) Timberland as defined under Public Resources Code Section 4526 and is zoned for various uses, including commercial timber production.

Would the project:

a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to nonagricultural use?

No impact. As described previously, the project site is classified as grazing land. There is no Prime Farmland, Unique Farmland, or Farmland of Statewide Importance located within the project area.¹¹ Therefore, development of the proposed project would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to nonagricultural use. No impact would occur.

b) Conflict with existing zoning for agricultural use, or a Williamson Act Contract?

Less than significant impact. The project site is designated RRD by the Sonoma County Zoning Code, which permits recreational uses in addition to certain agricultural uses and very low residential development. There are currently no properties under Williamson contract located on the project site or surrounding area.¹² The proposed project would expand recreational uses of the site in accordance with designated zoning, which is currently vacant and not being used for agricultural purposes. Thus, the proposed project would not conflict with existing zoning, including any existing agricultural uses, or a Williamson Act Contract. Thus, impacts would be less than significant.

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))?

Less than significant impact. The entire project site contains forest land, including timberland zoned for commercial timberland production. APN 115-220-007 specifically is zoned VOH and both APN 115-220-007 and APN 115-220-019 are zoned RC50/50 in addition to the RRD designation. The project site is vacant and is currently not being used for timberland production.¹³

The proposed project would expand recreational uses for the site in accordance with RRD zoning. The proposed project would not conflict with the zoning of forest lands for the site and any vegetation clearance would be conducted in accordance with applicable requirements for RRD zoning, specifically the VOH district, including the retention of existing valley oaks, the planting of replacement valley oaks, or the payment an in lieu fee per tree removal as described in County Municipal Code Section 26.67, Oak Woodland Combining District and VOH Valley Oak Habitat Combining District. Furthermore, the proposed project would comply with the provisions of the

¹¹ California Department of Conservation. 2025. California Important Farmland Finder. Website: <https://maps.conservation.ca.gov/DLRP/CIFF/>. Accessed March 6, 2025.

¹² California Department of Conservation. 2023. California Williamson Act Enrollment Finder. Website: <https://maps.conservation.ca.gov/dlrp/WilliamsonAct/App/index.html>. Accessed March 6, 2025.

¹³ California Department of Forestry and Fire Protection (CAL FIRE). 2025. CAL FIRE Timber Harvesting Plans All TA83. Website: <https://forest-practice-calfire-forestry.hub.arcgis.com/maps/04777bf6e6ce4b4d93298f4e3ba88d7f/about>. Accessed March 6, 2025.

County's Oak Woodland CEQA Requirement (Public Resources Code [PRC] § 21083.4), which requires the avoidance of or mitigation of any impacts to oak woodlands, and would also comply with Municipal Code Section 18.17, Tree Preservation. As such, the proposed project would not conflict with existing zoning or cause rezoning of forest lands defined under Public Resources Code Section 12220(g) and impacts would be less than significant.

d) Result in the loss of forest land or conversion of forest land to non-forest use?

Less than significant impact. The entirety of the project site is designated as CF by the City and contains hillside oak woodlands.¹⁴ According to the General Plan, Conservation, Design, and Open Space Element, Policy CDO 6-2, the City must protect distinctive natural vegetation such as oak woodlands, riparian corridors, and mixed evergreen forests, by maintaining the natural features as a whole. The proposed project would preserve a total of 208.66 acres of open space, including forest habitat and oak woodland. Preservation would entail the closure of approximately 0.94 mile of existing trail through existing forest and oak woodland areas and vegetation clearance for the development of 0.94 mile of new trail. The proposed project would allow for regrowth in areas of closed trails and would include vegetation clearance in compliance with the County's Oak Woodland CEQA Requirement, County Municipal Code Section 26.67, and City Municipal Code Section 18.17 for protected forest habitat and oak woodland areas. Thus, a majority of the existing forest and on-site oak woodland would be preserved, ensuring no significant loss of forest land or conversion of forest land to non-forest use. Therefore, impacts would be less than significant.

e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to nonagricultural use or conversion of forest land to non-forest use?

Less than significant impact. A significant impact would occur if the proposed project would indirectly result in the conversion of farmland to nonagricultural use or conversion of forest land to non-forest uses. As previously described, the project site contains oak woodland habitat and has not historically been and is not currently being used for timberland production. While the project site is zoned for certain agricultural uses, there are no existing agricultural uses occurring on-site. The area surrounding the project site is composed of open space, low-density residential development, and public institutional development.

Additionally, the surrounding area to the south and east of the project site is already urbanized and contains no designated Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. Furthermore, no parcels are under a Williamson Act Contract. While the site contains abundant oak woodland and forest habitat, as previously described, the proposed project would not result in a net loss forest land. Therefore, the proposed project, which would be consistent with the existing land use designation (CF) and zoning use (RRD), would thus not indirectly result in the conversion of farmland

¹⁴ City of Cloverdale. 2009. General Plan.

to nonagricultural use or the conversion of forest land to non-forest use and impacts would be less than significant.

Mitigation Measures

None required.

Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
2.3 Air Quality <i>Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:</i>				
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☐	☒
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment 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 or) adversely affecting a substantial number of people?	☐	☐	☒	☐

Environmental Evaluation

Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations.

Setting

Air pollutants relevant to the CEQA checklist questions for Air Quality are briefly described below.

- Ozone is a gas that is formed when reactive organic gases (ROG) and nitrogen oxides (NO_x)—both byproducts of internal combustion engine exhaust—undergo slow photochemical reactions in the presence of sunlight. Ozone concentrations are generally highest during the summer months when direct sunlight, light wind, and warm temperature conditions are conducive to its formation. Health effects can include, but not be limited to irritated respiratory system, reduced lung function, and aggravated chronic lung diseases.
- ROG, or volatile organic compounds (VOCs), are defined as any compound of carbon—excluding carbon monoxide (CO), carbon dioxide (CO₂), carbonic acid, metallic carbides or carbonates, and ammonium carbonate—that participates in atmospheric photochemical

reactions. Although there are slight differences in the definition of ROG and VOCs, the two terms are often used interchangeably.

- Nitrogen dioxide (NO₂) forms quickly from NO_x emissions. Health effects from NO₂ can include the following: potential to aggravate chronic respiratory disease and respiratory symptoms in sensitive groups; risk to public health implied by pulmonary and extra-pulmonary biochemical and cellular changes and pulmonary structural changes; contribution to atmospheric discoloration; increased visits to hospital for respiratory illnesses.
- CO is a colorless, odorless gas produced by the incomplete combustion of fuels. CO concentrations tend to be the highest during the winter morning, with little to no wind, when surface-based inversions trap the pollutant at ground levels. Because CO is emitted directly from internal combustion engines—unlike ozone—and motor vehicles operating at slow speeds are a primary source of CO in the Sonoma County region, the highest ambient CO concentrations are generally found near congested transportation corridors and intersections. Potential health effects from CO depends on exposure and can include slight headaches; nausea; aggravation of angina pectoris (chest pain) and other aspects of coronary heart disease; decreased exercise tolerance in persons with peripheral vascular disease and lung disease; impairment of central nervous system functions; possible increased risk to fetuses; death.
- Sulfur dioxide (SO₂) is a colorless, pungent gas. At levels greater than 0.5 parts per million (ppm), the gas has a strong odor, similar to rotten eggs. Sulfur oxide (SO_x) include SO₂ and sulfur trioxide. Sulfuric acid is formed from sulfur dioxide, which can lead to acid deposition and can harm natural resources and materials. Although SO₂ concentrations have been reduced to levels well below State and federal standards, further reductions are desirable because SO₂ is a precursor to sulfate and PM₁₀.
- Respirable particulate matter (PM₁₀) and fine particulate matter (PM_{2.5}) consist of extremely small, suspended particles or droplets 10 microns and 2.5 microns or smaller in diameter. Some sources of particulate matter, like pollen and windstorms, are naturally occurring. However, in populated areas, most particulate matter is caused by road dust, diesel soot, combustion products, abrasion of tires and brakes, and construction activities. Health effects from short-term exposure (hours/days) can include the following: irritation of the eyes, nose, throat; coughing; phlegm; chest tightness; shortness of breath; aggravate existing lung disease, causing asthma attacks and acute bronchitis; those with heart disease can suffer heart attacks and arrhythmias. Health effects from long-term exposure can include the following: reduced lung function; chronic bronchitis; changes in lung morphology; or death.
- Toxic air contaminants (TACs) refer to a diverse group of air pollutants that can affect human health but have not had ambient air quality standards established for them. Diesel particulate matter (DPM) is a toxic air contaminant that is emitted from construction equipment and diesel-fueled vehicles and trucks. Some short-term (acute) effects of DPM exposure include eye, nose, throat, and lung irritation, coughs, headaches, light-headedness, and nausea. Studies have linked elevated particle levels in the air to increased hospital admissions, emergency room visits, asthma attacks, and premature deaths among those suffering from respiratory problems. Human

studies on the carcinogenicity of DPM demonstrate an increased risk of lung cancer, although the increased risk cannot be clearly attributed to diesel exhaust exposure.

The project site is located in the North Coast Air Basin, within the jurisdiction of the Northern Sonoma County Air Pollution Control District (NoSoCoAir). Where available, the significance criteria established or recommended by NoSoCoAir were used to make determinations related to the air quality CEQA checklist impact questions. The NoSoCoAir has not adopted standards of significance for operational activities and instead suggests the use of the Bay Area Air Quality Management District (Bay Area Air District) guidance, thresholds and mitigation measures. In accordance with CEQA Guidelines Section 15064.7 (Thresholds of Significance), the City exercises its own discretion to use the significance thresholds in the Bay Area Air District CEQA thresholds based on substantial evidence contained in Bay Area Air District's record for adoption of the thresholds (which is relied on and incorporated herein). Accordingly, the assessment of the project's air quality impacts uses the thresholds and methodologies from Bay Area Air District's 2022 CEQA Air Quality Guidelines to determine the potential impacts of the project on the existing environment.¹⁵ The significance thresholds used in this analysis are based on Bay Area Air District standards and as set forth in Table 2 below. In developing thresholds of significance for air pollutants, the Bay Area Air District considered the emission levels for which a project's individual emissions would be cumulatively considerable. If a project exceeds the identified significance thresholds, its emissions would be cumulatively considerable, resulting in significant adverse air quality impacts to the region's existing air quality conditions.

Table 2: Thresholds of Significance

Pollutant	Construction Thresholds Average Daily Emissions	Operational Thresholds	
		Average Daily Emissions	Annual Average Emissions
Criteria Air Pollutants			
ROG	54 pounds/day	54 pounds/day	10 tons/year
NO _x	54 pounds/day	54 pounds/day	10 tons/year
PM ₁₀	82 pounds/day	82 pounds/day	15 tons/year
PM _{2.5}	54 pounds/day	54 pounds/day	10 tons/year
CO	Not Applicable	9.0 ppm (8-hour average) or 20.0 ppm (1-hour average)	
Fugitive Dust	Construction Dust Ordinance or other Best Management Practices	Not Applicable	

¹⁵ Bay Area Air Quality Management District (Bay Area Air District). 2022. CEQA Guidelines and Thresholds Update. April. Website: <https://www.baaqmd.gov/plans-and-climate/california-environmental-quality-act-ceqa/updated-ceqa-guidelines>. Accessed April 16, 2025.

Pollutant	Construction Thresholds Average Daily Emissions	Operational Thresholds	
		Average Daily Emissions	Annual Average Emissions
Health Risks and Hazards for New Sources			
Excess Cancer Risk	10 per 1 million	10 per 1 million	
Chronic or Acute Hazard Index	1.0	1.0	
Incremental annual average PM _{2.5}	0.3 µg/m ³	0.3 µg/m ³	
Health Risks and Hazards for Sensitive Receptors (Cumulative from All Sources Within 1,000-foot Zone of Influence) and Cumulative Thresholds for New Sources			
Excess Cancer Risk	100 per 1 million		
Chronic Hazard Index	10.0		
Annual Average PM _{2.5}	0.8 µg/m ³		
Notes: µg/m ³ = micrograms per cubic meter CO = carbon monoxide NO _x = nitrogen oxides PM ₁₀ = particulate matter less than 10 microns in diameter PM _{2.5} = particulate matter less than 2.5 microns in diameter ppm = parts per million ROG = reactive organic gas VOC = volatile organic compounds Source: Bay Area Air Quality Management District (Bay Area Air District). 2022. CEQA Guidelines and Thresholds Update. April. Website: https://www.baaqmd.gov/plans-and-climate/california-environmental-quality-act-ceqa/updated-ceqa-guidelines . Accessed April 16, 2025.			

Would the project:

a) Conflict with or obstruct implementation of the applicable air quality plan?

No impact. The proposed project is located in the North Coast Air Basin (Air Basin), where air quality is regulated by the NoSoCoAir. The Air Basin is in attainment for all federal and State ambient air quality standards. Therefore, NoSoCoAir is not required to prepare or implement an air quality plan. There is no applicable air quality plan. As such, no impacts would occur.

b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or State ambient air quality standard?

Less than significant impact. This impact is related to the cumulative effect of a project's regional criteria pollutant emissions. As described above, the region is currently in attainment for all federal and State ambient air quality standards. By its nature, air pollution is largely a cumulative impact resulting from emissions generated over a large geographic region. The attainment status of regional pollutants is

a result of past and present development within the Air Basin, and this potential regional impact is a cumulative impact. In other words, new development projects (such as the project) within the Air Basin would contribute to this impact only on a cumulative basis. No single project would be sufficient in size, by itself, to result in nonattainment of regional air quality standards. Instead, a project's emissions may be individually limited, but cumulatively considerable when taken in combination with past, present, and future development projects.

The cumulative analysis focuses on whether a specific project would result in cumulatively considerable emissions. According to Section 15064(h)(4) of the CEQA Guidelines, the existence of significant cumulative impacts caused by other projects alone does not constitute substantial evidence that the project's incremental effects would be cumulatively considerable. As previously stated, the NoSoCoAir has not adopted standards of significance for construction or operational activities and instead suggests the use of the Bay Area Air District thresholds and mitigation measures. Therefore, the determination of cumulative air quality impacts for construction and operational emissions is based on whether the proposed project would result in regional emissions that exceed the Bay Area Air District regional thresholds of significance for construction and operations on a project level. Projects that generate emissions below the Bay Area Air District significance thresholds would be considered consistent with regional air quality planning efforts would not generate cumulatively considerable emissions.

The proposed project's regional construction and operational emissions, which include both on- and off-site emissions, are evaluated separately below. Construction and operational emissions from the proposed project were estimated using the California Emissions Estimator Model (CalEEMod) version 2022.1.¹⁶ A detailed description of the assumptions used to estimate emissions and the complete CalEEMod output files are contained in Appendix A.

Construction Emissions

Construction emissions from the proposed project would be "short-term" or temporary in nature and duration. Construction of the proposed project would result in the temporary generation of ROG, NO_x, CO, PM₁₀, and PM_{2.5} emissions from construction activities including during demolition, site preparation, grading, and asphalt paving. Fugitive dust emissions are primarily associated with earth disturbance and grading activities and vary as a function of soil silt content, soil moisture, wind speed, acreage of disturbance area, and miles traveled by construction vehicles on-site and off-site. Construction-related NO_x emissions are primarily generated by exhaust emissions from heavy-duty construction equipment, material and haul trucks, and construction worker vehicles. ROG emissions are mainly generated by off-gas emissions associated with architectural coatings and asphalt paving.

Construction Fugitive Dust

The Bay Area Air District does not recommend a numerical threshold for fugitive dust particulate matter emissions. Instead, the Bay Area Air District bases the determination of significance for fugitive

¹⁶ California Emissions Estimator Model (CalEEMod). Version 2022.1.1. Website: <http://caleemod.com/>. Accessed April 16, 2025.

dust on a consideration of the control measures to be implemented. If all appropriate emissions control measures are implemented for a project as recommended by the Bay Area Air District, then fugitive dust emissions during construction are not considered significant. During construction activities, the following air pollution control measures shall be implemented as outlined in Mitigation Measure (MM) AIR-1. With incorporation of this measure, short-term construction impacts associated with the generation of fugitive dust would be less than significant.

Construction Air Pollutant Emissions: ROG, NO_x, PM₁₀, and PM_{2.5}

Construction emissions were quantified and estimated using CalEEMod Version 2022.1 for a typical construction scenario for a land use project of this size. CalEEMod provides a consistent platform for estimating construction and operational emissions from a wide variety of land use projects and is the model recommended by the Bay Area Air District for estimating project emissions. Construction emissions were estimated and compared with the applicable thresholds of significance established by the Bay Area Air District to assess ROG, NO_x, exhaust PM₁₀, and exhaust PM_{2.5} construction emissions to determine significance for this criterion.

The following project characteristics and assumptions were utilized in the analysis:

- Demolition and construction activities are anticipated to begin as soon as all permits and mitigation activities allow and last approximately 3 months. Because fuels and equipment fleets become cleaner over time, construction-related emissions decrease over time as well. Therefore, if construction begins in later years, construction-related emissions will be lower than when modeled to occur in earlier years.
- Demolition of the existing open-sided shed and trailer would result in approximately 42 tons of waste.
- The modeling assumed various on-site construction, including culvert replacement; widening of the access entry area to accommodate firetrucks; parking area including ADA spaces; the construction of trails (assuming 4 feet for the trail bed and 10 feet of total disturbance).
- Construction equipment assumed to be used is based on applicant-provided information combined with equipment typical to this type and level of construction activity.
- The modeling assumed implementation of the MM AIR-1 for fugitive dust.

Additional details on the assumptions and inputs are included in the California Emissions Estimator Model (CalEEMod) output reports (Appendix A).

Table 3 shows the proposed project's average daily emissions from construction-related exhaust emissions. As indicated in Table 3, construction exhaust emissions from all construction activities would be below the recommended thresholds of significance; therefore, the proposed project's construction would have less than significant impact related to emissions of ROG, NO_x, exhaust PM₁₀, and exhaust PM_{2.5}.

Table 3: Construction Regional Criteria Pollutant Exhaust Emissions

Total Emissions (pounds)	Air Pollutants (lbs/day)				
	Year	ROG	NO _x	PM ₁₀ (Exhaust)	PM _{2.5} (Exhaust)
Total Project Construction ¹	2026	826.34	1,260.50	63.18	56.21
Average Daily Emissions (lbs/day) ²		13.12	20.01	1	0.89
Significance Threshold (lbs/day)		54	54	82	54
Exceeds Significance Threshold?		No	No	No	No
Notes: lbs = pounds NO _x = oxides of nitrogen PM ₁₀ = particulate matter less than 10 microns in diameter PM _{2.5} = particulate matter less than 2.5 microns in diameter ROG = reactive organic gases ¹ Total emissions in pounds from all phases of construction. ² Calculated by dividing the pounds of emissions by the number of non-overlapping working days of construction (63 workdays). Source: California Emissions Estimator Model (CalEEMod) Output (see Appendix A).					

Operational Emissions

Operational Air Pollutant Emissions: ROG, NO_x, PM₁₀, and PM_{2.5}

Operational emissions would include mobile sources. Operational emissions were quantified and estimated using CalEEMod Version 2022.1 for the operational scenario for the proposed project. As described earlier, the proposed project's ongoing operational-related emissions would only include mobile emissions from vehicles visiting the park.

Table 4 shows estimated operational emissions compared with the applicable thresholds of significance established by the Bay Area Air District to assess ROG, NO_x, PM₁₀, and PM_{2.5} operational emissions to determine significance for this criterion. As shown in Table 4, the proposed project's regional daily operational emissions would not exceed any of the Bay Area Air District thresholds of significance. Therefore, the proposed project would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment during operation or construction and impacts would be less than significant.

Table 4: Operational Regional Criteria Pollutant Emissions

Emissions Source	ROG	NO _x	PM ₁₀ (Total)	PM _{2.5} (Total)
	Emissions			
<i>Total Average (lbs per day)–Mobile</i>	23.42	12.92	10.63	2.83
Bay Area Air District Significance Threshold (lbs/day)	54	54	82	54
Exceeds Significance Threshold?	No	No	No	No
<i>Annual Average (tons/year)</i>	0.01	0.01	0.01	0
BAAQMD Significance Threshold (tons/year)	10	10	15	10
Exceeds Significance Threshold?	No	No	No	No
Notes: BAAQMD = Bay Area Air Quality Management District lbs = pounds NO _x = nitrogen oxides PM ₁₀ = particulate matter less than 10 microns in diameter PM _{2.5} = particulate matter less than 2.5 microns in diameter ROG = reactive organic gases Source: Appendix A.				

Operational Carbon Monoxide Hotspot

A CO hotspot is a localized concentration of CO that is above a CO Ambient Air Quality Standard (AAQS). Localized CO hotspots can occur at areas with high vehicle density, such as intersections with heavy peak-hour traffic. The CO emissions from traffic generated by the proposed project could be a concern at the local level if project trip generation could lead to congested intersections that can result in high localized concentrations of CO. However, as previously stated, the proposed project is anticipated to result in very few additional mobile trips associated with visitors. The newly constructed parking lot would accommodate seven vehicles. The addition of these few mobile trips would not result in a localized concentration of CO that is above a CO AAQS. Therefore, the proposed project would have a less than significant impact related to CO.

c) Expose sensitive receptors to substantial pollutant concentrations?

Less than significant impact. Residences are located along the park's eastern border. However, as described previously, the low intensity and short duration of construction (3 months) would not present substantial pollutant concentrations to the residences. In addition, the vast majority of the construction of the new trails would take place thousands of feet from the residences and would be very minor in nature. As described previously, the quantity of pollutants emitted during construction would be small and occur for a very short time. The distance between most of the trail construction and these residences would allow dispersal of emissions, particularly given frequent winds in the

area. These short-term emissions would not constitute a substantial pollutant concentration at these residences. Future use of the trails would attract additional trips to the project site, but the increase over ambient traffic would be minimal. The parking lot would include spaces for only seven vehicles. The small increase would not be expected to result in substantial pollutant concentrations at these residences. Therefore, the impact to sensitive receptors would be less than significant.

d) Result in other emission (such as those leading to odors) adversely affecting a substantial number of people?

Less than significant impact. According to Bay Area Air District 2022 CEQA Guidelines, odor impacts could occur if the proposed project introduces a new odor source near existing receptors. If the proposed project would be an odor-generating facility, then the Bay Area Air District provides a list of recommended odor screening distances for evaluating potential odor impacts. According to the Bay Area Air District, recreational parks are not odor-generating facilities.

Construction

Potential sources that may emit odors during construction activities include exhaust from diesel construction equipment. However, because of the temporary nature of these emissions, the intermittent duration of construction activities, and the highly diffusive properties of DPM exhaust, nearby receptors would not be affected by diesel exhaust odors associated with project construction. Odors from these sources would be localized and generally confined to the immediate area surrounding the project site. The proposed project would utilize typical construction techniques, and the odors would be typical of most construction sites and temporary in nature. Thus, the proposed project would not introduce a new odor source near existing receptors.

Operation

The proposed project would result in the addition of mobile source emissions from vehicles visiting the Preserve. As previously stated, recreational parks are not identified by Bay Area Air District as sources of objectionable odors. Minor sources of odors, such as exhaust from mobile sources, are not typically associated with odor complaints, and potential odors would be temporary and insignificant. Therefore, the proposed project would have less than significant odor impacts during operation.

Summary

In conclusion, the proposed project would not result in odors that would adversely affect a substantial number of people during project construction or operation and impacts would be less than significant.

Mitigation Measures

MM AIR-1 Best Management Practices for Fugitive Dust

The following measures shall be implemented during all phases of construction to control dust and exhaust at the project site. Measures that are not applicable to the proposed project or are infeasible shall not be implemented.

- Water all exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) when dusty conditions are generated by construction activities.
- Cover trucks hauling soil, sand, and other loose materials off-site.
- Remove all visible soil on Second Street/Foothill Boulevard as needed using street sweeping brooms at least once per day. The use of dry power sweeping is prohibited.
- Limit all vehicle speeds on unpaved roads to 15 miles per hour (mph).
- Pave new or improved roadways, driveways, and sidewalks as soon as possible (*not applicable to proposed project*).
- Lay building pads as soon as possible after grading unless seeding or soil binders are used (*not applicable to proposed project*).
- Suspend all excavation, grading and/or demolition activities when average wind speeds exceed 20 mph.
- Wash off all trucks and equipment, including their tires, prior to leaving the site (*not feasible to implement*).
- Treat unpaved roads providing access to sites located 100 feet or further from a paved road with a 6- to 12-inch layer of compacted wood chips, mulch, or gravel (*not applicable to proposed project*).
- Minimize idling times either by shutting off equipment when not in use or reducing the maximum idling time to no more than 2 minutes (A 5-minute limit is required by State Airborne Toxics Control Measures [Title 13, Sections 2449(d)(3) and 2485 of the California Code of Regulations]). Provide clear signage for construction workers at all access points.
- Maintain and properly tune construction equipment in accordance with manufacturers' specifications. A certified mechanic shall check all equipment and record a determination of "running in proper condition" prior to operation.
- Post a publicly visible sign with the name and phone number of an on-site construction coordinator to contact regarding dust complaints. The on-site construction coordinator shall respond and take corrective action within 48 hours. The sign shall also provide the City's Code Enforcement Complaints email and number and the Bay Area Air Quality Management District's (Bay Area Air District's) General Air Pollution Complaints number to ensure compliance with applicable regulations.

Conclusion

There would be less than significant impacts related to air quality after implementation of MM AIR-1.

Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
2.4 Biological Resources				
<i>Would the project:</i>				
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 United States Fish and Wildlife Service?	☐	☒	☐	☐
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Wildlife or United States Fish and Wildlife Service?	☐	☒	☐	☐
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 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?	☐	☐	☐	☒

Environmental Evaluation

Setting

The following environmental evaluation is based, in part, on the Soda Springs Ranch Open Space Preserve Biological Resources Assessment (BRA), prepared by FirstCarbon Solutions (FCS) in June 2025. A field survey to support the BRA was conducted in May 2025 by FCS Biologists. The BRA, with supporting documentation, including the project-specific desktop review, and site photographs, is found in Appendix B. A detailed description of the environmental setting as it relates to biological resources is included in Section 2 of the BRA.

The project site is located within the northern portion of Sonoma County. The project site and surrounding area consists of mountainous terrain, including Cloverdale Creek to the north of the project site, Russian River to the east, Pritchett Peaks and Lake Sonoma to the south, and Cherry Creek to the west. Biological resources within the City of Cloverdale are diverse, despite its semi developed nature. The City contains natural ecological communities, harboring a diverse population of birds, mammals, reptiles, amphibians, and native plants. The City's biological resources exist among urban geography of open space parklands, urban forests, and natural undeveloped areas. The City has significant areas of natural ecosystems, including woodlands, grasslands, riparian habitat, and aquatic features that could support protected biological resources.

The proposed project site is undeveloped and surrounded by open space and residential development. The site is located west of North Foothill Boulevard, within the City of Cloverdale's SOI. The project site is composed of an Open Space Preserve containing an intermittent creek supporting riparian vegetation, a series of ephemeral drainages, various native woodlands and grasslands, and dirt roads traversing the site. Vegetation communities on-site include California bay (*Umbellularia californica*) riparian woodland, Douglas fir woodland alliance, coast redwood forest, Pacific madrone (*Arbutus menziesii*) woodland, mixed oak (*Quercus sp.*) woodland, manzanita (*Arctostaphylos sp.*) chaparral, needle grass (*Stipa sp.*) and melic grass (*Melica sp.*) serpentine grassland, wild oat (*Avena sp.*) and annual brome (*Bromus sp.*) grassland. Existing ephemeral drainages are dispersed throughout the site, with culverts and associated inlets and outlets that divert flows under the existing dirt roads.

Dominant oak species within the mixed oak alliance include coast live oak, interior live oak (*Quercus wislizeni*), valley oak (*Quercus lobata*), Oregon white oak, blue oak (*Quercus douglasii*), and California black oak (*Quercus kelloggii*). The mixed oak woodland, coast live oak woodland, Douglas fir woodland, and Pacific madrone woodland have shrub understories consisting of coyote brush (*Baccharis pilularis*), toyon (*Heteromeles arbutifolia*), tanoak (*Notholithocarpus densiflorus*), poison oak (*Toxicodendron diversilobum*), manzanita, rose (*Rosa sp.*), and non-native species surrounding the roads including French broom (*Genista monspessulana*) and Spanish broom (*Spartium junceum*). The herbaceous layer is abundant and dominated by native grasses. The California bay woodland on-site occurs surrounding the intermittent creek running west to east along the northern border of the project site. This community also includes bigleaf maple (*Acer macrophyllum*) and a few scattered black oak, coast redwood, and Douglas fir trees. The coast redwood forest on-site is also mainly

surrounding the intermittent creek or the other drainages present on-site. These forest patches occur as classic stands of redwoods without many other tree species present; however, there are a few California bay and bigleaf maple growing along the drainages in some of these forest sections. The California bay woodland and coast redwood forest on-site do not have dominant shrub or grassy herbaceous understories, instead featuring drainages, bare ground, or leaf litter. Both communities have a high diversity of ferns that are not commonly seen in the other communities on-site, including coastal woodfern (*Dryopteris arguta*), California maidenhair (*Adiantum jordanii*), California sword fern (*Polystichum californicum*), polypody fern (*Polypodium sp.*), and bracken fern (*Pteridium aquilinum*). The manzanita chaparral on-site is composed of moderate to dense manzanita with some toyon and a robust herbaceous understory of mostly non-native grasses with a variety of native forbs, including winecup clarkia (*Clarkia purpurea*), golden fairy lantern (*Calochortus amabilis*), soap plant (*Chlorogalum pomeridianum*), blue dicks (*Dipterostemon capitatus*), grassy tarweed (*Madia gracilis*), and iris (*Iris sp.*). The wild oat-annual brome grassland on-site is dominated by non-native and invasive grass species, such as wild oat (*Avena sp.*), soft brome (*Bromus hordeaceus*), ripgut brome (*Bromus diandrus*), and false brome (*Brachypodium distachyon*). The needle grass-melic grass serpentine grassland is characterized by the presence of purple needle grass (*Stipa pulchra*), as well as other serpentine associated species including California oat grass (*Danthonia californica*), coast range mariposa lily (*Calochortus vestae*), and dwarf plantain (*Plantago erecta*).

Would the project:

- 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 United States Fish and Wildlife Service?**

Less than significant with mitigation incorporated. As discussed above, potential impacts to special-status species and associated mitigation are based on the BRA prepared by FCS in June 2025. Prior to the May 2025 reconnaissance-level field surveys, FCS conducted literature reviews to identify potential biological resources that could be present on-site, including database searches of the California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDDB) and the California Native Plant Society (CNPS) Inventory of Rare Plants (CNPS Inventory). Both search queries were found within the *Cloverdale, California* USGS 7.5-minute Topographic Quadrangle Map and eight surrounding quadrangles (Appendix B).

The literature review performed by FCS identified a total of 71 special-status species within the project vicinity. The database identified 58 potential special-status plant species, seven of which have a moderate to high potential to occur on-site, including Howell's manzanita (*Arctostaphylos hispidula*), serpentine reed grass (*Calamagrostis ophitidis*), Rincon Ridge ceanothus (*Ceanothus confusus*), congested-headed hayfield tarplant (*Hemizonia congesta* ssp. *congesta*), bristly leptosiphon (*Leptosiphon aureus*), Cobb Mountain lupine (*Lupinus sericatus*), and bearded jewelflower (*Streptanthus barbiger*). The database identified 13 special-status wildlife species, four of which have the potential to occur on-site, including foothill yellow-legged frog (*Rana boylei* pop. 1), purple martin

(*Progne subis*), Crotch's bumble bee (*Bombus crotchii*), and northwestern pond turtle (*Actinemys marmorata*). These species are discussed in further detail below.

Special-status Plant Species

The project site contains suitable habitat to support seven potential special-status plant species. Project ground-disturbing activities, including vegetation removal, could have the potential to impact special-status plant species occurring on-site, resulting in potentially significant impacts. Therefore, with the implementation of rare plant surveys (MM BIO-1a), potential impacts to special-status plant species, including Howell's manzanita, serpentine reed grass, Rincon Ridge ceanothus, congested-headed hayfield tarplant, bristly leptosiphon, Cobb Mountain lupine, and bearded jewel flower, would be reduced to less than significant levels. Additional discussion of the potential special-status plant species is further discussed below.

Howell's Manzanita

Howell's manzanita is a perennial shrub in the Ericaceae family with a California Rare Plant Rank (CRPR) of 4.2 from the CNPS. There is potentially suitable habitat for this species in the chaparral and edge habitats on serpentine grassland on the project site.

Serpentine Reed Grass

Serpentine reed grass is a perennial herb in the Poaceae family with a CRPR of 4.3 from the CNPS. There is potentially suitable habitat for this species in the rocky areas of the chaparral, Douglas fir forest, redwood forest, California bay woodland, mixed oak woodland, coast live oak woodland, grasslands, and drainages on-site.

Rincon Ridge Ceanothus

Rincon Ridge ceanothus is a perennial shrub in the Rhamnaceae family with a CRPR of 1B.1 from the CNPS. There is potentially suitable habitat for this species in the chaparral, Douglas fir forest, redwood forest, California bay woodland, mixed oak woodland, and coast live oak woodland on-site.

Congested-headed Hayfield Tarplant

Congested-headed hayfield tarplant is an annual herb in the Asteraceae family with a CRPR of 1B.2 from the CNPS. There is potentially suitable habitat for this species in the grasslands and disturbed roadsides on-site.

Bristly Leptosiphon

Bristly leptosiphon is an annual herb in the Polemoniaceae family with a CRPR of 4.2 from the CNPS. There is potentially suitable habitat for this species in the chaparral, Douglas fir forest, redwood forest, California bay woodland, mixed oak woodland, coast live oak woodland, and grasslands on-site.

Cobb Mountain Lupine

Cobb Mountain lupine is a perennial herb in the Fabaceae family with a CRPR of 1B.2 from the CNPS. There is potentially suitable habitat for this species in the chaparral, Douglas fir forest, redwood forest, California bay woodland, mixed oak woodland, and coast live oak woodland on-site.

Bearded Jewelflower

Bearded jewelflower is an annual herb in the Brassicaceae family with a CRPR of 4.2 from the CNPS. There is potentially suitable habitat for this species in the chaparral and edge habitats on serpentine grassland on-site.

Special-status Wildlife Species

The project site contains suitable habitat to support seven potential special-status wildlife species, discussed below.

Foothill Yellow-legged Frog

Foothill yellow-legged frog is a Species of Special Concern (SSC) protected by the CDFW and has a moderate potential to occur on-site. This species is typically found in partially shaded shallow streams and riffles with a rocky substrate in a variety of habitats. The species requires at least some cobble-sized substrate for egg-laying and at least 15 weeks to attain metamorphosis. The project site contains marginally suitable drainages and a creek with riparian woodland. However, the existing aquatic features on-site do not contain the required microhabitat, specifically cobble-sized substrate, to support larvae and breeding activities. One CNDDDB occurrence was recorded approximately 0.5 mile southwest of the project site in 2002 along Cherry Creek Road. Additionally, one occurrence was previously recorded approximately 0.75 mile south of the project site in 2018, along Porterfield Creek. Because of the recent occurrence of the foothill yellow-legged frog, within dispersal distance, and the potential for individuals to traverse the site in search of suitable breeding habitat, pre-construction surveys and appropriate avoidance buffers, if present on-site, are required (MM BIO-1b). Implementation of avoidance and minimization measures would ensure that impacts to foothill yellow-legged frog would be reduced to less than significant levels.

Crotch's Bumble Bee

Crotch's bumble bee is a candidate for listing and receives protections under the Endangered Species Act and has a moderate potential to occur on-site. They are typically found in coastal California east to the Sierra-Cascade crest and south into Mexico. Food plant genera include *Antirrhinum*, *Phacelia*, *Clarkia*, *Dendromecon*, *Eschscholzia*, and *Eriogonum*. The project site contains the required host plant *Eschscholzia*, *Clarkia*, and *Eriogonum* for foraging to support this species. One CNDDDB occurrence was recorded approximately 9.5 miles south of the project site in 2023. Because of the suitable host plants on-site, and recent occurrence within the project vicinity, it cannot be ruled out that Crotch's bumble bee individuals could occupy the site. Ground-disturbing activities, including vegetation removal, could result in potentially significant impacts to Crotch's bumble bee. Therefore, with the implementation of pre-construction surveys, as well as CDFW consultation where required (MM BIO-1c), potential impacts to Crotch's bumble bee would be reduced to less than significant levels.

Northwestern Pond Turtle

Northwestern pond turtle is a SSC protected by the CDFW and has a moderate potential to occur on-site. This species is a thoroughly aquatic turtle found in ponds, marshes, rivers, streams, and irrigation ditches, usually with aquatic vegetation below 6,000 feet elevation. The species requires basking sites and suitable upland habitat (sandy banks or grassy open fields) up to 0.5 km from water for egg-laying. The project site contains drainages and a creek that supports riparian woodland and nearby grassland habitat. Two CNDDDB occurrences were recorded in 2002 within the Russian River approximately 1 mile east of the project site, within dispersal distance, and approximately 3.5 miles southeast of the project site. Because of the recent occurrences in proximity of the Russian River and suitable aquatic features to support this species, it cannot be ruled out that northwestern pond turtle individuals could occupy the site. Therefore, with the implementation of pre-construction surveys, as well as CDFW consultation where required (MM BIO-1d), potential impacts to northwestern pond turtle would be reduced to less than significant levels.

Protected Nesting Birds (Including Purple Martin)

The project site's existing trees, shrubs, and riparian woodland habitats may provide potential nesting habitat for birds, including purple martin. The entirety of the project site, channel banks and riparian vegetation along the northern intermittent creek, and areas adjacent to the project site contain a number of trees and shrubs that could provide potential nesting habitat could be used by the special-status birds. Should these be present, construction-related activities could result in their loss, which would result in a significant impact to special-status bird species. With implementation of pre-construction nesting bird surveys, as well as the establishment of avoidance buffers where required (MM BIO-1e), potential impacts to special-status bird species, including purple martin, would be reduced to less than significant levels.

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Wildlife or United States Fish and Wildlife Service?

Less than significant with mitigation incorporated. Potential impacts to sensitive natural communities and associated mitigation are based on the BRA prepared by FCS in June 2025. Vegetation communities with a State Rarity of S1 (Critically Imperiled), S2 (Imperiled), and S3 (Vulnerable) are considered a sensitive natural community. As previously discussed, the sensitive vegetation community on-site consists of mixed manzanita alliance (S3). Existing ephemeral drainages and culverts, with associated inlets and outlets, are dispersed throughout the site, currently used as the site's drainage system. These drainage channels run adjacent to and divert flows under the existing dirt roads. All drainages and associated riparian habitat, whether a sensitive vegetation alliance or association or not, are protected by State and federal laws and regulations as waters of the United States and State and by CDFW's Streambed Alteration Program.

The proposed project would include the closure of unnecessary trails, the repair of existing roads, and the development of multiuse trails throughout the site. Additionally, proposed modifications to the existing on-site storm drainage system would consist of culverts, inlets, and basins to detain waters

on-site. The proposed project could impact sensitive riparian habitat directly if trees or other vegetation within the riparian zone are removed or damaged during maintenance or construction activities. Additionally, the proposed project has the potential to impact the water quality of the drainage system. Potential temporary indirect impacts (during construction) and permanent indirect impacts (during project operation) include pollutant loading, increased erosion and sedimentation, and trash or debris dispersal into existing aquatic and riparian habitats. Temporary and indirect impacts to sensitive natural communities and/or jurisdictional features would be considered potentially significant under CEQA.

Construction of the proposed project would result in potential impacts to potential State or federally protected waters; and potential impacts to the associated riparian habitat during the proposed trail improvements during minor grading and vegetation removal activities. Trail improvement-related impacts would be regulated pursuant the CWA, Porter-Cologne Water Quality Control Act, and Fish and Game Code Section 1602, *et seq.*, and would require the project proponent to implement MM BIO-2a and comply with avoidance, minimization, and compensatory mitigation measures defined by the United States Army Corps of Engineers (USACE), Regional Water Quality Control Board (RWQCB), and CDFW to avoid and/or offset temporary impacts to the existing jurisdictional features and riparian habitat associated with the proposed trail improvements.

Construction of the proposed project would result in potential impacts to potential State or federally protected waters and potential impacts to existing riparian habitat during the proposed drainage improvements. Although the proposed project would not include permanent impacts (e.g., placement of fill) to the existing drainage system on-site, the proposed project has the potential for adverse impacts to the drainages through work that may occur below the drainage's top of bank and associated riparian canopy during the proposed modifications. To reduce impacts to the potential jurisdictional features, the project applicant shall implement MM BIO-2b and MM BIO-2c, which requires the applicant to coordinate with applicable regulatory agencies, including the CDFW, RWQCB, and USACE, to obtain the appropriate permits (1602, Waste Discharge Requirement [WDR]/401, 404) and/or no permit letters, to the extent required by applicable laws and regulations.

Compliance with regulatory permitting requirements and any conditions of approval determined by CDFW, RWQCB, and/or USACE would reduce impacts to riparian habitat and/or potential jurisdictional features to a less than significant level.

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?

No impact. The reconnaissance field survey conducted by FCS Biologists in May 2025 determined that no jurisdictional wetlands were observed within the project site survey area within the project limits of disturbance. No wetland indicators were present at any of the data collection points on-site. The BRA concluded that the project site does not contain any State or federally protected wetlands; therefore, no impacts would occur.

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 wildlife nursery sites?

Less than significant with mitigation incorporated. Wildlife corridors are generally described as pathways or habitat linkages that connect discrete areas of natural open space otherwise separated or fragmented by topography, changes in vegetation, and other natural or human induced factors, such as urbanization. The fragmentation of natural habitat creates isolated “islands” of vegetation that may not provide sufficient area or resources to accommodate sustainable populations for a number of species, thus adversely affecting both genetic and species diversity. Corridors often partially or largely eliminate the adverse effects of fragmentation by (1) allowing wildlife to move between remaining habitats to replenish depleted populations and increase the gene pool available; (2) providing escape routes from fire, predators, and human disturbances, thus reducing the risk that catastrophic events (such as fire or disease) would result in population or species extinction; and (3) serving as travel paths for individual animals moving throughout their home range in search of food, water, mates, and other needs, or for dispersing juveniles in search of new home ranges.

The project site and associated habitat likely serve as a wildlife movement corridor. Because of the undeveloped nature of the project site and vegetation communities present, it may serve as a movement corridor for common area wildlife (i.e., raccoon, skunk, opossum, deer, and coyote). Additionally, the project site contains mature trees and dense canopy throughout the site, making it a suitable nursery site for wildlife species, including protected nesting birds and roosting bats.

The proposed project would result in less than significant impacts to wildlife movement corridors and wildlife nursery sites. While the proposed project may result in minor, temporary impacts to wildlife movement and/or nursery sites during construction, implementation of pre-construction nesting bird surveys, as well as the establishment of avoidance buffers where required (MM BIO-1e), potential impacts to nesting birds and roosting bats would be reduced to less than significant levels.

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

Less than significant impact. City of Cloverdale General Plan policies and Municipal Code Ordinance(s) pertaining to biological resources are outlined below:

City of Cloverdale General Plan

The 2009 City of Cloverdale General Plan (General Plan) both contain policies to protect natural resource lands including, but not limited to, watershed, fish and wildlife habitat, biotic areas, and habitat connectivity corridors.

Policy CDO 6-1 Maintain and expand the tree canopy within and outside the developed areas of the City, including old growth and newly planted trees. Prepare tree protection standards that can be implemented with or without a tree preservation ordinance.

- Policy CDO 6-1** Maintain and expand the tree canopy within and outside the developed areas of the City, including old growth and newly planted trees, including best practice provisions for installation, maintenance and succession planting.
- Policy CDO 6-2** Protect distinctive natural vegetation such as oak woodlands, riparian corridors and mixed evergreen forests by maintaining the natural features as a whole. Preservation of individual trees or features rather than the larger habitat does not satisfy this policy.
- Policy CDO 6-3** Large or otherwise significant trees shall be maintained both in residential, nonresidential, and open space areas by: (1) Revising development plans that would remove significant trees so that those trees are saved. (2) Developing standard conditions of approval to minimize damage during construction and provisions to assure that building foundations, utilities, walkways, irrigation, or use patterns will not damage root structures, trunks or crowns.
- Policy CDO 6-4** New private and public development, including public street, sidewalk, utility, and park construction, shall provide a mix of trees with a crown that can provide shade and summer cooling and trees with height to create a silhouette against the skyline.
- Policy CDO 6-5** New public and private development shall provide street trees parallel to streets—in planter strips, in sidewalks, or at back of sidewalks, spaced at regular intervals along the street. Tree intervals shall provide a canopy with leaves touching at maturity. Tree locations shall be identified prior to design of utilities, drainage, hydrants, electrical equipment boxes, vaults, etc., and those features should be subservient to tree locations.
- Policy CDO 7-1** Conserve and protect the area's natural vegetation by: (1) Ensuring that drainage and runoff from City sources is not impairing the water quality of the Russian River. (2) Retaining existing riparian vegetation within the conservation buffers along all natural watercourses to preserve riparian vegetation and habitat. (3) Restoring degraded riparian habitats where feasible. (4) Prohibiting agricultural activities within the conservation buffers along all natural watercourses. (5) Avoiding the contamination of groundwater supplies.

City of Cloverdale Municipal Code

the City has implemented Chapter 18.17–Tree Preservation of the Municipal Code (Tree Ordinance) to establish standards and programs to protect, preserve, and maintain groves and stands of mature trees and specified individual protected trees through discretionary permits.

Chapter 18.17–Tree Preservation

The City defines a protected trees any tree following tree species with a diameter at breast height (DBH) of 24 inches or greater: native oaks (*Quercus sp.*) including, but not limited to, black oak, valley oak, blue oak, interior live oak, coast live oak, Oracle oak (*Quercus x morehus*), and Oregon

oak; American sycamore (*Platanus occidentalis*); California bay (*Umbellularia californica*), Douglas fir, Ponderosa pine (*Pinus ponderosa*), Black walnut (*Juglans nigra*), and English walnut (*Juglans regia*). The City also considers California or coast redwood (*Sequoia sp.*) with a DBH of 48 inches or greater as a protected tree. Multi-trunk trees must possess at least one trunk with the stated DBH above to be considered a protected tree. All trees designated as a heritage tree or located within a riparian corridor, public right-of-way, or mitigation plantings are considered protected trees.

The City prohibits the removal of or damage to protected trees without a tree removal permit. Tree removal permit applications require an arborist report, identifying all protected trees on-site and which are proposed for removal. A landscape plan must depict the location of all in-kind replacement tree plantings and/or proof of in lieu fee payment. Some tree removals may be exempt from the City's Tree Ordinance in emergency situations. If the City determines that a protected tree poses an imminent threat to the public safety or general welfare, or to private property or persons, or is deemed a fire hazard, it is exempt from the Tree Ordinance.

If tree(s) are proposed for removal, applicants must adhere to the City's mitigation and tree replacement requirements, including, but not limited to, the replacement ratio for any removed trees, whether replacement should be on-site or through the payment of an in lieu fee, and the types of trees which may be planted as replacement trees, shall be determined by the planning commission or City council. Tree replacement ratios are required as the following in relation to the trees permitted to be removed:

- All protected trees permitted to be removed which have been determined by a qualified Arborist to be in excellent or good health and/or with moderate to good structure shall be replaced on a one-to-one trunk diameter basis.
- All protected trees permitted to be removed which have been determined by a qualified Arborist to have moderate or marginal health and/or with marginal structure shall be replaced on a two-to-one trunk diameter basis.
- All protected trees permitted to be removed and determined by a qualified Arborist to have poor health or poor structure shall not be required to be replaced.

The Tree Ordinance states that the design of every development project shall preserve trees to the greatest extent possible. The design of proposed development shall address preservation of the most desirable and significant of the healthy trees and developers are encouraged to utilize creative land planning techniques to achieve this goal. All applicants for a development project shall include a tree preservation plan, including the following items: (1) a Tree inventory with tree locations, size (trunk DBH), health, and species; (2) Identification of all protected trees; (3) Proposed locations of all new trees to be planted; (4) Existing vegetation and proposed landscape plans; (5) Location of trees to be removed; and (6) Preservation measures.

All developments must adhere to the City's guidelines to protect trees during construction activities, including, but limited to: (1) Protective barriers must be placed around all newly planted and mature trees on-site; (2) All personnel must remain outside the established Environmental Sensitive Area; (3)

No grading may occur within the tree ESAs; (4) No signage or other attachments can be fixed to trees; (5) Any required work within the tree ESAs may only be completed using hand tools; (6) Harmful liquids must remain away from the tree; and (7) No equipment, solvents, paint, asphalt, or debris of any kind shall be placed, stored, or allowed within the ESAs.

The proposed project would adhere to General Plan policies (Policies LU 3-4, CDO 6-1, CDO 6-2, CDO 6-3, CDO 6-4, CDO 6-5, CDO 7-1) through project design features, obtaining tree removal permits, BMPs, and avoidance measures to preserve existing trees and natural vegetation communities within the project site to the maximum possible. Additionally, the proposed project would remain consistent with the City's Tree Ordinance through project design features, obtaining the required permits, if necessary, and tree avoidance to preserve protected trees and heritage trees on-site. All trees proposed for removal are downed and considered a hazard on-site, therefore, would be exempt from the City's Tree Ordinance. All other trees on-site would be avoided and preserved as a part of the proposed design. The proposed project would not conflict with any local policies or ordinances protecting biological resources, impacts would be less than significant.

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?

No impact. The project site, does not fall under an adopted Habitat Conservation Plan (HCP)/Natural Community Conservation Plan (NCCP), or other approved local, regional, or State HCP. However, the project site will be subject to the Sonoma County HCP, currently under review, once adopted by the County. Therefore, the proposed project would not conflict with the provisions of the adopted regional conservation plan and no impacts would occur.

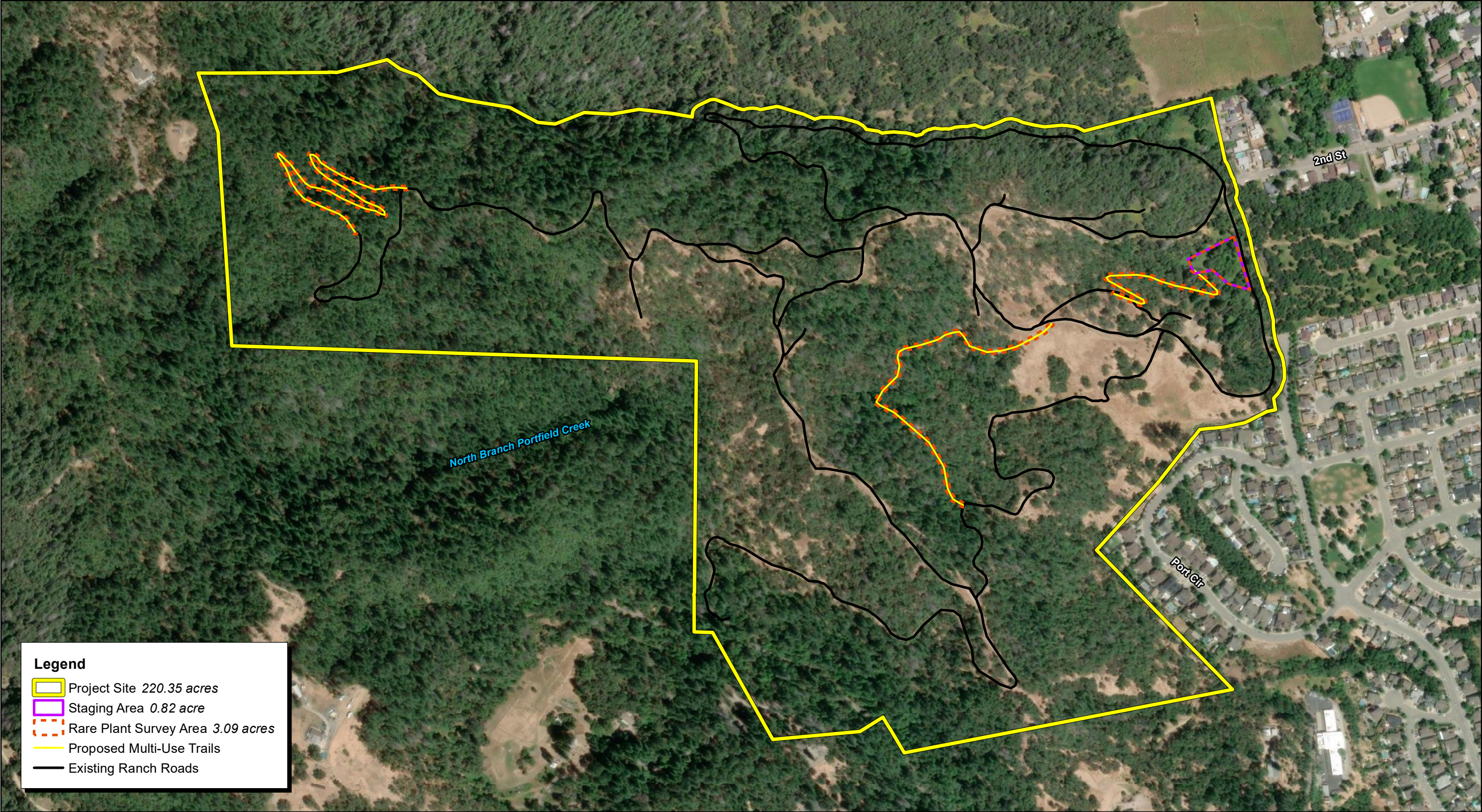
Mitigation Measures

MM BIO-1a Protocol-level Rare Plant Surveys

A qualified Plant Biologist shall conduct three surveys within the Rare Plant Survey Area (See Exhibit 5) for special-status plant species according to the California Department of Fish and Wildlife (CDFW) Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities (2018, rev. 2021). These surveys shall be timed to capture the local blooming period of special-status plant species with a moderate to high potential to occur on-site, including Howell's manzanita, serpentine reed grass, Rincon Ridge ceanothus, congested-headed hayfield tarplant, bristly leptosiphon, Cobb Mountain lupine, and bearded jewel flower.

If any special-status plant species are found within the project site impact area, the occurrences shall be mapped, recorded, and submitted to CNDDDB. The Rare Plant Survey Report shall detail any special-status plant species or sensitive natural communities found on-site, as well as propose potential avoidance or mitigation measures based upon specific occurrences.

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Source: ESRI Aerial Imagery. County of Sonoma. CalTopo Data.

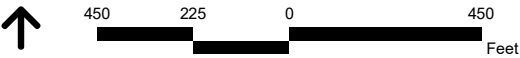


Exhibit 5
Rare Plant Survey Map

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MM BIO-1b Foothill Yellow-legged Frog Pre-construction Survey and Avoidance

To the extent practicable, the applicant shall avoid construction during the wet season when foothill yellow-legged frog (FYLF) are most active. Except for limited vegetation clearing (necessary to minimize effects to nesting birds) work shall be limited to the dry season (from June 1 to October 31).

No more than 15 days prior to the first ground-disturbing activities, the applicant shall retain a qualified Wildlife Biologist to conduct a focused survey for FYLF of the ground disturbance area and immediate vicinity to determine presence or absence of this species. If the species is observed within the Study Area during the focused survey, the California Department of Fish and Wildlife (CDFW) shall be contacted and all construction activities within the disturbance area shall be delayed until an appropriate course of action is established and approved by CDFW.

Before any activities begin on the project, the applicant shall retain an approved Biologist to conduct Worker Environmental Awareness Program (WEAP) training for all construction personnel. At a minimum, the training shall include a description of the FYLF and its habitat, the specific measures that are being implemented to conserve the FYLF for the current project, and the boundaries within which the project may be accomplished. Brochures, books, and briefings may be used in the WEAP, provided that a qualified person is on hand to answer any questions.

The applicant shall limit the number of access routes, size of staging areas, and the total area of the construction activity to the minimum necessary to achieve the project goal. Environmentally Sensitive Areas shall be established to confine access routes and construction areas to the minimum area necessary to complete construction, and minimize the impact to FYLF habitat; this goal includes locating access routes and construction areas outside of riparian areas to the maximum extent practicable.

MM BIO-1c Protocol-level Crotch's Bumble Bee Surveys

A qualified Biologist shall conduct focused Crotch's bumble bee surveys, in accordance with survey guidelines described in the 2023 California Department of Fish and Wildlife (CDFW) Survey Considerations for California Endangered Species Act (CESA) Candidate Bumble Bee Species, within 1 year of initiation of ground-disturbing activities (i.e., grubbing, grading, disking, etc.). If the focused surveys are positive for Crotch's bumblebee, the project applicant shall obtain take authorization under CESA in the form of an Incidental Take Permit (ITP) issued by CDFW prior to conducting any ground-disturbing activities. Mitigation measures outlined in the ITP shall be used to offset impacts to this species.

Areas scheduled for grading and/or vegetation shall be revegetated utilizing an assemblage of native upland vegetation suitable for the area. Invasive, exotic plants

shall be controlled to the maximum extent practicable during construction. This measure shall be implemented in all areas disturbed by activities associated with the project unless the CDFW, the United States Fish and Wildlife Service (USFWS), and the project applicant determine that it is not feasible or practical.

MM BIO-1d Northwestern Pond Turtle Pre-construction Survey and Avoidance

A qualified Biologist with relevant survey experience shall conduct a survey within the project site impact area for northwestern pond turtle no more than 5 days prior to beginning ground disturbance and/or construction. If any life stage of the northwestern pond turtle is detected, construction activities shall not be allowed to commence until consultation with California Department of Fish and Wildlife (CDFW) and the United States Fish and Wildlife Service (USFWS) has occurred.

Before any activities begin on the project, a qualified Biologist shall conduct Worker Environmental Awareness Program (WEAP) training for all construction personnel. At a minimum, the training shall include a description of the northwestern pond turtle and its habitat, the specific measures that are being implemented to conserve the northwestern pond turtle for the current project, and the boundaries within which the project may be accomplished. Barrier fencing shall be installed around the worksite to prevent northwestern pond turtle from entering the work area. A qualified Biologist shall be present during the installation of exclusion fencing. Barrier fencing shall be removed within 72 hours of completion of work.

Areas scheduled for grading and/or vegetation shall be revegetated utilizing an assemblage of native upland vegetation suitable for the area. Invasive, exotic plants shall be controlled to the maximum extent practicable during construction. This measure shall be implemented in all areas disturbed by activities associated with the project unless the CDFW, the USFWS, and the project applicant determine that it is not feasible or practical.

MM BIO-1e Protection of Active Bird Nests (includes pre-construction survey and implementation of avoidance buffer, if found)

If the proposed project initiates construction/maintenance activities during the avian nesting season, the project applicant shall retain a qualified Biologist to perform pre-construction surveys for nesting birds, including purple martin. The survey shall be conducted 5 days prior to the initiation of project activities to determine whether active nests are present. If an active nest is located, the qualified Biologist shall determine an appropriately sized avoidance buffer based on the species and anticipated disturbance level. A qualified Biologist shall delineate the avoidance buffer using Environmentally Sensitive Area (ESA) fencing, pin flags, and or yellow caution tape. No construction/maintenance activities or other foot traffic is allowed to occur within the avoidance buffer(s). The ESA buffer zone shall be maintained around the

active nest site(s) until the qualified Biologist determines that the young have fledged and are foraging independently. The qualified Biologist shall monitor the active nest during maintenance and/or construction activities and stop or divert project activities in the vicinity, as needed, to prevent any potential impacts that may result from the construction of the proposed project until the young have fledged.

MM BIO-2a Avoidance and Minimization of Impacts to Aquatic Features and Riparian Habitat

No substances toxic to fish and wildlife shall be discharged or allowed to leach into the existing aquatic features on-site. Reasonable precautions to protect aquatic habitats of the potentially jurisdictional features from pollution with harmful materials (e.g., fuels, oils, lubricants, and solvents) shall be implemented. Specifically, all potentially hazardous materials shall be controlled, cleaned up, and properly disposed of in accordance with the proposed project's water quality control permits and plans. Materials deleterious or toxic to fish and wildlife, including, but not limited to, asphalt, tires, concrete, construction materials, treated wood, and creosote-containing materials, shall not be stockpiled within 100 feet of the existing drainage features. Refueling and maintenance areas for equipment shall be limited to areas 100 feet from the existing drainage features on-site.

At no time shall silt-laden runoff be allowed to enter the drainage features. Erosion control measures shall be utilized throughout all phases of construction where sediment runoff from the proposed project may enter the aquatic features. Best Management Plans (BMPs) to avoid erosion and uncontrolled stormwater runoff shall be implemented. BMPs typically include silt fencing, coir rolls, and/or straw bale dikes.

MM BIO-2b Obtain Approval of and File CDFW Notification of Streambed Alteration Agreement Prior to Work

The project applicant, after coordination with the California Department of Fish and Wildlife (CDFW), shall obtain and file a notification of a Streambed Alteration Agreement, if and to the extent required by applicable laws and regulations, prior to conducting construction and/or maintenance activities within any aquatic resources or associated riparian habitat that may qualify as streams or sensitive natural communities under CDFW jurisdiction (i.e., those having bed and bank and at least periodical flow). If required, the project applicant shall implement all mitigation measures imposed by the CDFW related to the subject Streambed Alteration Agreement, which may include but not be limited to the implementation of erosion and bank stabilization measures, seasonal work restrictions, and/or restoration and revegetation of the riparian corridor, as determined by the CDFW.

MM BIO-2c Obtain Appropriate Permits Prior to Construction (CWA Sections 404/401 or Waste Discharge Requirement)

Prior to the fill of any potentially jurisdictional waters as part of the proposed project, the project applicant shall consult with the United States Army Corps of Engineers (USACE) to determine the extent, if at all, that waters of the United States may be impacted by the proposed project.

The applicant shall obtain a Section 404 Clean Water Act (CWA) permit for impacts to waters of the United States and Section 401 Water Quality Certification from the Regional Water Quality Control Board (RWQCB). These permits and certifications shall be obtained prior to issuance of grading permits for the implementation of the proposed project. If the existing drainage features on-site are found to be exempt from being regulated by the USACE as a water of the United States, the applicant shall consult with the RWQCB and obtain a Waste Discharge Requirement (WDR) if deemed necessary. The applicant shall design the proposed project to result in no net loss of functions and values of waters of the United States by incorporating impact avoidance, impact minimization, and/or compensatory mitigation for the impact, as determined in the CWA 404/401 or WDR.

Compensatory mitigation may consist of (1) obtaining credits from a mitigation bank; (2) making a payment to an in lieu fee program that shall conduct wetland, stream, or other aquatic resource restoration, creation, enhancement, or preservation activities; and/or (3) providing compensatory mitigation through an aquatic resource restoration, establishment, enhancement, and/or preservation activity. This final type of compensatory mitigation may be provided at or adjacent to the impact site (i.e., on-site mitigation) or at another location, usually within the same watershed as the permitted impact (i.e., off-site mitigation). The project/permit applicant retains responsibility for the implementation and success of the mitigation project.

Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
2.5 Cultural Resources and Tribal Cultural Resources				
<i>Would the project:</i>				
a) Cause a substantial adverse change in the significance of a historical resource as 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?	☐	☒	☐	☐
<i>Would the project 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:</i>				
d) 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	☐	☒	☐	☐
e) 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.	☐	☐	☐	☐

Environmental Evaluation

Setting

This section describes the existing cultural setting and potential effects from the project implementation on the project site and its surrounding area. The following discussion is based on a records search at the Northwest Information Center (NWIC), the Native American Heritage

Commission (NAHC), and a cultural resources pedestrian survey conducted by FCS. The non-confidential NWIC records search, pedestrian survey photographs, and NAHC correspondence is included in Appendix C.

Northwest Information Center

On March 10, 2025, a records search was conducted at the NWIC, located at Sonoma State University in Rohnert Park, California, for the project site and a 0.5-mile radius beyond the project boundaries. The current inventories of the National Register of Historic Places (NRHP), the California Register of Historical Resources (CRHR), the California Historical Landmarks (CHL) list, the California Points of Historical Interest (CPHI) list, and the California Built Environment Resource Directory (BERD) for Sonoma County were also reviewed to determine the existence of previously documented local historic resources. The results of the records search indicate that no cultural resources have been recorded within the project site; however, 30 cultural resources (four pre-contact and 26 historic) have been recorded within the 0.5-mile search radius. In addition, 32 area-specific survey reports on file with the NWIC, three of which partially address the project site, indicating that the project site has been previously partially surveyed for cultural resources.

Native American Heritage Commission

On February 10, 2025, FCS sent a request to the NAHC in an effort to determine whether any sacred sites are listed on its Sacred Lands File (SLF) for the project site. A response was received on February 12, 2025, indicating that the SLF search was positive for Native American cultural resources in the immediate project site. The NAHC included a list of 33 Tribal representatives available for consultation. To ensure that all Native American knowledge and concerns over potential Tribal Cultural Resources (TCRs) that may be affected by the proposed project are addressed, a letter containing project information and requesting any additional information was sent to each Tribal representative on February 12, 2025. A reply from the Big Valley Band of Pomo Indians of the Big Valley Rancheria was received on February 27, 2025, indicating that the project site does not fall within the Tribal boundaries and defer to local Tribes. On March 10, 2025, a reply from the Mishewal-Wappo Tribe of Alexander Valley deferring to the local Tribes. No additional responses have been received to date.

Pedestrian Survey

On April 23, 2025, FCS Senior Archaeologist Dr. Dana DePietro, and FCS Staff surveyed the proposed trail alignments and picnic bench areas order to identify any unrecorded cultural resources within the project boundary. The survey began in the east of the park boundary and moved clockwise, closely examining the full extent of each of the four proposed trail alignments located in the east, south-central, north-central, and western portions of the park. Eleven proposed picnic table locations were also surveyed in their entirety.

Overall visibility of native soils was poor, ranging from 10 to 20 percent, due to vegetation and ground cover. Bioturbation and intermittent inspection using a hand trowel allowed for limited observation, however. Soil composition along the proposed eastern trail alignment consisted of reddish-brown clay soils (Munsel 10 YR 4/6) interspersed with medium (3-5 cm) stones composed primarily of quartz and

schist. Soil composition along the proposed south-central trail alignment consisted of light brown silty soils (Munsel 10 YR 5/3) interspersed with small (1-3 cm) stones composed primarily of schist and chalk. Soil composition along the proposed western trail alignment consisted of dark brown soils (Munsel 10 YR 4/2) heavily interspersed with decaying foliage and organic material, and soil composition along the proposed north-central trail alignment consisted of medium red-brown iron rich soils (Munsel 7.5 YR 4/3) interspersed with small (1-3 cm) stones composed primarily of quartz, schist and some unworked chert.

Survey conditions were documented using digital photographs and field notes. During the survey, Dr. DePietro examined all areas of the exposed ground surface for prehistoric artifacts (e.g., fire-affected rock, milling tools, flaked stone tools, toolmaking debris, ceramics), soil discoloration and depressions that might indicate the presence of a cultural midden, faunal and human osteological remains, and features indicative of the former presence of structures or buildings (e.g., postholes, standing exterior walls, foundations) or historic debris (e.g., glass, metal, ceramics). Particular attention was paid to areas immediately adjacent to creeks and drainages as these natural resources may have been utilized by Native American Tribes in antiquity.

Overall, no indications of potentially eligible historic structures or pre-contact archaeological resources were encountered over the course of the pedestrian survey.

Buried Site Potential

In addition to the pedestrian survey, the potential for yet identified cultural resources in the project vicinity was reviewed against geologic and topographic geographic information system data for the general area and information from other nearby projects. The proposed project was evaluated against a set of criteria originally identified by a Geoarchaeological Overview of the nine Bay Area counties in Caltrans District 4 that was prepared for Caltrans.¹⁷ This study mapped the “archaeological sensitivity,” or potential to support the presence of buried pre-contact archaeological deposits, throughout the Bay Area based on geology and environmental parameters including distance to water and landform slope. The methodology used in the study is applicable to other parts of California, and generally concluded that sites consisting of flat, Holocene-era deposits in close proximity to water sources had a moderate to high probability of containing subsurface archaeological deposits when compared to earlier Pleistocene deposits situated on slopes or further away from drainages, lakes, and rivers.

The project site is situated on the sloping terrain. According to the geological map of Blake, et.al. (2002), the surface of the project site consists entirely of Franciscan Complex, which consist of Cretaceous Period sandstone (TKfa) and graywacke (KJfs) deposits. Applying the criteria set forth above, all Holocene-era deposits have the potential to contain archaeological deposits, which increases with the ease of the slope and proximity to water sources. Although the project site is situated on sloping Cretaceous Period deposits, the proximity to Cherry Creek, located 2.75 miles

¹⁷ Meyer, Jack, and Jefferey S. Rosenthal. 2007. A Geoarchaeological Overview for the Nine Bay Area Counties of Caltrans District 4. Far Western Anthropological Research Group, Inc., Davis, California. Submitted to the California Department of Transportation, District 4, Oakland.

east of Cherry Creek, and the positive NAHC SLF search, would suggest a low potential for unanticipated buried cultural resources to be impacted by project construction.

Cultural Resources

Would the project:

a) Cause a substantial adverse change in the significance of a historical resource as pursuant to Section 15064.5?

No impact. Historical resources in this context refer to the built environment, mainly buildings and structures over 45 years in age that may be eligible for inclusion on the CRHR or NRHP. Records search results conducted at the NWIC did not identify any historical resources within the proposed project boundaries; however, 24 historical resources have been recorded within the 0.5-mile search radius. Additionally, the pedestrian survey failed to identify any historical resources. Thus, the proposed project would not cause a substantial adverse change in the significance of any such known resources. No mitigation measures are required and impacts to historical resources would be less than significant.

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?

Less than significant with mitigation incorporated. The results from the NWIC indicate that 6 archaeological resources are recorded within 0.5 mile of the project site, none of which are located within the proposed project boundaries. The results of the pedestrian survey failed to locate or identify any archaeological resources due to the lack of soil visibility across the project site. Buried Site Potential indicates that the entirety of the proposed project rests entirely on Cretaceous period Franciscan Complex, which suggests a low potential for archaeological resources; however, the results of the NAHC SLF search was positive for TCRs, which increases the probability of encountering archaeological resources.

As such, it is possible that earthmoving activities associated with project construction could encounter previously undiscovered archaeological resources. Archaeological resources can include but are not limited to stone, bone, wood, or shell artifacts or features, including hearths and structural elements. Damage or destruction of these resources would have a potentially significant impact. Implementation MM CUL-1, MM CUL-2, and MM CUL-3 would ensure that potential impacts to archaeological resources would be reduced to a level of less than significant.

c) Disturb any human remains, including those interred outside of formal cemeteries?

Less than significant impact with mitigation incorporated. While no formal cemeteries or areas containing human remains are known to be in the project site's vicinity, the possibility always exists that construction-related ground disturbance may uncover previously undiscovered human remains. In the unlikely event such a discovery is made, CEQA Guidelines Section 15064.5, Health and Safety Code Section 7050.5, and Public Resources Code Section 5097.94 and Section 5097.98 must be

followed. Additionally, implementation of MM CUL-1 and MM CUL-3, which details inadvertent discovery procedures, would reduce potential impacts of previously undiscovered human remains to a less than significant level.

Tribal Cultural Resources

Would the proposed project 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:

- d) 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**

Less than significant with mitigation incorporated. A review of the CRHR, local registers of historic resources, a records search conducted at the NWIC, and a pedestrian survey failed to identify any listed TCRs that may be adversely affected by the proposed project. The NAHC SLF results were positive for TCRs in the project site. However, subsequent outreach to Tribal representatives for additional information and responses from the Big Valley Band of Pomo Indians of the Big Valley Rancheria indicated that the project site does not fall within the Tribal boundaries and deferred to local Tribes, and the Mishewal-Wappo Tribe of Alexander Valley deferred to the local Tribes. As such, no eligible or potentially eligible TCRs would adversely be affected by the proposed project. Should any undiscovered TCRs be encountered during project construction, implementation of MM CUL-1, MM CUL-2 and MM CUL-3 would ensure that potential impacts to TCRs would be reduced to a level of less than significant.

- e) 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.**

TBD. Tribal consultation efforts conducted by the City of Cloverdale pursuant to Assembly Bill (AB) 52 to identify additional significant TCRs meeting the criteria set forth in subdivision(c) pf Public Resources Code Section 5024.1 is yet to be determined.

Mitigation Measures

- MM CUL-1** Prior to the initiation of construction activities, all construction personnel conducting ground disturbance at the site shall be provided a Worker Environmental Awareness Program (WEAP) cultural resources “tailgate” training. The training shall include visual aids, a discussion of applicable laws and statutes relating to archaeological resources, types of resources that may be found within the project site, and procedures to be followed in the event such resources are encountered. The training

shall be conducted by an Archaeologist who meets the Secretary of the Interior's Professional Qualification Standards for archaeology.

Furthermore, inadvertent discovery protocols and procedures shall be implemented. Should exposed soils indicate cultural materials may be present, this may be followed by full-time or weekly "spot-checks" archaeological monitoring, as determined by the Lead Archaeologist; however, full-time monitoring is not recommended at this time.

MM CUL-2 In the event that buried archaeological resources are discovered during construction, operations shall stop within a 100-foot radius of the find and an Archaeologist who meets the Secretary of Interior's Professional Qualification Standards for archaeology shall be consulted to determine whether the resource requires further study. The qualified Archaeologist shall make recommendations to the lead agency on the measures that shall be implemented to protect the discovered resources, including but not limited to excavation of the finds and evaluation of the finds in accordance with Section 15064.5 of the CEQA Guidelines. Potentially significant cultural resources consist of, but are not limited to, stone, bone, fossils, wood, or shell artifacts or features, including hearths, structural remains, or historic dumpsites. Any previously undiscovered resources found during construction within the project area shall be recorded on appropriate California Department of Parks and Recreation (DPR) forms and evaluated for significance in terms of CEQA criteria. If the resources are determined to be unique historic resources as defined under Section 15064.5 of the CEQA Guidelines, mitigation measures shall be identified by the monitor and recommended to the lead agency. Appropriate mitigation measures for significant resources could include avoidance or capping, incorporation of the site in green space, parks, or open space, or data recovery excavations of the finds. The lead agency, along with other relevant or Tribal officials, shall be contacted upon the discovery of cultural resources to begin coordination on the disposition of the find(s). Treatment of any significant cultural resources shall be undertaken with the approval of the lead agency. No further grading shall occur in the area of the discovery until the lead agency approves the measures to protect these resources. Upon coordination with the lead agency, any archaeological artifacts recovered shall be donated to an appropriate Tribal custodian or a qualified scientific institution where they would be afforded applicable cultural resources laws and guidelines.

MM CUL-3 In the event of the accidental discovery or recognition of any human remains, CEQA Guidelines Section 15064.5, Health and Safety Code Section 7050.5, and Public Resources Code Sections 5097.94 and Section 5097.98 shall be followed. If during the course of project construction, there is accidental discovery or recognition of any human remains, the following steps shall be taken:

1. There shall be no further excavation or disturbance of the site where human remains are discovered and/or any nearby area reasonably suspected to overlie adjacent human remains until the County Coroner is contacted to determine

whether the remains are Native American and if an investigation of the cause of death is required. If the Coroner determines the remains to be Native American, the Coroner shall contact the Native American Heritage Commission (NAHC) within 24 hours, and the NAHC shall identify the person or persons it believes to be the Most Likely Descendant (MLD) of the deceased Native American. The MLD may make recommendations to the landowner or the person responsible for the excavation work within 48 hours, for means of treating or disposing of, with appropriate dignity, the human remains, and any associated grave goods as provided in Public Resources Code Section 5097.98.

2. Where the following conditions occur, the landowner or his or her authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity either in accordance with the recommendations of the MLD or on the project site in a location not subject to further subsurface disturbance:
 - The NAHC is unable to identify an MLD or the MLD failed to make a recommendation within 48 hours after being notified by the commission.
 - The descendant identified fails to make a recommendation.
 - The landowner or his authorized representative rejects the recommendation of the descendant, and mediation by the NAHC fails to provide measures acceptable to the landowner.

Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
2.6 Energy <i>Would the project:</i>				
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?	☐	☐	☒	☐

Environmental Evaluation

Setting

This section describes the existing energy setting in the proposed project area as well as the relevant regulatory framework. Energy consumption focuses on traditional fossil fuels as well as replacement with renewable sources. This section focuses primarily on energy regulations and policies, with references to greenhouse gas (GHG) emissions and air quality regulations that also reduce energy consumption.

Energy Usage Sectors

Energy use in an area is distributed across several sectors: industrial, residential, and commercial energy and transportation.

- **Transportation Sector:** This is a significant consumer of energy, primarily in the form of gasoline and diesel for vehicles.
- **Industrial Sector:** The industrial sector includes consumption from construction, in addition to manufacturing, agriculture and mining.
- **Residential and Commercial Sectors:** The residential sector covers energy used in homes, businesses, offices, stores, and other commercial establishments for heating, cooling, lighting, and appliances.

The information presented below is related to the transportation and construction sectors which are relevant to the proposed project.

Transportation Sector

Estimated sales of transportation fuels in the State were 13,576 million gallons of gasoline and 2,982 million gallons of diesel in 2023.¹⁸ A variety of alternative fuels are used to reduce petroleum-based fuel demand. The use of these fuels is encouraged through various Statewide regulations and plans, such as the Low Carbon Fuel Standard (LCFS) and Senate Bill (SB) 32. Conventional gasoline and diesel may be replaced, depending on the capability of the vehicle, with transportation fuels including hydrogen, biodiesel, and electricity. In 2023, the State had 597 renewable diesel refueling stations and 57 private hydrogen stations and seven retail hydrogen stations.¹⁹

Electricity can be used to power electric vehicles (EVs) and Plug-in Hybrid-Electric Vehicles (PHEVs) directly from the power grid. Electricity used to power vehicles is generally provided by the electricity grid and stored in the vehicles' batteries. Fuel cells are being explored to use electricity generated onboard the vehicle to power electric motors. As of August 2024, California had a reported 153,034 public and shared private electric vehicle chargers.

Construction Sector

While estimates of construction fuel are not available as a subcategory of industrial usage, construction fuel is known to be a significant contributor to industrial fuel consumption. The construction industry is a major user of diesel fuel as it is utilized almost exclusively in off-road construction equipment. Diesel is the fuel of choice because it has 12 percent more energy per gallon than gasoline and has fuel properties that prolong engine life making it ideal for heavy-duty vehicle applications. Biodiesel was introduced into California in 2000 and Renewable Diesel in 2012. Biodiesel is predominantly made from soybean and recycled oils into a unique diesel fuel (it can be blended into transportation fuels but is not a substitute for diesel fuel). Renewable Diesel is predominantly made from animal waste oils and the finished fuel is nearly identical to petroleum-based diesel.²⁰ The chemical and structural properties of renewable diesel are similar to petroleum-derived (conventional) diesel and can be used as a direct substitute for conventional diesel (up to 100 percent or R100). Blends of renewable diesel and conventional diesel are labeled with an R followed by the percentage (by volume) of the renewable diesel content.²¹

California consumed nearly 40 million barrels of renewable diesel in 2022,²² compared to 1 million barrels in 2011 and 28 million barrels in 2021. This is largely a result of the LCFS which went into

¹⁸ California Energy Commission (CEC). 2024 Transportation Energy - California Retail Fuel Outlet Annual Reporting (CEC-A15) Result. Website: <https://www.energy.ca.gov/data-reports/energy-almanac/transportation-energy/california-retail-fuel-outlet-annual-reporting>. Accessed February 2, 2025.

¹⁹ United States Department of Energy (DOE). 2024. Alternative Fueling Station Counts by State. Website: <https://afdc.energy.gov/stations/states>. Accessed on February 2, 2025.

²⁰ California Energy Commission (CEC). 2024. Diesel Fuel Data, Facts, and Statistics. Website: <https://www.energy.ca.gov/data-reports/energy-almanac/transportation-energy/diesel-fuel-data-facts-and-statistics>. Accessed February 2, 2025.

²¹ California Air Resources Board (ARB). 2024. Fact Sheet: Renewable Diesel Fuel Requirements. Website: <https://ww2.arb.ca.gov/resources/fact-sheets/fact-sheet-renewable-diesel-fuel-requirements>. Accessed February 2, 2025.

²² United States Energy Information Administration (EIA). 2024. State Profiles and Energy Estimates. Website: https://www.eia.gov/state/seds/sep_fuel/html/pdf/fuel_use_rd.pdf. Accessed February 2, 2025.

effect in 2011.²³ This represents a significant shift away from traditional diesel with clean fuels replacing over 50 percent of the diesel used in the State in the first quarter of 2023.²⁴

Regulatory Framework

Federal energy regulations were first introduced in 1975 with the Energy Policy and Conservation Act of 1975 in response to the 1973–1974 Arab Oil Embargo to improve the average fuel economy of cars and light trucks in the US. Other subsequent federal rules included the Energy Policy Act of 2005 (which introduced numerous energy efficiency standards for appliances—building off the existing Energy Star Program) and The Energy Independence and Security Act of 2007 (which strengthened the vehicular fuel economy standards).

These regulations set important groundwork and foundation for subsequently promulgated California regulations.

State

Because federal regulations generally preempt State and local regulations, they set the foundation for subsequent State regulations to build upon. The following addresses State regulations related to transportation fuel efficiency, and regulations related to commercial and residential energy usage related to building envelope and appliance usage.

Transportation Sector

California adheres to the federal Corporate Average Fuel Economy (CAFE) standards, but also has several other State programs that influence emissions and fuel efficiency. These regulations include the following:

- Pavley Regulations and Fuel Efficiency Standards (AB 1493)
- Low Emission Standards (LEV Program)
- Zero-Emission Vehicle (ZEV Program)
- Advanced Clean Cars Program
- CA Phase 2 GHG Trailer Certification
- Truck and Bus Regulations
- Heavy-duty Diesel GHG Certification Program
- Heavy-duty Inspection and Maintenance (I&M) Regulation
- Clean Miles Standard

These GHG or air quality regulations aim to reduce emissions of criteria pollutants, air toxics, and GHGs, resulting in decreased energy consumption. However, they are not energy regulations or

²³ United States Energy Information Administration (EIA). 2023. Almost all U.S. renewable diesel is consumed in California; most is not made there. Website: <https://www.eia.gov/todayinenergy/detail.php?id=57180#>. July 20. Accessed March 10, 2025.

²⁴ California Air Resources Board (ARB). 2023. Press Release 23-24: Low Carbon Fuel Standard drives shift away from petroleum. Website: <https://ww2.arb.ca.gov/news/first-time-50-california-diesel-fuel-replaced-clean-fuels>. August 23. Accessed March 10, 2025.

policies per se. While these regulations increase energy efficiency and consumption from vehicles, they typically apply to vehicle/engine manufacturers or vehicle maintenance and operation rather than directly to land use developers. Developers can influence on-site operational factors that affect energy consumption by enforcing air quality regulations and measures that influence emissions from vehicles, such as limits on idling of commercial motor vehicles and construction equipment.

The California Code of Regulations Title 13, Section 2485, Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling, prohibits diesel-fueled commercial vehicles from idling for more than five minutes at any given location. Compliance with this measure results in energy savings through reduced fuel consumption from unnecessary idling.

The Sustainable Communities and Climate Protection Act of 2008 (SB 375) requires land use projects to meet target reductions of Vehicle Miles Traveled (VMT) to reduce GHG emissions. Because VMT is directly related to fuel consumption, this regulation also serves to reduce energy consumption related to passenger vehicle travel.

Construction Sector

Land use development projects consume fuel during construction operations. Because of energy and efficiency requirements, off-road diesel equipment dominates the industry. Provisions in California's In-use Off-road Diesel Fleets regulation under California Code of Regulations Title 13 not only provide protection from air pollution but also promote the use of newer, well-tuned, and maintained equipment, and provide regulatory limits on unnecessary idling. These measures minimize toxic diesel exhaust and result in energy efficiency and avoidance of wasteful energy use.

Regional

The Bay Area Air District implements various policies and regulations to enhance energy efficiency and promote clean energy usage in the region. The 2017 Clean Air Plan, titled "Spare the Air, Cool the Climate," outlines several strategies to achieve these goals:

Clean Air Plan Control Measures

The Clean Air Plan includes specific control measures aimed at reducing energy consumption and promoting clean energy:

- BL1** Green Building Standards: Encourages the adoption of green building standards that exceed the mandatory requirements, promoting energy-efficient building designs and technologies.
- BL2** Decarbonizing Buildings: Focuses on reducing greenhouse gas emissions from buildings by promoting electrification and the use of renewable energy sources.
- BL4** Energy Efficiency: Implements programs to improve energy efficiency in existing buildings through retrofits and upgrades.

CEQA Guidelines define a significant effect on the environment as “a substantial, or potentially substantial, adverse change in the environment.” To determine whether a project would have a significant impact on energy, the type, level, and impact of emissions generated by the proposed project must be evaluated.

Would the project:

a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

Less than significant. The proposed involves demolition of a few small structures and signage; closure of existing trails via the installation of informational signs and vegetative planting; the construction of 0.94 mile of new unpaved trails; and the construction of a small parking lot. The proposed project’s construction was assumed to begin in January 2026 and last approximately three months based on model defaults and assumptions and applicant-provided information. If the construction schedule moves to later years, construction energy usage would be anticipated to decrease because of improvements in technology and more stringent regulatory requirements as older, less efficient equipment is replaced by newer and cleaner equipment. The proposed project would require light demolition, site preparation, grading, and paving. The construction phase would require energy for the preparation of the site (e.g., site clearing and grading), and paving. Petroleum-based fuels, such as diesel fuel and gasoline, would be the primary sources of energy for these tasks.

Fuel use associated with construction vehicle trips generated by the proposed project was also estimated; trips include construction worker trips, haul truck trips for material transport, on-site trucks, and vendor trips for construction material deliveries. Fuel use from these vehicles traveling to the project site was based on (1) the projected number of trips the proposed project would generate during construction, (2) average trip distances by trip type, and (3) fuel efficiencies estimated in the California Air Resources Board (ARB) Emissions Factor (EMFAC) mobile source emission model. The specific parameters used to estimate fuel usage are included in Appendix A. In total, the proposed project is conservatively estimated to generate 17,678 VMT and 11,484 gallons of combined gasoline and diesel for vehicle travel during construction. The assumptions utilized in the modeling represent a worst-case, conservative scenario.

The overall construction schedule and process is designed to be efficient in order to avoid excess monetary costs. For example, equipment and fuel are not typically used wastefully due to the added expense associated with renting the equipment, maintaining it, and fueling it. Therefore, the opportunities for future efficiency gains during construction are limited. Compliance with regulations such as the In-use Off-road Airborne Toxic Control Measures (ATCMs) minimizes emissions by using a modern fleet, keeping equipment well-tuned and limiting idling to 5 minutes or less. Thus, it is anticipated that the construction phase of the proposed project would not result in wasteful, inefficient, and unnecessary consumption of energy. Construction-related energy impacts would be less than significant.

Once operational, the proposed project would attract people who would access the site by motor vehicles, and the proposed project would include a parking lot with seven parking spaces to accommodate the traffic. This would represent a minor source of vehicle trips and related energy use. In addition, the proposed project would permanently conserve over 200 acres of natural forestland. For these reasons, it is concluded that the proposed project would have a negligible effect on the State's energy resources. Operational-related energy impacts would be less than significant.

Therefore, there is no evidence that the proposed project would result in wasteful, inefficient, or unnecessary use of energy that would result in significant environmental effects nor is there evidence that the proposed project would result in wasteful, inefficient, or unnecessary use of energy that would result in significant environmental effects.

b) Conflict with or obstruct a State or local plan for renewable energy or energy efficiency?

Less than significant. Construction practices would comply with all local and State regulatory requirements related to equipment age, operation, and design. Adherence with Bay Area Air District Basic Construction Mitigation Measures (MM AIR-1) would ensure that idling time of trucks is limited to 5 minutes. Construction equipment would be maintained and tuned according to manufacturer specifications, which would promote fuel efficiency. Compliance with the ARB Regulation for In-use Off-road Diesel-fueled Fleets (Off-road Diesel Regulation) would address unnecessary idling for off-road construction equipment, preventing the unnecessary or wasteful use of energy.

As stated, once operational, the proposed project would attract people who would access the site by motor vehicles, and the proposed project would include a parking lot with eight parking spaces to accommodate the traffic. This would represent a minor source of vehicle trips and related energy use. In addition, the proposed project would permanently conserve over 200 acres of natural forestland. The proposed project would be associated with a negligible amount of energy to provide a long-term environmental and recreational benefit. The proposed project would be consistent with State and local plans aimed at natural land conservation and goals to provide protection for environmental resources. Therefore, the proposed project is not inconsistent with any plan for energy efficiency, and impacts would be less than significant.

Mitigation Measures

None required.

Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
2.7 Geology and Soils				
<i>Would the project:</i>				
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) 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.	☐	☐	☐	☒
ii) Strong seismic ground shaking?	☐	☐	☒	☐
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
iv) 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 wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	☒

Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☒	☐	☐

Environmental Evaluation

Setting

The analysis in this section is based in part on documents, databases, and geologic mapping at the State and local levels. A paleontological records search was prepared by Patricia A. Holroyd, Senior Museum Scientist from the University of California Museum of Paleontology (UCMP). The results of the records search are provided in Appendix (D) of this Draft IS/MND.

The project site is located in the northern section of the Coast Ranges geomorphic province consisting of northwest-trending mountain ranges and valleys sub parallel to the San Andreas Fault.²⁵ The region is dominated by irregular topography comprised of the Franciscan Complex east of the San Andreas Fault with a mélange of sedimentary, metamorphic, and igneous rocks that formed during the Jurassic Period to the Oligocene Epoch from the continuous accretion of terranes comprised of oceanic rocks delivered from the subducting Farallon Plate forming an accretionary wedge below the North American Plate and above the subducting slab. Rock units in the Franciscan Complex have been metamorphosed to some degree and include greywacke sandstone, radiolarian chert, limestone, greenstone, serpentine, high-grade blueschist, and basalt. Two rock units from the Franciscan Complex are located on the project site with the eastern portion consisting of the Central “terrane” Graywacke and mélange (KJfs) derived from tectonic or sedimentary mixing of several terranes composed of a matrix of argillite and lithic sandstone with graywacke sandstone, greenstone, radiolarian chert, limestone, and serpentine, and the Coastal Belt Sandstone (TKfss) on the western side of the project site having very low grade and moderately lithic to quartz feldspathic graywacke sandstone with laumontite facies overlaying minor greenstone, radiolarian chert, and pelagic limestone.²⁶

The westernmost portion of Sonoma County is a seismically active region within the San Andreas Fault Zone consisting of many right-lateral strike slip faults striking in a northwest direction including the Maacama Fault Zone approximately 5 miles east of the project site along with other lesser-known sub faults. The San Andreas Fault is located approximately 21 miles to the west of the project site

²⁵ Wagner D.L. 2002. California Geomorphic Provinces Note 36. December.

²⁶ Blake Jr, M.C., R.W. Graymer, and R.E. Stamski. 2022. Geologic Map and Map Database of Western Sonoma, Northernmost Marin, and Southernmost Mendocino Counties, California.

extending 600 miles from the Gulf of California in the south to Point Arena in the north. According to the California Department of Conservation Geological Survey's Regulatory Mapping System, the Maacama Fault Zone connects to the San Andreas Fault from the Rodger Creek-Healdsburg, Hayward, and Calaveras Faults to the south.²⁷

The General Plan, which is a long-term document intended to guide physical development and the use of land within its planning area outlines several goals, policies, and implementation programs to reduce the effects of seismic and subsurface hazards and to maintain the preservation of paleontological resources.²⁸

Goals, policies, and implementation programs related to Geology and Soils include the following:

Goal CDO 4 Investigate historic, archaeological, and paleontological resources and preserve or conserve resources that help residents and visitors understand the history of Cloverdale

Policy CDO 4-4 Preserve paleontological resources if identified by discovery or if the area is found to have resources by other investigations or databases.

Goal PS 1 Prevent unnecessary exposure of people and property to risks of damage or injury from earthquakes, landslides, and other geologic hazards.

Policy PS 1-1 Continue to utilize all available data on geologic hazards and related risks from the appropriate agencies.

Policy PS 1-2 Continue to utilize studies of geologic hazards prepared during the development review process.

Policy PS 1-6 Require dynamic analysis of structural response to earthquake forces prior to City approval of building permits for structures whose irregularity or other factors prevent reasonable load determination and distribution by static analysis.

Policy PS 1-8 Roads, public facilities and other Public Agency projects should incorporate measures to mitigate identified geologic hazards to acceptable levels.

Goal PS 5 Reduce damage to life and property from natural hazards to the greatest extent possible.

²⁷ California Department of Conservation. 2025. Regulatory Mapping System. Website: <https://maps.conservation.ca.gov/cgs/informationwarehouse/eqzapp/>. Accessed March 7, 2025.

²⁸ City of Cloverdale. 2009. City of Clover General Plan. May 13.

Policy PS 5-12 Require development adjacent to hillside areas to minimize geologic and fire hazards. Require all new development, including single-family residential, to provide built-in fire protection (i.e., automatic fire sprinklers).

Implementation PS 1-5

For projects proposed in hazardous geologic areas, require a geologic report that includes analysis of soils foundation, grading, erosion, and sediment control.

Require a geotechnical investigation prior to project approval for new development and redevelopment projects in areas with identified significant geologic hazards or where the City Engineer determines such hazards may exist, including liquefaction-related failures, slope stability and erosion hazard analysis in hillside areas, existing or potential soil instability, or expansive soils. The report shall include an assessment of geologic and seismic hazards, and all recommendations contained in the report shall be implemented.

Require new development projects to incorporate sound soil conservation practices and keep land alteration (grading) to a practical minimum by the following (a) minimize cuts and fills, (b) limit grading to the smallest practical area of land, (c) limit time land is exposed to accelerated erosion from grading, (d) apply best management practices for winterization, (e) replant graded areas to ensure permanent plant cover, and (f) design project-specific erosion control measures.

Would the project:

- a) **Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury or death involving:**
 - i) **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.**

No impact. As described previously, the project site is not located on or within a designated Alquist-Priolo Earthquake Fault Zone as defined by the California Department of Conservation. The nearest faults to the project site are the Healdsburg, Maacama, and Rodgers Creek Faults, none of which run through the project site. The closest Alquist-Priolo Earthquake Fault Zone is the Maacama Fault Zone, located approximately 5.0 miles east of the project site. This distance precludes the possibility exposure to fault rupture. Furthermore, the proposed project would not result in the construction of any buildings. Therefore, no impact would occur.

ii) Strong seismic ground shaking?

Less than significant impact. The project site could experience seismic ground shaking similar to other parts of the Bay Area. However, the proposed project would not result in the construction of any buildings. Therefore, impacts would be less than significant.

iii) Seismic-related ground failure, including liquefaction?

No impact. According to the California Natural Resources Agency Seismic Hazards Program for Liquefaction Zones map, the project site is not located in a liquefaction zone.²⁹ Furthermore, the proposed project would not result in the construction of any new buildings. Therefore, no impacts would occur.

iv) Landslides?

Less than significant impact. According to the General Plan, there are landslide risks in the hills along the west side of the City, which includes the project site. The proposed project would construct three new multiuse trails, which would comply with all regulations of the California Building Standards Code (CBC) and would be required to implement best practices for areas with landslide risks. The project site is already used for recreational purposes and the proposed project would not change this use. As such, the proposed project would not increase the risk of loss, injury, or death involving landslides. Therefore, impacts would be less than significant.

b) Result in substantial soil erosion or the loss of topsoil?

Less than significant impact. According to the General Plan, many soils in the hillsides have a high erosion potential. However, natural vegetative cover partially protects soils from accelerated erosion. Ground disturbance during construction of the new trails could expose and loosen soils, although the proposed project would be subject to compliance with the National Pollutant Discharge Effluent Standards (NPDES) General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit). The Construction General Permit requires development and implementation of a Storm Water Pollution Prevention Plan (SWPPP) and monitoring plan, which must include erosion control and sediment control Best Management Practices (BMPs) that would meet or exceed measures required by the Construction General Permit to control potential construction-related pollutants. Compliance with these standard requirements would reduce impacts to less than significant.

Operation of the proposed project would include new maintained trails and the installation of trees and scattered vegetation. As such, soil erosion would not increase during project operation. Impacts would be less than significant.

²⁹ California Natural Resources Agency. 2025. CGS Seismic Hazards Program: Liquefaction Zones. Website: <https://gis.data.cnra.ca.gov/datasets/cadoc::cgs-seismic-hazards-program-liquefaction-zones/explore?location=38.794078%2C-123.011366%2C13.85>. Accessed May 23, 2025

- 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?**

Less than significant impact. As described above, there are potentially unstable soils at the project site. The proposed project would construct three new multiuse trails, which would comply with all CBC regulations and would be required to implement BMPs regarding soil instability. The project site is already used for recreational purposes and the proposed project would not change this use, nor would it result in the construction of any buildings. As such, the proposed project would not increase the risks of soil instability. Impacts would be less than significant.

- 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?**

Less than significant impact. According to the General Plan, all soils in the planning area, including the project site are moderately to occasionally highly expansive. The proposed project would result in the construction of three new multiuse trails, which would comply with all CBC regulations and would be required to implement BMPs regarding expansive soils. The project site is already used for recreational purposes and the proposed project would not change this use, nor would it result in the construction of any buildings. As such, impacts would be less than significant.

- 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?**

No impact. The proposed project would not include the use of septic tanks. Portable restrooms be included in the parking area on the western end of the site. The portable restrooms would be transported off-site and disposed of at the appropriate wastewater treatment facility. The portable restrooms would be located in the parking area and would not be placed on unstable soils. As such, the impact would be less than significant.

- f) **Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?**

Less than significant impact with mitigation incorporated. Paleontological resources are nonrenewable resources consisting of the preserved remains of prehistoric organisms including vertebrates, invertebrates, plants, and microscopically small organisms. The Society of Vertebrate Paleontology (SVP) Standard Procedures considers significant paleontological resources to be identifiable large or small vertebrate fossils, uncommon invertebrate, plant, or trace fossils older than the middle Holocene, or those that provide data on taphonomic, taxonomic, phylogenetic, paleoecologic, stratigraphic, and/or biochronologic information. According to the SVP Standard Procedures, sedimentary formations, some volcanoclastic formations, and low-grade metamorphic rocks that have previously yielded significant paleontological resources within their geographic extent and that are lithologically suitable for the preservation of fossils are considered to have a high potential for containing significant paleontological resources.

As previously mentioned, the project site is located on the Franciscan Complex consisting of the Central “terrane” Graywacke and mélange (KJfs) on the eastern portion of the project site, and the Coastal Belt Sandstone (TKfss) on the west side of the project site. Rock units from the Franciscan Complex have provided a variety of paleontological resources such as radiolarians in the radiolarian chert and foraminifers embedded in limestone, invertebrates consisting of bivalves and cephalopods, and marine and nonmarine vertebrates. Rock units from both terranes that underly the project site have preserved paleontological resources as the Central “terrane” Graywacke and mélange (KJfs) has furnished megafossils and microfossils within the graywacke sandstone, argillite, radiolarian chert, and greenstone from the Late Cretaceous, while the Coastal Belt Sandstone (TKfss) has provided fossils from the pelagic limestone and graywacke sandstone from the Late Cretaceous to Late Eocene.³⁰

The UCMP Locality Search Online Database was utilized to identify any fossil localities in the project region or those that are associated with the rock units underlying the project site. A total of 492 invertebrate fossil localities are located within Sonoma County with 32 identified in rock units from the Jurassic to Cretaceous periods similar to the age of the Franciscan Complex terranes that underlie the project site. Furthermore, around 10 fossil localities may be related to the project region with three localities named after Dutcher Creek Road which begins approximately 2.2 miles southeast of the project site, and seven localities named after Dry Creek which transects through the Coastal Belt Sandstone (TKfss) and parts of the Central “terrane” Graywacke and mélange (KJfs) approximately six miles west of the project site. Although the UCMP Locality Search identified vertebrate, microfossil, and plant localities in Sonoma County, the age and relative location of these localities are not affiliated with the rock units on the project site or are located in the surrounding vicinity.

The UCMP conducted a records search for the project site and surrounding area and determined that no fossil localities have been identified on the project site. However, one vertebrate locality (UCMP locality V5213) approximately 0.85-mile southwest of the project site yielded two specimens in 1952. The specimens consisted of a left third molar and a right second molar which assisted with the naming of a new mastodon species from North America: *Mammuth pacificus* from the Pleistocene Epoch.³¹

Since the sedimentary and low-metamorphosed rock units on the project site are known to yield microorganisms and invertebrates, are considered as having high paleontological potential based on the definitions provided by the SVP Standard Procedures, and one vertebrate locality and several invertebrate localities have been uncovered in the project region, ground-disturbing activities within those rock units identified as having high paleontological potential could disturb significant paleontological resources. As mentioned above, the Cloverdale General Plan includes Policy CDO 4-4 which requires preservation for the discovery of identified paleontological resources or in areas found to have such resources. To ensure consistency with Policy CDO 4-4, the construction phase of

³⁰ Blake M.C., Jr., R.W. Graymer, and R.E. Stamski. 2022. Geologic Map and Map Database of Western Sonoma, Northernmost Marin, and Southernmost Mendocino Counties, California.

³¹ Dooley Jr, A.C. et al. 2019. *Mammuth pacificus* sp. nov., a newly recognized species of mastodon from the Pleistocene of western North America. March 27.

the proposed project would be required to implement MM GEO-1a through MM GEO-2c which would ensure the protection and recovery of any identified paleontological resources. As such, implementation of MM GEO-1a through MM GEO-2c would ensure that impacts related to potential damage to unique paleontological resources would be reduced to less than significant.

Mitigation Measures

- MM GEO-1a** On the first day of ground disturbance and prior to the start of any ground-disturbing activities, a qualified professional Paleontologist that meets SVP Standard Procedures shall be retained to prepare and conduct a project-wide Worker Environmental Awareness Program (WEAP) training. The WEAP training shall contain unanticipated discovery measures to be followed if paleontological resources are encountered while the qualified professional Paleontologist or certified Paleontological Resource Monitor is not present during ground-disturbing activities. The WEAP shall be conducted by a qualified environmental trainer under the supervision of a qualified professional Paleontologist. The training session shall focus on the recognition and understanding of significant paleontological resources pertinent to the regions geography and geology that may be encountered, a review of applicable federal, State, and local regulations that outline the importance and require the protection and preservation of significant paleontological resources, and procedures to be followed if any significant paleontological resources are encountered. In the event construction crews are phased in, additional training shall be conducted for new construction personnel.
- MM GEO-1b** All project-related ground disturbances that may impact high potential rock units at the surface or subsurface shall undergo full-time monitoring by the qualified professional Paleontologist or certified Paleontological Resources Monitor. The qualified professional Paleontologist shall have the authority to temporarily halt ground-disturbing activities in the event significant paleontological resources are discovered to examine the importance of the specimens and provide recommendations for appropriate removal, treatment, or any future monitoring or mitigation measures that need to be implemented. Construction workers should not attempt to remove paleontological resources. If no significant specimens are encountered during ground-disturbing activities, full-time monitoring can be reduced to spot-checking or suspended entirely, at the discretion of the qualified professional Paleontologist. The qualified professional Paleontologist may screen a test sample of 0.4 cubic yards/meters (600 lbs) from bulk matrix sampling followed by screen washing through appropriately sized mesh screens for rock units that may contain microfossils. If returns from the sample are significant, the qualified professional Paleontologist may extract a standard sample of 4.0 cubic yards/meters (6,000 lbs) or at a larger size deemed necessary. Samples may be excavated and processed off-site to avoid construction delays.

MM GEO-1c For paleontological resources that are uncovered during excavation activities, the qualified professional Paleontologist shall be required to document the discovery and assess the significance of the find using criteria from CEQA Guidelines Section 15064.5. The qualified professional Paleontologist shall identify, catalog uncovered specimens to the lowest taxonomic level possible, and shall prepare a list of specimens that shall be added to a collection before being transported and curated at a recognized repository facility (such as the UCMP) for future research. The qualified professional Paleontologist shall notify the appropriate agencies to determine procedures to be followed before ground-disturbing activities are allowed to resume. If the applicant determines avoidance is not feasible, the qualified professional Paleontologist shall prepare an excavation plan for mitigating the effect of construction activities on the discovery to the extent feasible.

Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
2.8 Greenhouse Gas Emissions				
<i>Would the project:</i>				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
b) Conflict with any applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐

Environmental Evaluation

This section describes existing climate conditions as well as the relevant regulatory framework. The “Environmental Setting” provides a description of GHG emissions and the current state of the climate. The “Regulatory Framework” provides a description of relevant federal, State, and local regulatory policies that serve to reduce GHG emissions and are applicable to the proposed project.

Setting

Earth’s temperature is rising,³² and although the global climate has varied over the long-range time scale, there is strong scientific consensus that the rapid heating in recent decades is both unusual and caused by emissions of GHGs from human activities such as the burning of fossil fuels including coal and oil.³³ Gases that trap heat in the atmosphere are referred to as GHGs. The effect is analogous to the way a greenhouse retains heat. Prominent GHGs contributing to the greenhouse effect are CO₂, methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFC), chlorofluorocarbons (CFC), and sulfur hexafluoride (SF₆). Atmospheric concentrations of CO₂, the most prominent GHG, have been increasing rapidly in recent decades, from approximately 280ppm before the start of the Industrial Revolution in the 1760s, to more than 400 ppm as of 2013.³⁴ According to the United

³² National Centers for Environmental Information (NCEI) National Oceanic and Atmospheric Administration (NOAA). 2024. Website: <https://www.ncei.noaa.gov/access/monitoring/climate-at-a-glance/global/time-series>. Accessed March 15, 2025.

³³ K. Myers, et al., 2021. Consensus revisited: quantifying scientific agreement on climate change and climate expertise among Earth scientists 10 years later. Environmental Research Letters Vol.16 No. 10, 104030. October. DOI:10.1088/1748-9326/ac2774. Accessed March 15, 2025.

³⁴ Global Monitoring Library, National Oceanic and Atmospheric Administration (NOAA). 2024. Website: <https://www.noaa.gov/news-release/greenhouse-gases-continued-to-increase-rapidly-in-2022>. Accessed March 15, 2025.

Nations Intergovernmental Panel on Climate Change (IPCC), it is extremely unlikely that global climate change of the past 50 years can be explained without the contribution from human activities.

As the concentration of these gases continues to increase in the atmosphere, Earth's temperature has increased by about 1.2 to 1.4°F (degrees Fahrenheit) since 1900.³⁵ Even if GHG emissions could be reduced to zero overnight, global temperatures will continue to rise in future years due to the buildup of GHGs that have already accumulated in the atmosphere and the oceans. As future emissions increase the atmospheric concentrations of CO₂ and other GHGs, the impacts of the warming greenhouse effect are projected to steadily worsen.

Global climate change is not confined to a particular project area and is generally accepted as the consequence of global industrialization over the last 200 years. A typical project, even a very large one, does not generate enough GHG emissions on its own to influence global climate change significantly; hence, the issue of global climate change is, by definition, a cumulative environmental impact. Therefore, this section discusses the proposed project's contribution to the cumulative GHG impact.

Greenhouse Gases

Unlike emissions of criteria and toxic air pollutants, which have local or regional impacts, emissions of GHGs that contribute to global warming or global climate change have a broader, global impact. Global warming is a process whereby GHGs accumulating in the atmosphere contribute to an increase in the temperature of the earth's atmosphere. The principal GHGs contributing to global warming are CO₂, CH₄, N₂O, and fluorinated gases (Table 5). These gases allow visible and ultraviolet light from the sun to pass through the atmosphere, but they prevent heat from escaping back out into space.

GHGs have long atmospheric lifetimes, ranging from several years to several thousand years. GHGs persist in the atmosphere for a long enough time to be dispersed around the globe, cumulatively combining to cause a global climate effect.

Table 5: Description of Greenhouse Gases of Concern

Greenhouse Gas	Description and Sources and (Sinks)	Atmospheric Lifetime	Percent of US Emissions
Carbon Dioxide (CO ₂)	• Fossil fuel combustion • Forest clearing • Cement production • (Plants)	50-200	79.7
Methane (CH ₄)	• Livestock • Landfills • Leaks from oil and natural gas production	12	11.1

³⁵ National Aeronautics and Space Administration (NASA). 2024. World of Change: Global Temperatures. Website: <https://earthobservatory.nasa.gov/world-of-change/global-temperatures>. Accessed March 15, 2025.

Greenhouse Gas	Description and Sources and (Sinks)	Atmospheric Lifetime	Percent of US Emissions
Nitrous Oxide (N ₂ O)	- Fertilizers - Manure - Fossil Fuel Combustion - Nylon production - Semiconductor Manufacturing - Wastewater treatment	114	6.1
Hydrofluorocarbons (HFCs)	- Automobile air conditioners - Refrigerants.	1-50,000	3.1
Perfluorocarbons (PFCs)	- Primary aluminum production - Semiconductor manufacturing	10,000-50,000	
Sulfur hexafluoride (SF ₆)	- Electrical power transmission equipment - Magnesium industry - Semiconductor manufacturing	3,200	
Nitrogen trifluoride (NF ₃)	Electronics manufacture for semiconductors and liquid crystal displays.	740	
Source: United States Environmental Protection Agency (EPA). 2024. Overview of Greenhouse Gases.			

GHG emissions contributing to global climate change are attributable in large part to human activities associated with the transportation, industrial/manufacturing, utility, residential, commercial, and agricultural sectors. Emissions of CO₂ are byproducts of fossil fuel combustion. Methane, a highly potent GHG is largely associated with agricultural practices and landfills. N₂O is also largely attributable to agricultural practices and soil management. CO₂ sinks, or reservoirs, include vegetation and the ocean, which absorb CO₂ through sequestration and dissolution, respectively.

Climate Impacts

Global Warming

Even if GHG emissions could be reduced to zero overnight, global temperatures will continue to rise in future years due to the buildup of GHGs that have already accumulated in the atmosphere and the oceans. As future emissions increase the atmospheric concentrations of CO₂ and other GHGs, the impacts of the warming greenhouse effect are projected to steadily worsen.

Statewide Climate Impacts

These impacts—including substantially higher temperatures, more extreme weather, increased wildfire events and sea level rise—are already being experienced in California today. As reported by the California Natural Resources Agency in 2009, despite annual variations in weather patterns, California has seen a trend of increased average temperatures, more extreme hot days, fewer cold nights, longer growing seasons, less winter snow, and earlier snowmelt and rainwater runoff. California's coastal oceans warmed by 1.26°F from 1900 to 2016, and a larger proportion of total

precipitation is falling as rain instead of snow.³⁶ Sea level rose by as much as 7 inches along the California coast over the last century, leading to increased erosion and adding pressure to the State's infrastructure, water supplies, and natural resources. Within the past decade, California has experienced some of the most extreme climate events in its recorded history—a severe 4-year drought, a dramatic reduction in Sierra Nevada winter snowpack, five of the State's 20 largest forest fires since 1932, and 2 years back-to-back of the hottest recorded average temperatures.

Regional Climate Impacts

The San Francisco Bay Area, where the project site is located, has experienced similar trends as California. Averaged across the region, mean annual temperature has increased nearly 1°F in the last 30 years over the previous 30-year period.³⁷

These observed trends in the San Francisco Bay Area are anticipated to continue in the future:

- **Substantial increases in temperatures and more extreme hot days.** By 2050, Bay Area temperatures are projected to rise by 2.7°F, with very hot days and severe heat waves more than doubling.³⁸
- **More precipitation extremes, more rain, and less snow.** The Sierra Nevada, crucial for Bay Area water supply, faces more extreme wet and dry years, challenging water storage and distribution.³⁹
- **Sea level rise.** Sea level at the Golden Gate Bridge has risen 8 inches in the last 100 years, affecting coastal flooding and erosion.
- **Increased frequency of wildfires.** Higher temperatures, winds, and drought are increasing wildfires, causing air pollution spikes and emitting CO₂ and black carbon.⁴⁰
- **Exacerbation of air quality problems and impacts on public health.** More extreme-heat days correlate with higher ozone levels, leading to respiratory issues, heat-related illnesses, and increased vector-borne diseases.⁴¹
- **Higher temperatures exacerbate pollution from cars and industry.** Higher temperatures boost air conditioner use in buildings and cars, leading to more fossil fuel combustion and higher levels of ozone precursors, particulates, TACs, and GHGs.⁴²

³⁶ California Governor's Office of Planning and Research (OPR). 2019. California's Fourth Climate Change Assessment. California's Changing Climate 2018. January 16.

³⁷ Bay Area Air Quality Management District (Bay Area Air District). Clean Air Plan 2017. Website: https://www.baaqmd.gov/~media/files/planning-and-research/plans/2017-clean-air-plan/attachment-a_-proposed-final-cap-vol-1-pdf. Accessed March 15, 2025.

³⁸ Ibid.

³⁹ Ibid.

⁴⁰ Ibid.

⁴¹ Ibid.

⁴² Ibid.

While the impacts are felt locally, climate change is a global issue because GHGs are global pollutants. Pollutants with localized air quality effects, including criteria air pollutants and TACs, have relatively short atmospheric lifetimes (approximately 1 day) and generally do not travel greatly beyond their point of emission (refer to Section 2.3, Air Quality, for further discussion). By contrast, GHGs have long atmospheric lifetimes, ranging from several years to several thousand years. GHGs persist in the atmosphere for a long enough time to be dispersed around the globe, cumulatively combining to cause a global climate effect.

Local Climate Impacts—Temperature

Cal-Adapt provides a way to explore peer-reviewed data that portrays how climate change might affect California at both the State and local level. Figure 1 provides the Cal-Adapt generated snapshot of climate change impacts, showcasing both historical data and projected annual average temperatures for the project area of Sonoma County.

Annual Average Maximum Temperature

Average of all the hottest daily temperatures in a year.

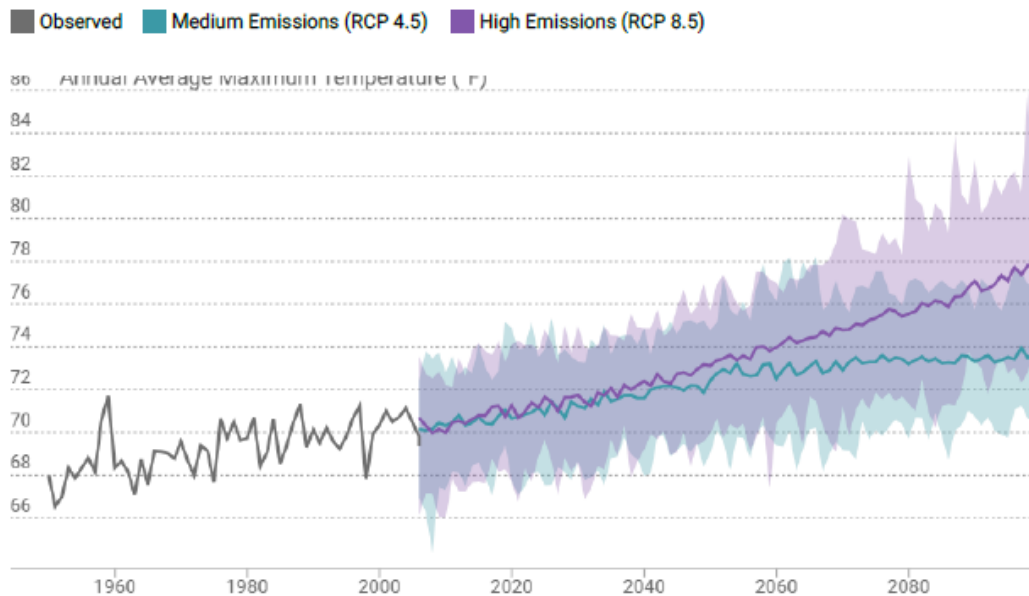


Figure 1: Observed and Projected Temperatures for Climate Change in the Project Area

Source: Cal-Adapt. 2024. Local Climate Snapshots.

Cal-Adapt uses globally recognized Representative Concentration Pathways (RCPs) based on different GHG emission levels to project climate impacts for California. A high emissions scenario (RCP 8.5) assumes GHG emissions will rise throughout the twenty-first century, leading to a radiative

forcing of 8.5 watts per square meter (W/m^2) by 2100.⁴³ A medium emissions scenario (RCP 4.5) assumes emissions will peak around 2040 and then decline, stabilizing radiative forcing at 4.5 W/m^2 by 2100 due to moderate mitigation efforts.⁴⁴

For climate planning up to 2050, the California Governor's Office of Land Use and Climate Innovation (LCI) (formerly the California Governor's Office of Planning and Research [OPR]) recommends using the high emissions scenario (RCP 8.5) because temperature projections under different scenarios do not differ much before midcentury and to account for potential high emissions.⁴⁵ For analyses beyond 2050, LCI suggests using the medium emissions scenario (RCP 4.5) to reflect moderate mitigation efforts. These guidelines ensure robust climate impact assessments, aiding long-term planning and compliance with CEQA.

The chart in Figure 1 highlights trends and potential future scenarios, offering valuable insights for climate planning and adaptation. The results indicate that, for Sonoma County, temperatures are predicted to increase by 4.1°F under the high emissions scenario in the midcentury period (2035–2064) and by 4.3°F under the medium emissions scenario by the end of the century (2070–2099). Predicted temperatures would increase by 7.2°F by the end of the century under the business-as-usual high emissions scenario, highlighting the importance of mitigation measures for GHG emissions.

GHG Emissions and Inventories

The GHGs regulated by AB 32, the California Global Warming Solutions Act of 2006, include CO_2 , CH_4 , N_2O , HFC, perfluorocarbon (PFC), and SF_6 . Each GHG has its own global warming potential (GWP), which measures how much heat the gas can trap in the atmosphere compared to CO_2 over a specified time period.

GWP measures how much heat a greenhouse gas traps in the atmosphere over a specific time period, usually 100 years, compared to CO_2 . This allows for comparing the impacts of different gases on global warming. According to the IPCC Fourth Assessment Report:

- **CH_4 :** GWP of 25
- **N_2O :** GWP of 298
- **HFCs:** GWPs range from hundreds to thousands
- **PFCs:** Very long atmospheric lifetimes, often thousands of years
- **SF_6 :** GWP of 23,500, the most potent GHG emission known

⁴³ van Vuuren, Detlef P., et al. 2011. The representative concentration pathways: an overview. *Climatic Change* (2011) 109:5–31. DOI 10.1007/s10584-011-0148-z. Accessed March 15, 2025.

⁴⁴ van Vuuren, Detlef P., et al. 2011. The representative concentration pathways: an overview. *Climatic Change* (2011) 109:5–31. DOI 10.1007/s10584-011-0148-z. Accessed March 15, 2025.

⁴⁵ California Energy Commission (CEC). 2024. Website: <https://cal-adapt.org/help/faqs/which-rcp-scenarios-should-i-use-in-my-analysis/>. Accessed March 15, 2025.

GWP factors are used to convert emissions into a common unit called carbon dioxide equivalent (CO₂e). CO₂e is calculated by multiplying the emissions of each GHG by its GWP and summing the results. Since CO₂ is the basis, its GWP is 1.

California Greenhouse Gas Emissions Inventory

California contributed GHG emissions of 371.1 million metric tons (MMT) of CO₂e into the atmosphere in 2022.⁴⁶ Anthropogenic CO₂ is largely the byproduct of fossil fuel combustion and attributable to transportation, industry/ manufacturing, electricity generation, natural gas consumption, and agriculture processes. As shown in Figure 2, the transportation sector is the largest emitter at approximately 38 percent of GHG emissions, followed by industrial at approximately 19 percent of GHG emissions.

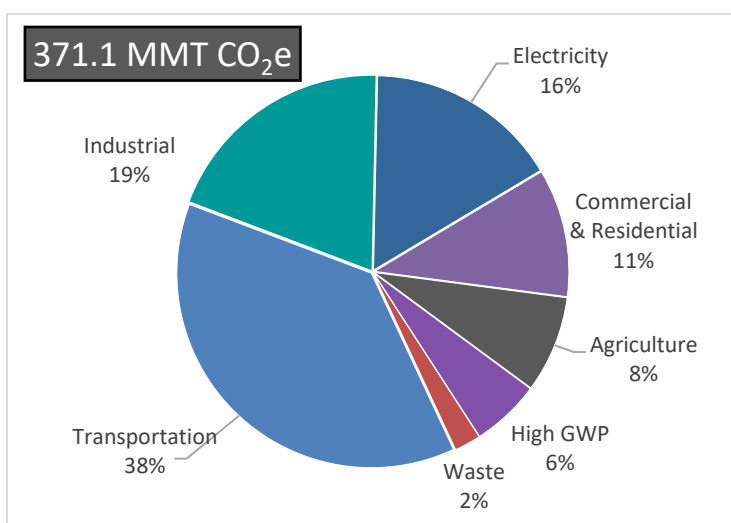


Figure 2: California GHG Emissions by Scoping Plan Sector (2022)

Source: California Air Resources Board (ARB). 2024. Current California GHG Emission Inventory Data 2000–2022.

Regional Greenhouse Gas Inventory

The most recent Bay Area Air District emissions inventory, shown in Figure 3, was published in 2017, based on 2011 projected emissions.

⁴⁶ California Air Resources Board (ARB). 2021. Current California GHG Emission Inventory Data. Website: <https://ww2.arb.ca.gov/ghg-inventory-data>. Accessed March 15, 2025.

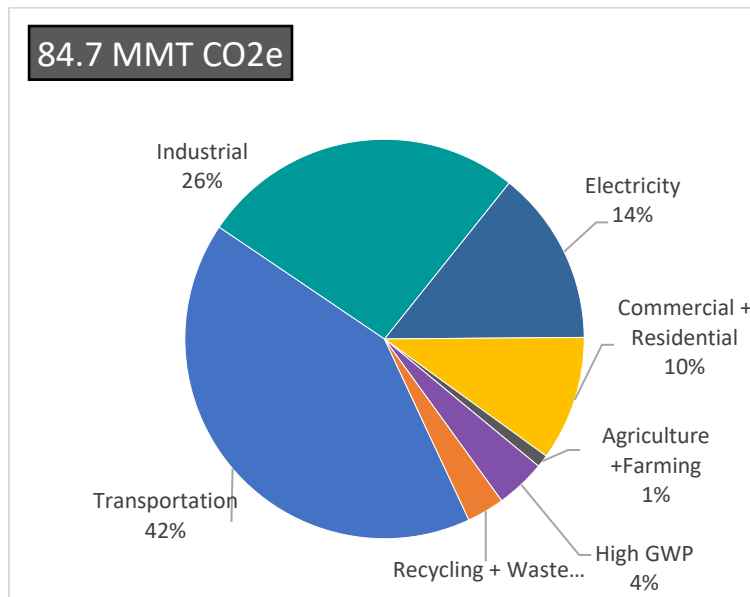


Figure 3: Bay Area Air District GHG Emissions by Scoping Plan Sector

Source: Bay Area Air Quality Management District (Bay Area Air District). 2017. Bay Area Emissions Inventory: Greenhouse Gas Emissions and Forecasts.

This production-based emissions inventory analyzes GHG emissions that are produced within the Bay Area. The report categorizes GHG emissions from anthropogenic activities into seven major emissions inventory sectors and presents emissions for a base year of 2015. This report describes preliminary work to forecast trends in GHG emissions in the San Francisco Bay Area up to the year 2050. The report describes the Bay Area Air District efforts to include adopted and expected policies to improve the accuracy of regional GHG forecasts.

The Bay Area Air District has a planned inventory update in 2025 as it is currently reassessing the regional CH₄ emissions inventory. Recent studies utilizing facility-scale measurements have found that bottom-up inventorying methods are underestimating CH₄ emissions. The Bay Area Air District is incorporating these measurement-based CH₄ assessments to improve the emissions inventory, wherever feasible.

Regulatory Framework

The following section describes federal, State, regional, and local regulations and policies that are relevant to GHG emissions.

The United States Environmental Protection Agency (EPA) is the governing body responsible for regulating air pollution in the United States and setting nationwide air quality and emissions standards. The EPA adopts and implements several regulations to reduce GHG emissions as well. These include GHG emission reduction standards for passenger cars and light-duty trucks, heavy-duty trucks (including buses), commercial aircraft and large business jets, heavy equipment (with

spark-ignition engines and compression ignition [CI] diesel engines), locomotives, marine vessels, recreational vehicles, and small equipment/tools.

California has implemented more stringent GHG emissions reduction regulations on the same sources listed above (except commercial aircraft and large business jets). Therefore, those regulations and their impact are discussed in greater detail below.

State Regulations for GHGs

California has taken several legislative steps to reduce Statewide GHG emissions and is internationally known for its leadership on action to address climate change. In 2006, California legislature passed AB 32, which created a comprehensive, multi-year program to reduce GHG emissions in California and required the State (by law) to reduce GHG emissions to 1990 levels by 2020. The legislature built upon this law by passing SB 32, which requires the State to reduce GHG emissions 40 percent below 1990 levels by 2030, and later passed AB 1279, which requires the State to achieve net-zero GHG emissions by 2045 and net-negative emissions thereafter. To achieve these State-mandated emissions reduction targets, a document known as the Scoping Plan was required to be created by the ARB beginning in 2007 and to be updated at least once every 5 years to “ensure the GHG emissions reduction activities to be adopted and implemented by the state board are complementary, nonduplicative, and can be implemented in an efficient and cost-effective manner.” The Scoping Plan outlines strategies across nearly all levels of California’s government and economy and defines—at a granular level—the regulatory actions needed to reduce GHG emissions from all economic sectors to meet the targets.

The ARB is the Statewide governing body which focuses on California’s unique air quality challenges by setting the State’s own, stricter, GHG and air pollutant emissions standards for a range of Statewide pollution sources including vehicles, fuels, on- and off-road equipment, and consumer products. The ARB also manages the cap-and-trade program to achieve GHG emission reductions from large industrial facilities. The ARB has pioneered a range of approaches in California that have set the standard for effective air and climate programs for the nation and the world. ARB regulations, based on extensive research and established science, have driven innovation, leading to significant technological developments such as the production of low- and zero-emission cars and trucks and cleaner fuels. As stated, ARB is tasked by the legislature with updating the Scoping Plan, which was most recently adopted in 2022 (2022 Scoping Plan), to ensure the State carries out actions to meet the 2030 and 2045 GHG emissions reduction targets.

Other State agencies responsible for regulating GHGs include:

- **California Energy Commission (CEC):** The State’s energy policy and planning agency, responsible for climate change related programs including energy efficiency and leading the State to a 100 percent clean energy reality. The CEC mandates building energy efficiency standards (in new and existing buildings) and manages the Renewable Portfolio Standard (RPS).

- **California Department of Resources Recycling and Recovery (CalRecycle):** California's recycling and waste management agency, responsible for implementation of State climate policies including landfill methane emissions reduction, waste-to-energy production, and composting requirements. CalRecycle implements food and yard waste recycling regulations, including mandates to cut organic waste disposal 75 percent by 2025.
- **California Governor's Office of Land Use and Climate Innovation:** Formerly the OPR, the LCI is California's long-range planning agency, responsible for implementing CEQA review and conducting Statewide research on all climate change policies and impacts.

As a result of these actions, California reached its 2020 GHG emissions reduction target of reducing GHG emissions back to 1990 levels 4 years early and is on track to meet the 2030 GHG reduction target. Below is a summary of State regulations that are applicable to the proposed project and will serve to reduce GHG emissions now and in the future to ensure California stays on the path to meeting the State-mandated 2030 and 2045 targets:

- **Advanced Clean Cars II (ACC II):** Designed to reach 100 percent new vehicle Zero-Emission Vehicles (ZEVs) and clean PHEVs in California by the 2035 model year.
- **Small Off-Road Engine (SORE) Regulations:** Transition 100 percent of small off-road spark-ignition engines (at or below 25.5 horsepower and used in non-stationary equipment) to zero-emission by 2035 (where feasible).⁴⁷
- **Zero-Emission Forklifts:** The regulation will achieve emission reductions of both criteria pollutants and GHG emissions by requiring the phase-out of forklifts using large spark-ignition (LSI) engines, such as those running on propane and gasoline.⁴⁸ The regulation is expected to result in a significant shift of the forklift segment in California to zero-emission technology.
- **Low Carbon Fuel Standard:** Increase the availability and use of low carbon fuels, including renewable diesel, biodiesel, renewable and natural gas by mandating that the fuel carbon intensity in California must achieve a 20 percent reduction by 2030.⁴⁹
- **Renewable Portfolio Standard:** One of California's key programs for advancing renewable energy, it sets continuously escalating renewable energy procurement requirements for the State's load-serving entities. All entities must procure 60 percent of their electricity portfolio from renewable energy resources by 2030.
- **Building Energy Efficiency Standards—Title 24, Part 6 (Energy Code):** Contain energy and water efficiency requirements (and indoor air quality requirements) for newly constructed

⁴⁷ California Air Resources Board (ARB). 2024. SORE—Small Engine Fact Sheet. Website: <https://ww2.arb.ca.gov/resources/fact-sheets/sore-small-engine-fact-sheet>. Accessed March 22, 2025.

⁴⁸ California Air Resources Board (ARB). 2024. Zero-Emission Forklifts. Website: <https://ww2.arb.ca.gov/our-work/programs/zero-emission-forklifts>. Accessed March 22, 2025.

⁴⁹ California Air Resources Board (ARB). 2024. Low Carbon Fuel Standard. Website: <https://ww2.arb.ca.gov/our-work/programs/low-carbon-fuel-standard/about>. Accessed March 22, 2025.

buildings; the requirements have gradually increased in efficiency and technology over the past decades. The current standard, known as the 2022 Energy Code, builds on California's technology innovations, and includes encouraging heat pumps, requiring electric-ready single-family homes, and solar/battery storage standards for various building types. The 2022 Energy Code also strengthens ventilation standards to improve indoor air quality.

California Green Building Standards Code—Title 24, Part 11 (CALGreen)

Mandatory green building standards code for the State with the goal of reducing GHG emissions from buildings, including reducing energy and water consumption.

Regional Regulations for GHGs

The Bay Area Air District is one of 35 local air pollution control districts in California tasked with regulating air pollutant emissions from businesses and stationary sources within the Bay Area. The Bay Area Air District's efforts are crucial in supporting California's broader GHG reduction goals and ensuring compliance with State and federal regulations.

The Bay Area Air District's Spare the Air Clean Air Plan is a comprehensive strategy aimed at improving air quality and reducing GHG emissions in the Bay Area. Key components of the plan include promoting clean transportation, reducing industrial emissions, enhancing energy efficiency, and increasing the use of renewable energy.

In addition to the Spare the Air Clean Air Plan, the Bay Area Air District has developed a Regional Climate Protection Strategy that outlines specific actions to reduce GHG emissions across various sectors, including transportation, buildings, energy, and waste management. This strategy complements State-level initiatives and ensures that the Bay Area contributes effectively to California's climate goals.

The Bay Area Air District implements various control measures to achieve these goals, such as:

- **Regulating Industrial Emissions:** Enforcing stricter emissions standards for industrial facilities and promoting the adoption of cleaner technologies. These regulations are codified in the Bay Area Air District's rules and regulations, which set limits on emissions of pollutants and GHGs from various sources.
- **Vehicle Emissions Programs:** Encouraging the use of EVs and expanding EV charging infrastructure. This includes regulations that require reductions in emissions from mobile sources, aligning with California's ACC regulation.
- **Energy Efficiency Programs:** Supporting energy efficiency improvements in residential, commercial, and industrial sectors. These efforts are guided by regulations that mandate energy efficiency standards and promote the use of low emission technologies.
- **Renewable Energy Initiatives:** Promoting the use of renewable energy sources like solar and wind power. This is supported by regulations that incentivize renewable energy adoption and set targets for renewable energy use.

- **Land Use and Development:** Integrating air quality and GHG reduction measures into land use planning and development processes. This includes promoting smart growth principles, encouraging higher-density development near transit hubs, and implementing green building standards. The Bay Area Air District provides technical assistance and policy guidance to local governments to ensure that land use decisions contribute to regional air quality and climate goals.

The Bay Area Air District works closely with local governments, providing technical assistance, funding opportunities, and policy guidance to support the development and implementation of local Climate Action Plans (CAPs).

The Bay Area Air District's efforts are closely tied to its CEQA thresholds. The Bay Area Air District provides specific CEQA Guidelines and thresholds for GHG emissions, helping local agencies assess and mitigate the environmental impacts of proposed projects. By aligning its regulations and control measures with CEQA requirements, the Bay Area Air District ensures that projects within its jurisdiction contribute to regional and State GHG reduction goals while complying with environmental review processes. In 2022, the Bay Area Air District Board of Directors adopted CEQA Thresholds for Evaluating the Significance of Climate Impacts from Land Use Projects and Plans. These thresholds and associated guidance assist lead agencies in evaluating air quality and climate impacts from proposed land use projects in the San Francisco Bay Area Air Basin (SFBAAB) during the environmental review process.

Sonoma County Climate Action 2020 and Beyond Regional Climate Action Plan

In 2016, Sonoma County adopted the Climate Action 2020 and Beyond Regional Climate Action Plan which establishes the County GHG reduction goals below 1990 levels: 25 percent by 2020, 40 percent by 2030, and 80 percent by 2050, consistent with the State requirements.⁵⁰ The CAP outlines the reduction efforts in six major GHG source areas, including building energy, transportation and land use, solid waste, water and wastewater, livestock and fertilizer, and advanced climate initiatives. Notably, based on projections from the 2010 GHG inventory, Sonoma County is not expected to meet the 2015 goal of 25 percent below 1990 levels. Furthermore, the County's population is projected to increase by 5 percent between 2010 and 2020, and employment is projected to increase by 13 percent over the same period. The two main factors which influence the growth of GHG emissions in the County are from population and economic growth. In addition, Appendix A of the County's CAP includes a consistency checklist in which projects can identify all applicable mandatory local or regional measures in the CAP in order to demonstrate consistency. Projects that implement all applicable mandatory CAP measures can conclude that their impacts related to GHG emissions would be less than significant under CEQA. However, since the CAP checklist is intended for residential, commercial, and mixed-use projects, the proposed project is not a type of project addressed within the CAP. Thus, the County's CAP does not apply to the proposed project.

⁵⁰ County of Sonoma. 2024. Climate Resilience Comprehensive Action Plan.

<https://sonomacounty.ca.gov/Main%20County%20Site/Administrative%20Support%20%26%20Fiscal%20Services/CAO/Documents/Climate%20Action%20and%20Resiliency/Climate-Resilience-Comprehensive-Action-Plan.pdf>. August.

Impact Discussion

The CEQA Guidelines define a significant effect on the environment as “a substantial, or potentially substantial, adverse change in the environment.” To determine whether a proposed project would have a significant impact on GHGs, the type, level, and impact of emissions generated by the proposed project must be evaluated.

Thresholds of Significance for the Proposed Project

The Lead Agency utilizes the criteria in CEQA Guidelines Appendix G Environmental Checklist to determine whether GHG emission impacts are significant environmental effects. For purposes of this Draft IS/MND, a GHG emission impact is considered significant if the proposed project would:

- a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.
- b) Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases.

Bay Area Air District Guidance

Where available, significance criteria established by the applicable air quality management or air pollution control district may be relied upon as a methodology to reach significance determinations. The Lead Agency, in its discretion, has determined to utilize the Bay Area Air District significance criteria for purposes of this analysis.

Construction-related GHG Emissions

The Bay Area Air District's 2022 CEQA Guidelines state that, because construction emissions are temporary and variable, the Bay Area Air District has not developed a quantitative threshold of significance for construction-related GHG emissions. However, the lead agency should quantify and disclose GHG emissions that would occur during construction. Citing LCI's (formerly OPR's) Discussion Draft Climate Change Advisory document, it is recommended that lead agencies quantify a project's construction (as well as its operational) GHG emissions, using available data and tools, to determine the amount, types, and sources of GHG emissions resulting from the proposed project.

Operational-Related GHG Emissions

As previously stated, the proposed project would not be associated with ongoing operational-related impacts with the exception of the few mobile trips from visitors accessing the park. The Bay Area Air District's 2022 CEQA Guidelines do not include a GHG threshold for parks or recreational-only land uses.

Would the project:

a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Less than significant. Both construction and operational activities have the potential to generate GHG emissions.

Project Emissions (for Informational Purposes)

Construction

The proposed project would generate GHG emissions during temporary (short-term) construction activities such as demolition, site grading, operation of construction equipment, operation of on-site heavy-duty construction vehicles, hauling of materials to and from the project site, asphalt paving, and construction worker vehicle trips. On-site construction activities would vary depending on the level of construction activity.

The proposed project's construction emissions are presented in Table 6. It should be noted that the analysis conservatively assumes that construction would begin January 2026. As vehicle and equipment fuel efficiencies and emission control standards continue to incrementally improve with each year, project construction emissions are likely to decrease nominally from what is shown in Table 6 should the construction schedule move to later years. In addition, the construction-related assumptions to calculate worker VMT and fuel use are conservative and represent a worst-case modeling scenario. Therefore, the construction GHG emissions contained in Table 6 represent a conservative assessment of project construction emissions.

Table 6: Proposed Project Construction GHG Emissions

Year	Total GHG Emissions (MT CO ₂ e per year)
2026	122
Total Construction Emissions	122
Emissions Amortized Over 30 Years ¹	4
Notes: GHG = greenhouse gas MT CO ₂ e = metric tons carbon dioxide equivalent Source: Appendix A.	

As shown above, the proposed project could generate approximately 122 MT CO₂e during construction, however it is anticipated that the construction worker VMT and fuel use would be lower than what was estimated. There is no existing or proposed construction-related climate impact threshold at this time. GHG emissions from construction represent a very small portion of a project's lifetime GHG emissions. The proposed thresholds for land use projects are designed to address

operational GHG emissions, which represent the vast majority of project GHG emissions. Furthermore, construction GHG emissions are amortized over 30 years and accounted for as part of operational GHG emissions. Therefore, construction-related impacts would be less than significant.

Operation

Operational or long-term emissions occur over the life of the proposed project and would be associated with mobile emissions from visitor trips. As previously stated, the number of visitor trips is anticipated to be negligible, as the parking lot provides spaces for only eight vehicles. In addition, the proposed project would permanently conserve over 200 acres of natural forestland which acts as a carbon sequestration sink. Therefore, operational-related impacts would be less than significant.

b) Conflict with any applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Less than significant. Both construction and operational activities have the potential to generate GHG emissions. As described in the previous analysis, the proposed project would generate insignificant GHG emissions compared to the emissions from other sources in California or the world. Once construction is complete, the proposed project would generate minimal vehicle-related emissions. In addition, many of these visitors would likely be driving to another park or preserve on the coast to meet their recreational needs if the proposed project was not constructed. Also, the proposed project supports the State's goal to protect natural and working lands and promote natural carbon sequestration opportunities. Accordingly, it is concluded that the proposed project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions.

Mitigation Measures

None required.

Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
2.9 Hazards and Hazardous Materials				
<i>Would the project:</i>				
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, would it 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, would the project 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?	☐	☐	☒	☐

Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
g) Expose people or structures, either directly or indirectly to a significant risk of loss, injury or death involving wildland fires?	☐	☐	☒	☐

Environmental Evaluation

Setting

Site Uses

Based on a records search conducted from the NWIC for the project area consisting of historical aerial photographs and topographic maps dating back to 1961, little development has occurred within the project site boundaries apart from the existence of roads and trails. This network of trails and roads have been altered overtime by the prior private owners, where the site is currently being used for recreational and conservation uses.⁵¹

Existing structures include an open-walled shed and trailer located near the site's northeastern boundary. Although the wooden and metal open-walled shed was likely constructed prior to 1980, asbestos-containing materials (ACMs) were typically used in building construction materials for insulation and as a fire retardant, roofing shingles, ceiling and floor tiles, and asbestos cement products.⁵² Therefore, the shed does not likely contain ACMs. The existing open-walled shed does not include paint along the building surfaces and, therefore, does not contain lead-based paint.

Based on a regulatory database search of the California State Water Resources Control Board (State Water Board) GeoTracker and the California Department of Toxic Substances Control (DTSC) EnviroStor, there are no leaking underground storage tank (LUST) or hazardous materials contamination cases at the site that represent an environmental concern.

Surrounding Uses

The project site is surrounded by residential uses to the east, residences and several institutional facilities, to the south and southeast, in addition to undeveloped lands that consist of oak woodland and forest. To the north and west are undeveloped lands composed of oak woodland and forest habitat. Based on a regulatory database search of the State Water Board GeoTracker and DTSC

⁵¹ Hollis Agricultural Consulting. 2023. Soda Springs Ranch Open Space Preserve Conservation Easement: Baseline Documentation. Pages 10-11.

⁵² United States Environmental Protection Agency (EPA). Learn About Asbestos. <https://www.epa.gov/asbestos/learn-about-asbestos>. Accessed June 9, 2025.

EnviroStor, the nearest off-site hazardous materials case is located approximately 0.1 mile of the project site's southwestern boundary north of Cherry Creek Road, involved the closure of an illegal methamphetamine operation on the property in 1999 where waste pit materials and contaminated soil were removed. A follow-up soil assessment confirmed the site's status as a closed case in 2003.⁵³

There are 27 off-site hazardous materials sites within a 1 -mile radius of the project site.⁵⁴ All of these sites are documented as closed cases and are located at lower elevation. Save for the 2003 site, all of them are located east of the project site's eastern boundary past Foothill Boulevard. Given the absence of the widespread use and production of hazardous materials based on lack of historical and current uses, and documented cleanup efforts for surrounding former sites, there is minimal evidence to suggest the exposure or on-site contamination of hazardous materials on the project site.

Regulatory Framework

The following section describes federal, State, regional, and local regulations and policies that are relevant to hazards and hazardous materials.

Federal

Federal Aviation Regulations, FAR Part 77

The Federal Aviation Administration (FAA) issued a final rule on July 21, 2010, to Code of Federal Regulations Part 77, Title 14, for the "Safe, Efficient Use and Preservation of the Navigable Airspace." The rule became effective on January 18, 2011. Federal Aviation Regulations Part 77, Title 14 (FAR Part 77) establishes standards and notification requirements for objects affecting navigable airspace.

Any person/organization who intends to sponsor any of the following construction or alterations must notify the FAA Administrator:

- Any construction or alteration exceeding 200 feet above ground level
- Any construction or alteration:
 - within 20,000 feet of a public use or military airport which exceeds a 100:1 surface from any point on the runway of each airport with at least one runway more than 3,200 feet
 - within 10,000 feet of a public use or military airport which exceeds a 50:1 surface from any point on the runway of each airport with its longest runway no more than 3,200 feet
 - within 5,000 feet of a public use heliport which exceeds a 25:1 surface
- Any highway, railroad or other traverse way whose prescribed adjusted height would exceed that above noted standards
- Any construction or alteration located on a public use airport or heliport regardless of height or location

⁵³ California Environmental Protection Agency (Cal/EPA). Cortese Data List Resources. Website: <https://calepa.ca.gov/sitecleanup/corteselist/>. Accessed June 5, 2025.

⁵⁴ Ibid.

- When requested by the FAA⁵⁵

State

Government Code Section 65962.5

Government Code Section 65962.5 of the Government Code requires Cal/EPA to compile and annually update a list of hazardous waste and substances sites, referred to as the Cortese List.⁵⁶ The Cortese List is used by State, local agencies, and developers to comply with CEQA requirements.⁵⁷ The Cortese List includes hazardous substance release sites identified by the State Water Board and DTSC.

Regional

Sonoma County Airport Land Use Commission Comprehensive Airport Land Use Plan

The County of Sonoma's Comprehensive Airport Land Use Plan (CALUP) was adopted by the Sonoma County Airport Land Use Commission (ALUC) in January 2001. The CALUP applies to all six airports in the County, including the Cloverdale Municipal Airport. It establishes referral boundaries, airport influence area, air space protection standards, airport safety zones, and noise standards around each airport which set forth restrictions on allowed land uses and establish standards for open space retention and allowed density and lot coverage.⁵⁸ The Cloverdale Municipal Airport includes six airport safety zones, including the runway protection zone, inner safety zone, inner turning zone, outer safety zone, sideline safety zone, and traffic pattern zone.⁵⁹ The CALUP includes land use standards and restrictions on the density and development within these zones to reduce the risk of aircraft safety hazards.

Local

City of Cloverdale General Plan

Policy PS 3-2 Consider the severity of natural fire hazards, potential damage from wildland and structural fires, adequacy of fire protection and mitigation measures consistent with this element in the review of projects.

Goal PS 4 While maintaining the autonomy granted to it pursuant to State zoning laws, implement State and County requirements for the storage, transport, disposal and use of hazardous materials, including requirements for management plans, security precautions, and contingency plans.

⁵⁵ Federal Aviation Administration. Notification of Proposed Construction or Alteration on Airport Part 77. Website: <https://www.faa.gov/airports/central/engineering/part77>. Accessed June 8, 2025.

⁵⁶ Ibid.

⁵⁷ Ibid.

⁵⁸ Sonoma County Permit Sonoma. Airport Land Use Commission: Comprehensive Airport Land Use Plan. Website: <https://permitsonoma.org/boardscommissionsandcommittees/airportlandusecommission>. Accessed June 3, 2025.

⁵⁹ Sonoma County Permit Sonoma. Airport Safety Zones. Website: <https://permitsonoma.org/regulationsandlongrangeplans/longrangeplans/airportlanduseplan/chapter8/airportsafetyzonesairportsonomacounty>. Accessed June 4, 2025.

Policy PS 4-1 Where allowed by law, regulate the transportation of hazardous materials to minimize the potential for damage. Seek regulation by other agencies consistent with adopted City policies.

Would the project:

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Less than significant impact. The proposed Open Space Preserve would be open to the public and include roads/trails that would primarily be used for hiking. Picnic tables would also be constructed for users of the Preserve. Operational maintenance activities would include the clearance of debris from the roads/trails, litter removal, minor pruning of vegetation, and the cleaning of picnic tables and signs. The proposed project would include the use of small quantities of cleaning and maintenance chemicals during project operations. However, no hazardous chemicals would be stored on the site. The proposed project would comply with applicable federal, State, and local handling and disposal requirements, including the compliance with DTSC requirements pertaining to the use and transport of hazardous chemicals. Therefore, small quantities of cleaning supplies and maintenance chemicals that would be used on-site would not result in a significant hazard to on-site workers or the environment through routine transport, use, or disposal of the chemicals. As such, the impact would be less than significant.

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?

Less than significant impact with mitigation incorporated. The proposed project would include the demolition of an open-walled shed, removal of two culverts, and the construction of roads/trails and picnic tables, as well as the installation of new gates, signs, and the replacement of two culverts. As described above, there are no hazardous materials or LUST cases identified at the site; therefore, no known contaminants of concern have been identified for the site. Construction workers would not likely be exposed to significant soil contamination. However, the proposed project would be required to implement a site-specific Health and Safety Plan (HASP) to ensure the proper handling and disposal of the site's soils during construction (refer to MM HAZ-1). The implementation of MM HAZ-1 would reduce the impact of the accidental release of hazardous materials from unknown contaminated soil on construction workers' to less than significant. With the implementation of the implementation of MM HAZ-1, the proposed project would not create a significant hazard to the public or the environment during construction. As such, the impact would be less than significant with mitigation.

As described in the response to checklist question (a), the proposed project would comply with the applicable federal, State and local handling and disposal requirements for the small quantity of chemicals that would be used during project operations. The proposed project would comply with applicable State and local handling and disposal requirements, including the compliance with DTSC requirements pertaining to the use and transport of hazardous chemicals. Therefore, during project

operations, the proposed project would not 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. As such, the impact would be less than significant.

c) 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. There are no existing or proposed schools within one-quarter mile of the project site. The nearest school to the site is Washington School, located at 129 South Washington Street, approximately 0.27 miles from the site's eastern boundary at Foothill Boulevard. Therefore, the proposed project would not emit or handle hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school. As such, no impact would occur.

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, would it create a significant hazard to the public or the environment?

No Impact. The project site is not on a list of hazardous materials sites in regulatory databases, the State Water Board's GeoTracker and DTSC EnviroStor databases, pursuant to Government Code Section 65962.5.⁶⁰ As such, the proposed project would not be located on a hazardous materials site that would create a significant hazard to the public or the environment. Therefore, no impact would occur.

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, would the project result in a safety hazard or excessive noise for people residing or working in the project area?

No impact. The project site is located within the airport influence area within the CALUP, adopted by the ALUC. The nearest airport to the site is the Cloverdale Municipal Airport, which is approximately 2 miles southeast of the site. The project site is located outside of the airport safety zones configured around the Cloverdale Municipal Airport.⁶¹ The project would include the construction of roads/trails, picnic tables and gates (which would be less than 10 feet in height), and a parking area. Thus, the proposed project would not include the construction or alteration of structures that would exceed FAA Part 77 height standards. The distance of the longest Cloverdale Municipal Airport runway from the site is between 10,000 and 20,000 feet and the length of the runway is approximately 2,910 feet; given the runway's distance from the site and that the length of the runway is less than 3,200 feet, the proposed project would not result in a significant aircraft hazard. For the above reasons, the proposed project is not subject to the FAA notification requirements for the construction or alteration of

⁶⁰ California Environmental Protection Agency (Cal/EPA). Cortese Data List Resources. <https://calepa.ca.gov/sitecleanup/corteselist/>. Accessed June 5, 2025.

⁶¹ Sonoma County Permit Sonoma. Cloverdale Municipal Airport Referral Area. Website: <https://permitsonoma.org/regulationsandlongrangeplans/longrangeplans/airportlanduseplan/chapter8/cloverdaleairport>. Accessed June 4, 2025.

structures. As a result, the proposed project would not result in a safety hazard, related to airport/aircraft operations, for people residing or working in the project area. As such, no impact would occur.

f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Less than significant impact. The proposed Open Space Preserve would primarily be accessed by pedestrians. Users of the Preserve would park on the street or in the Cloverdale City Park parking lot on West Second Street and then walk to the West Second Street entrance. Users could also park along South Foothill Boulevard and then walk to the South Foothill Boulevard entrance. Vehicles that could access the site would be City-owned vehicles, maintenance staff vehicles, and emergency vehicles. Vehicles would access the site via the West Second Street gate shown on Exhibit 4, Site Plan. Based on the City's adopted Emergency Operations Plan and Evacuation Zone Map, the proposed project's West Second Street access is located on the border of Evacuation Zones 1 and 3. The primary evacuation route for Zone 1 is from North Street to Cloverdale Boulevard, to US-101. The primary evacuation route for Zone 3 is from Healdsburg Avenue to Cloverdale Boulevard, to Citrus Fair, and then to US-101.⁶² The addition of approximately 54 daily vehicle trips (i.e., 50 daily trips from Open Space Preserve users and four trips from City-owned and maintenance staff vehicles) would not interfere with the City's Emergency Operations Plan or emergency evacuation plan. As such, the impact would be less than significant.

g) 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 site is located within a designated High Fire Hazard Severity Zone within a State Responsibility Area (SRA). The project site is surrounded by areas of similar or higher fire hazard severity, including a Very High Fire Hazard Severity Zone to the southeast.⁶³ The proposed project would involve vegetation management for the creation of new trails and picnic areas and would therefore not result in significant alterations to the project site that would increase wildfire risk. Furthermore, the proposed project would maintain an existing fuel break located between the conservation space and the residences along Port Circle, further reducing wildfire risks. Therefore, the proposed project would not result in a significant risk of loss, injury, or death to people or structures as a result of increased exposure. Impacts would be less than significant.

⁶² City of Cloverdale. Emergency Operation Plan and Evacuation Plan. <https://www.cloverdale.net/457/Emergency-Operation-Plan-and-Evacuation->. Accessed June 9, 2025.

⁶³ California Department of Forestry and Fire Protection (CAL FIRE). Fire Hazard Severity Zone (FHSZ) Viewer. Website: <https://experience.arcgis.com/experience/6a9cb66bb1824cd98756812af41292a0>. Accessed June 2, 2025.

Mitigation Measures

- MM HAZ-1** Prior to the issuance of any demolition or grading permits (whichever occurs first), a Health and Safety Plan (HASP) shall be prepared to establish health and safety protocols for construction workers at the site. All measures identified in the HASP shall be implemented during all phases of construction, as applicable. The HASP shall be prepared by an environmental professional and submitted to the Sonoma County Department of Environmental Health (SCDEH).

Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
2.10 Hydrology and Water Quality				
<i>Would the project:</i>				
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:	☐	☐	☒	☐
(i) result in substantial erosion or siltation on- or off-site;	☐	☐	☒	☐
(ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;	☐	☐	☒	☐
(iii) 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	☐	☐	☒	☐
(iv) 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?	☐	☐	☒	☐

Environmental Evaluation

Setting

The City's water supply relies on seven wells under the direct influence of surface water from the Russian River. The City is located within the Alexander Valley Groundwater Basin. In partnership with Sonoma County and the City of Santa Rosa, the City of Cloverdale is a co-permittee on a Municipal Separate Storm Sewer System (MS4) Phase 1 Permit, to regulate stormwater discharges into its system, to exempt specific non-stormwater discharges, and to adopt Low Impact Development (LID) BMPs. To comply with the permit, the City adopted a stormwater ordinance to regulate stormwater discharges into its system.

The proposed project comprises three parcels located in the Porterfield Creek Watershed, which drains into the Russian River. The North Branch of Porterfield Creek flows across the southwestern portion of the site and an unnamed tributary to Cloverdale Creek flows along the project site's northern boundary (Figure 2). Soda Spring, a natural soda water spring, is located in the northern portion of the project site. To manage stormwater discharge and to reduce erosion on-site, the project site contains an existing drainage system comprised of LID measures such as above ground culverts and drainage ditches. The site is currently undeveloped and does not use groundwater or surface water resources.

Would the project:

a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?

Less than significant impact. The proposed project has the potential to release water pollutants during both construction and operation that may violate water quality standards and degrade surface or groundwater quality.

During construction activity, runoff carrying eroded soils and pollutants could enter storm drainage systems and enter the Russian River, increasing sedimentation and degrading downstream water quality. These sediments also would be carried downstream and discharged into the San Francisco Bay and Pacific Ocean, degrading surface water quality, or allowed to seep into the associated groundwater table. This would represent a potentially significant construction impact related to surface and groundwater quality.

As previously mentioned under Section 2.10, Hydrology and Water Quality, the site currently contains a network of culverts and drainage ditches that collect surface runoff from the site. During site grading for the proposed parking area and vegetation clearance conducted for the proposed trails, eroded soils and pollutants could enter storm drainage systems and enter the Russian River, increasing sedimentation and degrading downstream water quality. This would represent a potentially significant construction impact related to surface and groundwater quality. Under the NPDES General Construction Permit (NPDES No. CAS000002, Order No. 99-08-DWQ) process, projects that disturb 1 or more acres of lands are required to obtain a permit before the start of construction activity. Since the proposed project would disturb less than 1 acre of land including grading for an approximately

2,000-square-foot parking area and vegetation clearance for 0.91 acre of proposed trails (i.e., approximately 41,600 square feet of disturbance),⁶⁴ the proposed project would not be required to prepare and implement a SWPPP. The SWPPP would identify structural and nonstructural BMPs intended to prevent erosion and reduce the impacts to water quality during construction. The proposed project's construction BMPs would include the installation of silt fences, installation of fiber rolls, and stabilization of stockpiles. Although construction activities have the potential to generate increased sedimentation, compliance with applicable policies and regulations would minimize the potential to degrade water quality in downstream water bodies to the maximum extent possible. As a result, construction-related project impacts related to surface and groundwater water quality would be less than significant.

Under existing conditions, the entire site is composed almost entirely of pervious surfaces. The proposed project would be composed almost entirely of pervious surfaces, with the addition of 500 square feet of impervious surfaces in the approximately 2,000-square-foot parking area, located near the proposed eastern entrance on West Second Street. Although the proposed project would involve the removal and replacement of two culverts, this work would be done to prevent trail erosion and would not alter the rest of the existing drainage system. Therefore, the proposed project would be consistent with Municipal Code Chapter 16.10, Storm Water, as it would rely on the existing natural drainage system to reduce peak runoff flow and remove pollutants, thus reducing impacts to water quality downstream. These standard best practices currently being used on the project site would ensure that the proposed project is consistent with the Cloverdale Municipal Code, reducing potential impacts to less than significant.

b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

Less than significant impact. The City is located within the Alexander Valley Groundwater Basin but does not currently pump groundwater from the Alexander Valley Groundwater Basin or use groundwater as part of its water supply. The City obtains water from the Russian River via seven wells along its west bank.⁶⁵ The use of these wells is directly under the influence of surface water from the Russian River and is not tied to the use of aquifers or groundwater basins.

The project site is composed largely of pervious surfaces and would utilize existing BMPs provided for through the existing on-site drainage system, comprising of LID treatment measures such as culverts and drainage ditches, to reduce peak runoff flow and therefore interference with groundwater discharge. Therefore, stormwater would be retained on-site and interference with groundwater recharge would be reduced. Impacts would be less than significant.

⁶⁴ (4,965 feet of total trail length x and 8 foot wide soil disturbance)/ 43,560 square feet/one acre = 0.91 acres

⁶⁵ City of Cloverdale. 2015 Urban Water Management Plan (UWMP). Page 6-2.

c) Substantially alter the existing drainage pattern of 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:

(i) result in substantial erosion or siltation on- or off-site;

Less than significant impact. During construction and grading the proposed project would likely alter the drainage pattern. However, as described in Impact 10(a) the proposed project would be required to implement a SWPPP as part of its Construction General Permit. The SWPPP is designed to ensure that erosion and siltation are prevented or minimized to the maximum extent feasible during construction.

As discussed in Impact 10(a), the 208.66-acre site is almost completely composed of pervious surfaces. The proposed project would include an approximately 2,000-square-foot parking area with approximately 500 square feet of impervious surfaces; approximately 1,500 square feet of the parking area would consist of pervious gravel. The addition of 800 square feet of impervious surfaces would not substantially increase the amount of stormwater runoff that could carry sediments and pollutants into the Russian River. Furthermore, the proposed project would restrict vegetation clearance as part of construction of the proposed trails and the installation of picnic tables throughout the site, as shown in Exhibit 3. This would minimize impacts on existing oak woodland and forest habitat and would reduce the possibility for increased surface runoff and erosion.

The proposed project would also involve the removal of two culverts to prevent erosion on proposed trails, by allowing stormwater to drain through existing natural systems. The removal of culverts would be conducted within a largely flat, previously graded area that contains an open-walled shed as shown in Exhibit 4, Site Photographs.⁶⁶ The removal would be compliant with the Cloverdale Municipal Code Chapter 16.10, Stormwater, which includes LID and BMPs as mitigation. Impacts related to alterations of drainage patterns resulting from erosion or siltation would be less than significant.

(ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;

Less than significant impact. As discussed in Impact 10(a), the site is almost completely composed of pervious surfaces. The proposed project would not increase the amount of impervious surfaces and so would not increase the rate or amount of surface runoff in a manner that could result in flooding and surface runoff.

Surface runoff generated by the proposed project would be managed by the existing on-site drainage system, which is designed to detain and meter the release of peak runoff in order to avoid inundating downstream waterways in a manner that creates substantial flooding on- or off-site. As mentioned, this would consist of LID treatment and BMPs consistent with the Cloverdale Municipal Code Chapter 16.10,

⁶⁶ Hollis Agricultural Consulting. 2023. Soda Springs Ranch Open Space Preserve Conservation Easement: Baseline Documentation. May

Storm Water. Although the proposed project would involve the removal of several large culverts, this would be done to reduce erosion and increased surface runoff. Thus, the possibility of flooding resulting from increased surface runoff from the proposed project would be low and impacts would be less than significant.

(iii) 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

Less than significant impact. The proposed project would not increase the amount of impervious surfaces on-site; therefore, the proposed project is not expected to increase the amount of surface runoff generated. Consistent with the Construction General Permit, the proposed project would implement a SWPPP during construction which would identify structural and nonstructural BMPs intended to prevent significant polluted runoff during construction. The storm drainage system is designed to detain and meter the release of peak runoff to avoid inundating downstream waterways in a manner that could exceed the capacity of storm drainage facilities. Impacts would be less than significant.

(iv) impede or redirect flood flows?

Less than significant impact. According to FEMA's National Flood Hazard Layer, the proposed project is not within a designated flood hazard zone⁶⁷. The nearest flood hazard zone is located 270 feet east of the project site, near the project site boundary with Port Circle. As already discussed, the proposed project would not increase the amount of impervious surfaces and would also remove several culverts, thereby reducing the amount of runoff in downstream waterways by allowing natural drainage systems to detain and meter the release of peak runoff to avoid inundating downstream waterways. Accordingly, the proposed project is unlikely to impact or redirect flood flows. Thus, impacts would be less than significant.

d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

Less than significant impact. As mentioned in Impact c(iv), the proposed project is not within a designated flood hazard zone.⁶⁸ Since the project sits at a slightly higher elevation (361 MSL) than the adjacent flood zone (353 MSL), the proposed project is at a reduced risk of pollutant release due to flood inundation.

Seiches and tsunamis are short duration earthquake-generated water waves in large, enclosed bodies of water and the open ocean. The project site is not near any large inland bodies of water and

⁶⁷ Federal Emergency Management Authority (FEMA). National Flood Hazard Layer (NFHL) Viewer. Website: <https://www.arcgis.com/apps/webappviewer/index.html?id=8b0adb51996444d4879338b5529aa9cd>. Accessed May 15, 2025.

⁶⁸ Ibid.

is more than 20 miles from the Pacific Ocean and 4 miles from Lake Sonoma, a condition that precludes inundation by tsunami or seiche. Therefore, impacts would be less than significant.

e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Less than significant impact. Given that proposed construction would disturb less than 1 acre of land, the proposed project would not be required to implement a SWPPP and associated BMPs for LID treatment. The preparation of a SWPPP to identify potential structural and nonstructural BMPs during construction, combined with LID treatment measures and bioretention features existing on the project site, would be sufficient to ensure reduction of pollutants entering surface waters or groundwater basins. As previously discussed under Impact 10(b), the City does not currently pump groundwater and groundwater resources are not proposed for the project site. Thus, the proposed project would not conflict with or obstruct a water quality control plan or groundwater management plan. Impacts would be less than significant.

Mitigation Measures

None required.

Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
2.11 Land Use and Planning				
<i>Would the project:</i>				
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?	☐	☐	☒	☐

Environmental Evaluation

Setting

The project site is located in unincorporated Sonoma County, directly outside and adjacent to the City but within the City's SOI and Urban Growth Boundary, as shown in Exhibit 2. The City General Plan designates and pre-zones the entirety of the project site as CF. The primary uses under CF land use designation are to manage and preserve valuable biological, visual, and agricultural resources in the City's planning area. The Sonoma County General Plan designates the entirety of the project site as both Resources and Rural Development (RRD)⁴ and B8. The purpose of the RRD designation is to protect lands needed for commercial timber, wildlife habitat, and certain agricultural production activities, as well as allowing for very low-density residential development and recreational and visitor-serving uses. The RRD B8 designation is intended to "freeze" parcels that are:

- 1) Designated Rural Residential in the General Plan and subject to a Williamson Act Contract;
- 2) Within the City's designated urban service boundary where the City intends to limit urban growth upon annexation or a similar occurrence; or
- 3) Within a specific plan or plan policy where the City intends to limit urban development.

Since the project site is currently located outside of the City, it does not have City-designated zoning; however, it is pre-zoned CF, which would become enacted upon annexation of the entire project site into the City as part of the proposed project.

Would the project:

a) Physically divide an established community?

No Impact. The physical division of an established community would occur if construction of a large linear feature such as a railroad or interstate highway separated an existing community or if a feature that connects a community is removed, such as a bridge.

The proposed project includes enhancements to an existing open space area that would facilitate greater community use of existing and proposed trails and recreational facilities. Accordingly, the proposed project would not divide an established community; there would be no impact.

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?

Less than significant impact. The project site is within the City's SOI. As described in the General Plan, the City SOI is the area of the City that has been approved for future annexation by the Sonoma County Local Agency Formation Commission. The Sonoma County General Plan uses the SOI to define the ultimate area to be annexed to the City."⁶⁹ Because the project site is currently located outside of the city limits, the proposed project would require annexation into the City of Cloverdale. The General Plan designates the project site as CF and the project site has been pre-zoned as CF.

A significant impact would occur if the project would conflict with policies and regulations stipulated in the City's General Plan or Zoning Code. Since the proposed project would establish a conservation easement over the entire Open Space Preserve and would entail only minor utility and circulation improvements over a portion of the site with prior grading and clearance, impacts to biological, visual, and agricultural resources would be less than is significant. Thus, there would be no conflict with the project site's land use designation and pre-zoning classification, and impacts would be less than significant.

Mitigation Measures

None required.

⁶⁹ City of Cloverdale. 2015. General Plan. January 28. Page 7. Website:
<http://www.cloverdale.net/documentcenter/view/1673>. Accessed March 7, 2019.

Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
2.12 Mineral Resources				
<i>Would the project:</i>				
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?	☐	☐	☐	☒
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?	☐	☐	☐	☒

Environmental Evaluation

Setting

There are no areas in Cloverdale that are designated by the State Mining and Geology Board under the California Surface Mining and Reclamation Act of 1975 (SMARA). According to the California Geological Survey Updated Mineral Land Classification Map, Cloverdale is classified as a Mineral Resource Zone (MRZ)-3 area. An MRZ-3 area contains mineral occurrences of undetermined mineral resource significance.⁷⁰ There are no active mineral recovery sites within a 1-mile radius of the project location. The closest mineral recovery site to the project site is the Russian River, located approximately 1.70 miles east from the project site.⁷¹

Would the project:

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?

No impact. The project site does not support any mineral extraction activities, nor do any known mineral deposits exist on-site. Therefore, implementation of the proposed project would not result in

⁷⁰ California Department of Conservation. 2011. Mineral Land Classification. Website: https://maps.conservation.ca.gov/cgs/minerals/?page=Mineral-Land-Classification#data_s=id%3AdataSource_335-18a47b5b8e5-layer-10-192c08351d6-layer-28%3A21. Accessed April 14, 2025.

⁷¹ Stinson, M.C., Manson, M.W., and Plapper, J.J. 1987. State Report 146. Part III: Mineral Land Classification: Aggregate Materials in the San Francisco-Monterey Bay Area: Classification of Aggregate Resource Areas: North San Francisco Bay Production-Consumption Region. Website: https://www.conservation.ca.gov/cgs/Documents/Publications/Special-Reports/SR_146-MLC-Report03.pdf. Accessed April 14, 2025.

the loss of availability of a known mineral resource that would be of value to the region and the residents of the State. Therefore, no impact would occur.

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?

No Impact. As described previously, the project site is designated as CF under the City General Plan. This land use designation does not allow for mineral resource recovery sites. As a result, this condition precludes the possibility of the project's impact on a locally important mineral resource as delineated on a local general plan, specific plan or other land use plan. Thus, no impact would occur.

Mitigation Measures

None required.

Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
2.13 Noise <i>Would the project result in:</i>				
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, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

Environmental Evaluation

Setting

The project site is located within the City of Cloverdale in the County of Sonoma, California. It is within the Porterfield Creek Watershed and is surrounded by open space to the north, south, and west and by residential development to the east. The primary noise sources near the project site include traffic from West Cherry Creek Road to the south and Port Circle to the east. The closest noise-sensitive receptors to the project site are single-family residences located east of the project site.

Characteristics of Noise

Noise is defined as unwanted sound. Sound levels are usually measured and expressed in decibels (dB), with 0 dB corresponding roughly to the threshold of hearing. Most of the sounds that we hear in the environment do not consist of a single frequency, but rather a broad band of frequencies, with each frequency differing in sound level. The intensities of each frequency add together to generate a sound. Noise is typically generated by transportation, specific land uses, and ongoing human activity.

The standard unit of measurement of the loudness of sound is the dB. The 0 point on the dB scale is based on the lowest sound level that the healthy, unimpaired human ear can detect. Changes of 3 dB or less are only perceptible in laboratory environments. A change of 3 dB is the lowest change that can be perceptible to the human ear in outdoor environments. While a change of 5 A-weighted decibel (dBA) is considered to be the minimum readily perceptible change to the human ear in outdoor environments.

Since the human ear is not equally sensitive to sound at all frequencies, the dBA scale was derived to relate noise to the sensitivity of humans, it gives greater weight to the frequencies of sound to which the human ear is most sensitive. The A-weighted sound level is the basis for a number of various sound level metrics, including the day/night sound level (L_{dn}) and the Community Noise Equivalent Level (CNEL), both of which represent how humans are more sensitive to sound at night. In addition, the equivalent continuous sound level (L_{eq}) is the average sound energy of time-varying noise over a sample period and the L_{max} is the maximum instantaneous noise level occurring over a sample period.

Regulatory Framework

The City addresses noise in the Noise Element of the General Plan.⁷²

Cloverdale General Plan

Land Use and Noise Compatibility Standards are established in Exhibit 4.1 and 4.2 of the Noise Element. The land use category that applies closest to the open space proposed project is playgrounds and neighborhood parks. According to the City's Land Use and Noise Compatibility Standards, noise environments with noise levels up to 70 dBA CNEL are considered to be normally acceptable, while noise environments from 70 dBA to 75 dBA CNEL are considered to be conditionally acceptable, for new playgrounds and neighborhood parks land use developments. The General Plan does not have interior land use standards for open space land uses.

Policy NE 1-3 Noise from stationary sources, such as music, machinery and pumps, and air conditioners, shall be contained on the generating site and shall not exceed the standards of Exhibit 4.1 Land Use and Noise Compatibility Standards-Exterior for the generating and receiving site at the property line. According to Exhibit 4.1, noise levels up to 60 dBA CNEL is normally acceptable for residential land uses.

Would the project result in:

- 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?**

⁷² City of Cloverdale. 2009. General Plan Noise Element. Website:
<http://www.cloverdale.net/DocumentCenter/Home/View/537>. Accessed on April 29, 2019.

Short-term Construction Impacts

Less than significant impact. For purposes of this analysis, a significant impact would occur if construction activities would result in a substantial temporary increase in ambient noise levels in excess of the City's established standards applicable to construction noise.

While the City does not establish noise level thresholds for construction activities, this analysis uses the noise limits established by the Federal Transit Administration (FTA) to identify the potential for impacts due to substantial temporary construction noise. The FTA identifies construction noise limits in the Transit Noise and Vibration Impact Assessment Manual.⁷³ During daytime hours, a significant temporary increase would be an increase in excess of the 8-hour average noise level of 80 dBA L_{eq} as measured at a receiving residential land use.

Noise impacts from construction activities associated with the proposed project would be a function of the noise generated by construction equipment, equipment location, sensitivity of nearby land uses, and the timing and duration of the construction activities.

Construction is completed in discrete steps, each of which has its own mix of equipment and, consequently, its own noise characteristics. These various sequential phases would change the character of the noise generated on the site and, therefore, the noise levels surrounding the site as construction progresses. Despite the variety in the type and size of construction equipment, similarities in the dominant noise sources and patterns of operation allow construction-related noise ranges to be categorized by work phase. Typical operating cycles for these types of construction equipment may involve 1 or 2 minutes of full-power operation followed by 3 or 4 minutes at lower power settings. Impact equipment such as pile drivers would not be used during construction of the proposed project.

Construction of the proposed project would require the use of graders, excavators, dozers, front-end loaders, and backhoes. The maximum noise level generated by each bulldozer, excavator, and grader is assumed to be 85 dBA L_{max} at 50 feet from this equipment.

The closest noise-sensitive receptors to the project site are single-family residences located east of the project site, on North Foothill Boulevard near the proposed Second Street entrance. The closest residence would be located approximately 90 feet from the acoustic center of construction where multiple pieces of heavy construction equipment would potentially operate simultaneously at the project site. At this distance, worst-case construction noise levels could range up to approximately 74 dBA L_{eq} , at the façade of the nearest sensitive receptor. The calculation spreadsheet with detailed modeling assumptions is provided in Appendix H.

These reasonable worst-case construction noise levels would only occur periodically throughout the day as construction equipment operates along the nearest project boundaries. Additionally, these noise levels would drop off at a rate of 6 dBA per doubling of distance as the equipment moves over

⁷³ Federal Transit Administration (FTA). 2018. Transit Noise and Vibration Impact Assessment Manual. September.

the project site. Therefore, the calculated reasonable worst-case 8-hour average noise level for construction assuming construction equipment moves over the project site would be 68 dBA $L_{eq(8-hour)}$ as measured at the nearest residential receptor.

These calculated conservative worst-case construction noise levels would not exceed the FTA's threshold of 80 dBA $L_{eq(8-hour)}$ as measured at the nearest residential receptors. Therefore, the proposed project would not result in a substantial temporary increase in noise levels in excess of established standards and construction noise impacts on sensitive receptors in the project vicinity would be less than significant.

Operational/Stationary Source Noise Impacts

Less than significant impact. A significant impact would occur if operational noise levels generated by stationary noise sources at the project site would result in a substantial permanent increase in ambient noise levels in excess of any of the noise performance thresholds established by the City. According to Policy NE 1-3, in the Noise Element of the General Plan, noise from stationary sources such as music, machinery, pumps, and air conditioners should not exceed the City's normally acceptable land use compatibility standards as measured at a receiving property line. The City's normally acceptable thresholds are 60 dBA CNEL and 65 dBA CNEL for residential and commercial land uses. The City's normally acceptable thresholds are 70 dBA CNEL for new playgrounds and neighborhood parks land use developments.

The primary new stationary noise source associated with implementation of the proposed project would be the new parking lot activity. Potential impacts associated with this new noise source is analyzed below.

Parking Lot Activities

Typical parking lot activities include people conversing, doors shutting, and vehicles idling which generate noise levels ranging up to 60 dBA L_{eq} at 50 feet. These activities are expected to occur sporadically throughout the day, as visitors arrive and leave parking lot areas at the project site.

The nearest residential sensitive receptors, single-family residences located east of the project site, on North Foothill Boulevard near the proposed Second Street entrance, would be located approximately 110 feet from the acoustic center of the nearest proposed parking area. Because of distance attenuation, noise levels from typical parking lot activity, assuming a reasonable worst-case of one parking movement for each parking stall in 1 hour, would attenuate to 48 dBA L_{eq} as measured at the nearest residential receptor. Assuming these worst-case hourly average noise conditions occurred each hour during the day when the park is open, the resulting 24-hour average could range up to 47 dBA CNEL as measured at the nearest residential receptor. The calculation sheet is provided in Appendix H.

These noise levels would not exceed the Cloverdale General Plan operational stationary noise performance thresholds of 60 dBA CNEL for receiving residential land uses, nor would they exceed the threshold of 70 dBA CNEL for adjacent open space land uses.

Therefore, noise generated by parking lot activities would not result in a substantial permanent increase in ambient noise levels in excess of established thresholds as measured at the nearest noise-sensitive land use property line and the potential impact would be less than significant.

Operational/Mobile Source Noise Impacts

Less than significant impact. A significant impact would occur if project-generated traffic would result in a substantial increase in ambient noise levels compared with those that would exist without the proposed project. Typically, a doubling of the traffic volumes on a roadway segment is required in order to result in an increase of 3 dBA in traffic noise levels; which, as discussed in the characteristics of noise discussion above, is the lowest change that can be perceptible to the human ear in outdoor environments. Therefore, for the purposes of this analysis, a doubling of the existing Average Daily Traffic (ADT) or peak-hour traffic volumes could result in a substantial permanent increase in traffic noise levels.

According to the Institute of Transportation Engineers (ITE) Trip Manual,⁷⁴ the existing average daily trip generation for the six homes located at the end of North Foothill Boulevard, past the proposed parking lot entrance, is a minimum of 51 trips per day.

According to the project applicant, the proposed project is projected to generate a maximum of 25 daily trips on weekends (Saturday–Sunday) and a maximum of 10 trips per weekday (Monday–Friday). Therefore, proposed project trips would not double existing trips on the roadway segments that access the parking lot for the project. This project-related increase in trips would result in a less than 1 dBA increase in traffic noise levels along any roadway segment in the project vicinity. This increase is below a level that would be a perceptible increase and well below a level that would be considered a substantial increase in traffic noise levels. Therefore, the proposed project would not double average daily trips on North Foothill Boulevard adjacent to the project site and would not generate 3 dBA increase in traffic noise levels. Thus, the proposed project would not result in a substantial permanent increase in ambient noise levels from project-generated traffic trips, and mobile source operational noise impacts would be less than significant.

b) Generation of excessive groundborne vibration or groundborne noise levels?

Less than significant impact. A significant impact would occur if the proposed project would generate groundborne vibration or groundborne noise levels in excess of established standards. For determining construction-related vibration impacts, the FTA Construction Vibration Impact Criteria are utilized. The FTA has established industry-accepted standards for vibration impact assessment in its Transit Noise and Vibration Impact Assessment Manual, dated September 2018.

Groundborne noise is generated when vibrating building components radiate sound, or noise generated by groundborne vibration. In general, if groundborne vibration levels are do not exceed levels considered to be perceptible, then groundborne noise levels would not be perceptible in most

⁷⁴ Institute of Transportation Engineers (ITE) Trip Generation Manual, 11th Edition. 2021.

interior environments. Therefore, this analysis focuses on determining exceedances of groundborne vibration levels.

In extreme cases, excessive groundborne vibration has the potential to cause structural damage to buildings. Common sources of groundborne vibration include construction activities such as blasting, pile driving and operating heavy earthmoving equipment. Construction vibration impacts on building structures are generally assessed in terms of inches per second (in/sec) peak particle velocity (PPV).

Short-term Construction Vibration Impacts

For purposes of this analysis, a significant impact would occur if the proposed project would generate groundborne vibration or groundborne noise levels in excess of the FTA impact assessment criteria for construction (i.e., 0.2 in/sec PPV for buildings of non-engineer timber and masonry construction).

Of the variety of equipment used during construction, the excavators that are anticipated to be used for improvements at the proposed parking area would produce the highest groundborne vibration levels. Excavators produce groundborne vibration levels ranging up to 0.089 in/sec PPV at 25 feet from the operating equipment.

The nearest off-site receptor to the project site is the single-family residences located east of the project site, on North Foothill Boulevard near the proposed Second Street entrance. The façade of this building would be located approximately 90 feet from the nearest construction footprint where the heaviest construction equipment would potentially operate. At this distance, groundborne vibration levels would range up to 0.013 in/sec PPV from operation of the types of equipment that would produce the highest vibration levels. This is below the FTA's Construction Vibration Impact Criteria of 0.2 in/sec PPV for this type of structure, a building of nonengineered timber and masonry construction. Therefore, the impact of short-term groundborne vibration associated with construction to off-site receptors would be less than significant.

Operational Vibration Impacts

A significant impact would occur if the project would generate excessive groundborne vibration levels at sensitive receptors in the project vicinity. Implementation of the proposed project would not include any permanent sources of vibration that would expose persons in the project vicinity to groundborne vibration levels that could be perceptible without instruments at any existing sensitive land use in the vicinity of the project site. Therefore, operational groundborne vibration impacts would be less than significant.

- 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, would the project expose people residing or working in the project area to excessive noise levels?**

No impact. A significant impact would occur if the project would expose people residing or working in the project area to excessive noise levels 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 2 miles of a public airport or public use airport.

The project site is not located within the vicinity of a private airstrip. The nearest public airport to the project site is the Cloverdale Municipal Airport, located approximately 2 miles southeast of the project site. The project site is located outside of the 55 dBA CNEL airport noise contours of this closest airport. While aircraft noise is occasionally audible on the project site from aircraft flyovers, aircraft noise associated with nearby airport activity would not expose people residing or working near the project site to excessive noise levels. Therefore, implementation of the proposed project would not expose persons residing or working in the project vicinity to noise levels from airport activity that would be in excess of normally acceptable standards for the proposed land use development, and no impact would occur.

Mitigation Measures

None required.

Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
2.14 Population and Housing				
<i>Would the project:</i>				
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?	☐	☐	☐	☒

Environmental Evaluation

Setting

As of 2024, the City had a population of 8,710, a decrease of 3.32 percent from 2020.⁷⁵ The City currently provides 1,849 jobs, one of the lowest jobs to housing units ratios in the County and seeks to improve these through localized job growth. Currently, approximately 14 percent of the City's workforce is employed in natural resources, construction, and maintenance operations.⁷⁶

Would the project:

- 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)?**

No Impact. Unplanned direct population growth would occur if the proposed project results in population growth not considered by the City in its General Plan. The proposed project would establish a conservation easement across three undeveloped parcels within the City's SOI, which would provide recreational opportunities and preserve biological, visual, and agricultural resources. The Open Space Preserve would serve the existing residents in area. The project site would be used for recreational purposes and the proposed project would not add new housing. In addition, the Open

⁷⁵ California Department of Finance. 2025. E-5 Population and Housing Estimates for Cities, Counties, and the State, 2020–2024, with 2020 Census Benchmark. May.

⁷⁶ City of Cloverdale. 2023. Housing Element Update. April.

Space Preserve would not add new jobs, and the Preserve would be served by the City's existing employees and maintenance staff. Therefore, the proposed project would not induce substantial unplanned direct population growth within the City.

Unplanned indirect population growth would occur if the project expanded infrastructure and extended roadways that would result in unplanned growth. The proposed project would include the construction of internal trails/roads, removal and replacement of culverts, and improvements at West Second Street entrance to allow for emergency vehicle access. The proposed project would not require the extension of City roadways or infrastructure. As such, the proposed project would not result in substantial indirect unplanned growth.

The proposed project would not result in either direct or indirect population growth. Thus, there would be no impact.

b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

No Impact. The project site consists of open space, trees, a vacant open-walled shed and trailer, and roads/trails and does not contain residences or businesses. Therefore, the proposed project would not result in the displacement of people or housing and does not necessitate the construction of housing elsewhere. As such, there would be no impact.

Mitigation Measures

None required.

Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
2.15 Public Services <i>Would the project 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:</i>				
a) Fire protection?	☐	☐	☒	☐
b) Police protection?	☐	☐	☒	☐
c) Schools?	☐	☐	☐	☒
d) Parks?	☐	☐	☐	☒
e) Other public facilities?	☐	☐	☐	☒

Environmental Evaluation

Setting

Cloverdale Fire Protection District provides fire services for the City. The Cloverdale Fire Protection District protects over 75 square miles in northern Sonoma County, including the City.

The Cloverdale Police Department provides protection services for the City. The Cloverdale Police Department is split into four divisions: Administration, Auxiliary Services, Communications and Records, and Field Services and Investigations. The Dispatch Unit staffs five full-time Public Safety Dispatchers/Records Technicians. The Patrol Division staffs three sergeants and 10 officers and runs a K-9 Unit. The Police Station is approximately 0.53 mile east of the project site.

Cloverdale Unified School District (CUSD) provides education throughout the City. CUSD serves a maximum of 1,480 students at its four schools: Jefferson Elementary School (pre-K–4), Washington School (5–8), Cloverdale High School (9–12), and Johanna Echols–Hansen Continuation High (11–12). The closest school to the project site is Washington School, located approximately 0.32 miles to the southeast.

The City maintains 44.3 acres of active use parkland including several different types of parks with various uses. Sonoma County Regional Parks and the City jointly manage 58.2 acres of passive open space. The closest parkland to the project site is Cloverdale City Park, approximately 200 feet to the east. Section 16, Recreation, details City parks and recreational facilities at greater length.

The Cloverdale Regional Library is part of the Sonoma County Library System and is approximately 0.5 mile east of the project site.

Would the project 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:

a) Fire protection?

Less than significant impact. The Cloverdale Fire Protection Station (301 Sunrise Drive) is located 1.6 miles to the north of the project site. The CAL FIRE Sonoma Lake Napa Unit—Cloverdale (1001 South Cloverdale Boulevard) is located approximately 1.12 miles southeast of the project site. The project site is located in excess of an 8-minute response time from the nearest fire station; according to the Cloverdale Fire Protection District, this exceeds local and national standards for fire service delivery.⁷⁷ These are existing conditions not caused by the proposed project.

The proposed project would be accessed via a proposed entrance off the intersection of West Second Street and North Foothill Boulevard. Measurements for the proposed entrance would be designed to be consistent with requirements for ingress and egress stipulated by the Cloverdale Municipal Code Chapter 15.14, including Sections 503.2.4 and 503.4 for emergency vehicle access. Therefore, the proposed project would comply with Policy PS 5-12 of the General Plan requiring incorporation of emergency vehicle access for proposed development.

The proposed project is already within the Cloverdale Fire Protection District and would include maintenance of an existing shaded fuel brake between the conservation space and the residences along Port Circle. The existing use at the project site would not change. Therefore, impacts would be less than significant.

b) Police protection?

Less than significant impact. As previously mentioned in Section 2.14, Population and Housing, the proposed project would facilitate conservation and open space; it would not result in either direct or indirect population growth. It would not change the existing uses of the area. Therefore, the proposed project would not impact demands on police services outside of the scope of the General Plan. Therefore, impacts would be less than significant.

⁷⁷ FirstCarbon Solutions (FCS). 2020. Draft Baumgardner Ranch Development Project Initial Study/Mitigated Negative Declaration. February.

c) Schools?

No Impact. As previously mentioned, the proposed project would be implemented for conservation aims and would not either directly or indirectly impact population growth. Thus, there would be no impact.

d) Parks?

No Impact. The proposed project is intended to facilitate recreational use through the installation of trail facilities and accessibility improvements, including the creation of a new parking area. However, since the City General Plan has designated the project site as CF and the project site has been pre-zoned CF pending annexation into the City, the proposed project is not expected to increase demand on park resources beyond what is projected for in the General Plan. Thus, impacts would be less than significant.

e) Other public facilities?

No Impact. The proposed project would not result in either direct or indirect population growth and would thus not increase demand on library services. Therefore, there would be no impact.

Mitigation Measures

None required.

Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
2.16 Recreation				
a) Would the project 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) Does the project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?	☐	☐	☒	☐

Environmental Evaluation

Setting

The City currently maintains 44.3 acres of active use parkland, including three neighborhood and two community parks, three active use open spaces, and two community centers.⁷⁸ Sonoma County Regional Parks and the City jointly manage the 58.2 acres of passive open space in River Park and 250 acres in the Porterfield Creek Open Space Preserve. Upon annexation into the City, the proposed project would increase the City's provision of passive open space to 22.2 acres per 1,000 residents by five-fold, from 4.9 acres per 1,000 residents, furthering the City's current exceedance of its goal of 1.5 acres of open space per 1,000 residents.⁷⁹

- a) Would the project 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?**

Less than significant impact. The proposed project would be confined to the development of a new Open Space Preserve, to be annexed into the City under the zoning use CF. The proposed project would therefore be designed to accommodate recreational uses and would thus reduce, not increase, the use of other recreational facilities in the area.

While the proposed project would not include the installation of new restroom facilities and would thus require that visitors use nearby restroom facilities located in nearby Cloverdale City Park, 0.11 mile

⁷⁸ City of Cloverdale. 2009. City of Cloverdale General Plan, page 61. May. Amended January 28, 2015.

⁷⁹ Ibid.

east of the project site, this would not be expected to significantly increase demand on park facilities. As noted by the City, the proposed project would result in no greater than 25 park visitors daily, both during weekdays and weekends.⁸⁰ This minimal increase in park users to the area would thus result in nominal increases to nearby park facilities, thereby avoiding the physical deterioration of those facilities. Impacts would be less than significant.

b) Does the project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?

Less than significant impact. The proposed project would involve the construction of approximately 0.94 miles of new multiuse trail, primarily within the northern and central regions of the project site. Given that this would also involve the closure of approximately 0.90 mile of unused trails in the western and southeastern regions of the project site, the proposed project would not result in net loss of vegetation and would require only minor grading, minimizing physical disturbance. Furthermore, the proposed parking area, located in the southeastern portion of the project site, would also involve only minor grading, occurring over a relatively flat, previously graded terrain previously used to house temporary office structures. Therefore, the proposed project would result in minimal physical effects on the environment and impacts would be less than significant.

Mitigation Measures

None required.

⁸⁰ Figures provided through correspondence with City.

Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
2.17 Transportation				
<i>Would the project:</i>				
a) Conflict with a program plan, ordinance or policy of the circulation system, including transit, roadway, bicycle and pedestrian facilities?	☐	☐	☒	☐
b) Would the project 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?	☐	☐	☒	☐

Environmental Evaluation

Setting

This section includes a discussion of the existing transportation setting in the project area. The existing roadway network, including roadways that provide regional and local access to the site, as well as the existing transit, bicycle, and pedestrian facilities in the project area, are described below.

Existing Roadway Network

Regional Access

US-101 is a four-lane highway that extends north to south within the eastern side of the City. US-101 is a heavily traveled highway connecting San Francisco to coastal regions to the north (Marin County and Sonoma County), south (San Mateo County and Santa Cruz County), and beyond. Access to the project area is provided via an interchange at Citrus Fair Drive.

Local Access

Arterials

Arterials are generally classified by the City as roadways carrying large volumes over long distances. The primary arterial in the project area is described below.

Cloverdale Boulevard

Cloverdale Boulevard is a north–south arterial, generally with one to two lanes in each direction, connecting SR-128 in the north to Dutcher Creek Road in the south. In the project vicinity, North Cloverdale Boulevard provides access to the site via its intersection with West Second Street, which provides direct access to the project site.

Collectors

The City generally classifies collectors as roadways that carry local area traffic to the arterial system. The primary collectors in the project area are described below.

North Jefferson Street

North Jefferson Street is primarily a north–south collector with one lane in each direction connecting the western city limits to East First Street to the south. North Jefferson Street provides access to the site via its intersection with West Second Street, which provides direct access to the project site.

South Franklin Street

South Franklin Street is a north–south collector with one lane in each direction connecting North Franklin Street and West First Street to South Cloverdale Boulevard.

West Cherry Creek Road

West Cherry Creek Road is a one lane, east–west collector connecting the western city limits to South Cloverdale Boulevard. West Cherry Creek Road connects to Foothill Boulevard, which will include a future pedestrian access to the project site.

Local Streets

Local roads/streets connect blocks and land parcels, and the primary emphasis is on land access. In most cases, local streets connect to other local roads/streets and collectors. In some cases, local streets connect to minor arterials.

North Franklin Street

North Franklin Street is a northwest local street, with one lane in each direction, that extends from West First Street to its intersection with West Second Street, which provides direct access to the project site.

West Second Street

West Second Street is a local street, with one lane in each direction, that runs from North Cloverdale Boulevard (an arterial roadway) to North Foothill Boulevard. Access to the project site is provided via the West Second Street Soda Springs Open Space Preserve gate entrance at this intersection. The site is currently accessed by the City and maintenance staff and is not currently open to the public.

Foothill Boulevard

Foothill Boulevard is a north–south local road, with one lane in each direction, which runs from West Cherry Creek Road to where Foothill Boulevard terminates, approximately 625 feet north of Merlot Drive. Future pedestrian access to the site would be located approximately 400 feet north of Merlot Drive.

Existing Transit, Bicycle, and Pedestrian Facilities

The City has bus and rail service provided by three transit providers: Sonoma County Transit, Amtrak, and Sonoma-Marín Area Rail Transit (SMART). Table 7 shows operational information for the City’s transit services. The nearest transit stop to the project site is a bus stop located on South Cloverdale Boulevard and South Street, approximately 0.5 miles east of the site.

Table 7: Public Transit Service and Facilities

Service	Description
Cloverdale Shuttle, Local 68	Provides local weekday shuttle service within the City. Route 68 primarily travels along Cloverdale Boulevard beginning in the north at Champlain Avenue and ending in the south at Treadway Drive.
Sonoma County Transit, Route 60	Provides daily bus service to and from the City with connections to the greater Sonoma County Area.
Amtrak Thruway Service	Provides intercity bus service to the City via the Cloverdale Depot located at Citrus Fair Drive and Asti Road.
Planned Sonoma-Marín Area Rail Transit (SMART)	SMART consists of 70 miles of rail service connecting Sonoma and Marín Counties and serving 16 stations from Cloverdale in Sonoma County to the San Francisco-bound ferry terminal in Larkspur, Marín County. Currently, SMART serves various stations in Larkspur, San Rafael, Marín, Novato, Petaluma, Cotati, Rohnert Park, Santa Rosa, and Sonoma County. Windsor, Healdsburg, Petaluma North, and Cloverdale facilities are planned but not completed currently. The Cloverdale station is expected to be completed as funding becomes available, the timing of which is unknown.
Source: City of Cloverdale. 2024. Sonoma County Transit. 2024.	

The Caltrans Highway Design Manual⁸¹ classifies bikeways into four categories:

- Class I Bikeway (Bike Path)—Provides a completely separate facility for the exclusive use of bicycles and pedestrians with crossflow by vehicles minimized.
- Class II Bikeway (Bike Lane)—Provides a striped lane for one-way bike travel on a street or highway.

⁸¹ California Department of Transportation (Caltrans). 2019. Highway Design Manual, Seventh Edition. Website: <https://dot.ca.gov/programs/design/manual-highway-design-manual-hdm>. Accessed June 9, 2025.

- Class III Bikeway (Bike Route)—Provides for shared use with pedestrian or motor vehicle traffic.
- Class IV Bikeway (Separated Bikeway)—Provides for the exclusive use of bicycles and includes a separation (e.g., grade separation, flexible posts, inflexible physical barrier, or on-street parking) required between the separated bikeway and the through vehicular traffic.

Based on Exhibit 3.1-3 in the City's Circulation Element Subsequent EIR, bikeways in the project vicinity include Class II bicycle lanes on Foothill Boulevard, south of West First Street. In addition, Class III bicycle lanes are located West First Street, East of South Franklin Street.

Pedestrian facilities are present throughout the City to varying degrees. They consist of sidewalks, trails, crosswalks, curb ramps, and signals. Pedestrian facilities in the site's vicinity include a sidewalk located on the southern portion of West Second Street and the western portion of South Foothill Boulevard.

Regulatory Framework

Senate Bill 743

In November 2017, the OPR (now the LCI) released a technical advisory containing recommendations regarding the assessment of VMT, proposed thresholds of significance, and potential mitigation measures for lead agencies to use while implementing the required changes contained in SB 743. Also in November 2017, LCI released the proposed text for Section 15064.3, Determining the Significance of Transportation Impacts, which summarized the criteria for analyzing transportation impacts for land use projects and transportation projects and directs lead agencies to "choose the most appropriate methodology to evaluate a project's VMT, including whether to express the change in absolute terms, per capita, per household or in any other measure." LCI recommends that for most instances a per service population threshold should be adopted and that a 15 percent reduction below that of existing development would be a reasonable threshold.

The LCI's technical advisory notes that many agencies use screening thresholds to identify when a project should be expected to cause a less than significant impact without conducting a detailed study. The technical advisory also suggests that lead agencies may screen out VMT impacts using project size, VMT maps for residential and office projects, and transit availability.

Screening Threshold for Small Projects

The technical advisory states that many local agencies have developed screening thresholds to indicate when detailed analysis is needed. Based on the technical advisory, assuming there is no substantial evidence indicating that a project would generate a potentially significant level of VMT, or inconsistency with a Sustainable Communities Strategy (SCS) or General Plan, projects that generate or attract fewer than 110 trips per day may generally be assumed to cause a less than significant transportation impact.

Would the project:

a) Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

Less than significant. The proposed project would include the construction of trails/roads within the Open Space Preserve which would primarily be used by pedestrians for hiking and recreation. The proposed project would add a pedestrian access point to the Preserve on South Foothill Boulevard. The City's Circulation Element includes policies to improve the City's roadways in compliance with the Complete Streets Act. The Complete Streets Act requires any substantive revision of the Circulation Element of a City or County's General Plan to identify how it will safely accommodate the circulation of all users of the roadway including pedestrians, bicyclists, children, seniors, individuals with disabilities, and transit riders, as well as motorists.

Circulation Element Policy CE 1-1 requires the development and maintenance of the network of freeways, arterials, collectors, and local streets with adequate capacity and safety to address complete streets.

The Circulation Element also includes policies to promote bicycle safety when infrastructure improvements are made in accordance with the objectives of Plan Bay Area 2050, the Complete Streets Act, and the Caltrans District 4 Bike and Pedestrian Plans. For example, the Circulation Element Implementation CE 1-1.a (under Policy CE 1-1) requires the City to design, construct, upgrade, and maintain the bicycle and pedestrian circulation system according to the functions they are intended to serve. Further, Circulation Element Policies CE 3-1 and CE 3-2 require City streets to be designed as complete streets, which integrate walking, biking, transit uses, green infrastructure, and natural features.

The proposed project would improve pedestrian access to the site by adding an entrance to the Preserve on Foothill Boulevard. The project would not require improvements that would interfere with the roadway, bicycle, pedestrian, and transit policies established in the Circulation Element. Therefore, the proposed project would not conflict with a program plan, or policies addressing the City's circulation system, including transit, roadway, bicycle and pedestrian facilities. As such, the impact would be less than significant.

b) Would the project conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?

Less than significant impact. As described above, CEQA Guidelines Section 15064.3 requires an analysis of transportation impacts based on VMT. CEQA Guidelines Section 15064.3, subdivision (b), gives local agencies discretion to select the most appropriate methodologies and significance thresholds for evaluating VMT. The City analyzes project VMT impacts based on the LCI's technical advisory.

Based on the City's data for a similar Open Space Preserve, the Porterfield Creek Preserve in the City of Cloverdale, the proposed Soda Springs Open Space Preserve would have an average of 25

pedestrian users per day. City-owned vehicles and maintenance staff may also travel to and from the Preserve, resulting in four vehicle trips per day. The proposed project would, therefore, would result in approximately 54 vehicle trips per day. The project would generate less than 110 vehicle trips, would not generate significant VMT, and would not interfere with the implementation of an SCS such as Plan Bay Area 2050.⁸² As such, the proposed project would meet LCI's VMT screening threshold for small projects. Therefore, the proposed project would not result in a significant VMT impact and the impact would be less than significant.

c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

Less than significant impact. The proposed project would construct new roads/trails which would primarily be used for pedestrian access. City-owned vehicles and maintenance staff vehicles could access the site via the West Second Street entrance. The proposed roads/trails would be designed to be consistent with the City's standards for driveway widths (a minimum of 20 feet wide at the West Second Street access point) and internal roads/trails for Open Space Preserves. The proposed project would not increase hazards due to geometric design features or incompatible uses. As such, the impact would be less than significant.

d) Result in inadequate emergency access?

Less than significant impact. Emergency vehicles would access the site via the West Second Street entrance (refer to Exhibit 4). All roads and the West Second Street access point would be designed for fire safety accessibility, conforming with the requirements of the California Fire Code and Cloverdale Municipal Code Chapter 15.14 requirements for driveway minimum width of not less than 20 feet. In addition, the City's Fire Department will review the project's site plans prior to project approval to ensure the proposed project would include adequate emergency access. As such, the proposed project would provide adequate emergency access and would not conflict with California Fire Code standards. Thus, impacts would be less than significant.

Mitigation Measures

None required.

⁸² Metropolitan Transportation Commission (MTC). Plan Bay Area 2050. Website: <https://mtc.ca.gov/planning/long-range-planning/plan-bay-area-2050>. Accessed June 9, 2025.

Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
2.18 Utilities and Service Systems				
<i>Would the project:</i>				
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☒	☐
b) Have sufficient 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 adequate 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) Comply with federal, State, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☒	☐

Environmental Evaluation

Setting

The proposed project would not entail the construction or extension of new or existing utility lines. Although the proposed project consists of a network of culverts and drainage ditches, these features are above ground and used to divert surface water to manage surface water flow and to prevent trail erosion; two culverts would be removed and replaced as part of the proposed project to prevent trail

erosion. As such, the proposed project would not result in new and expanded sewer and water infrastructure, expanded wastewater collection services, or the installation of new electric, natural gas, or telecommunications lines. All existing utility lines, for natural gas and electricity, would continue to be provided by PG &E, which would continue to be serviced by Sonoma Clean Power. The proposed project would locate several wastebins within the vicinity of the proposed parking area to manage solid waste. Any solid waste would be collected by the City and transported to the nearest landfill with available capacity. The closest landfills within the vicinity of the project site are the Portero Hills Landfill (69 miles); the Kellery Canyon Landfill (81 miles); and the Vasco Road Sanitary Landfill (101 miles).

Would the project:

- a) **Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?**

Less than significant impact. As previously mentioned, the proposed project is a conservation easement. The proposed project would not require or result in the relocation or construction of new or expanded water, wastewater treatment, electric power, natural gas, or telecommunications facilities. The existing on-site drainage system, consisting of culverts and drainage ditches, is above ground and would involve only minor alterations as part of the proposed project. This would include the removal of several large culverts to prevent trail erosion, thus minimizing environmental impacts. Since the proposed project would only involve minor alterations to the existing utility system to reduce environmental impacts and would not involve the construction or relocation of any other utility facilities, impacts would be less than significant.

- b) **Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?**

Less than significant impact. The proposed project would establish a conservation easement over the site. It would not result in the development of new structures and would thus not require the provision of additional water supplies following the implementation of the proposed project. Furthermore, the proposed project would be serviced by an existing on-site drainage system consisting of culverts and ditches, which would effectively manage water flow, thereby reducing “pooling” or contamination of existing water sources on-site. Therefore, impacts would be less than significant.

- 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?**

Less than significant impact. As previously mentioned, the proposed project would not result in an expansion of wastewater treatment or services. The proposed project would involve the removal of several existing on-site culverts to prevent trail erosion, but these modifications would be restricted to

only a few large culverts to prevent trail erosion and are not projected to have any significant impact on the current on-site system for managing wastewater. Thus, the proposed project would not result in exceedance of adequate capacity for managing the project site's wastewater demands, which would be minimal as the site would simply be reclassified as a conservation feature. Therefore, impacts would be less than significant.

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?

Less than significant impact. As noted under Section 2.16, Recreation, the proposed project would be expected to generate a maximum of 25 visitors per day to the site.⁸³ This nominal number of visitors, which would be expected to engage in largely recreational activities involving hiking and movement, is not expected to result in the significant deposition of solid waste, let alone one which would exceed State or local standards for ensuring adequate capacity for existing solid waste facilities. Furthermore, the City would provide one solid waste bin adjacent to the proposed parking area to manage solid waste needs. Therefore, impacts would be less than significant.

e) Comply with federal, State, and local management and reduction statutes and regulations related to solid waste?

Less than significant impact. As previously mentioned, the proposed project would result in a nominal number of visitors, approximately 25 per day.⁸⁴ This number would result in an insignificant amount of solid waste per the proposed project's intended use, which would be to maximize recreational activities involving hiking and other movement. Thus, the provision of a single solid waste bin adjacent to the proposed parking area would be sufficient for the proposed project's solid waste needs and the proposed project would be compliant with federal, State, and local management reduction statutes and regulations for solid waste. Impacts would be less than significant.

Mitigation Measures

None.

⁸³ Figures provided through correspondence with City.

⁸⁴ Ibid.

Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
2.19 Wildfire <i>If located in or near State Responsibility Areas or lands classified as very high fire hazard severity zones, would the project:</i>				
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?	☐	☐	☒	☐

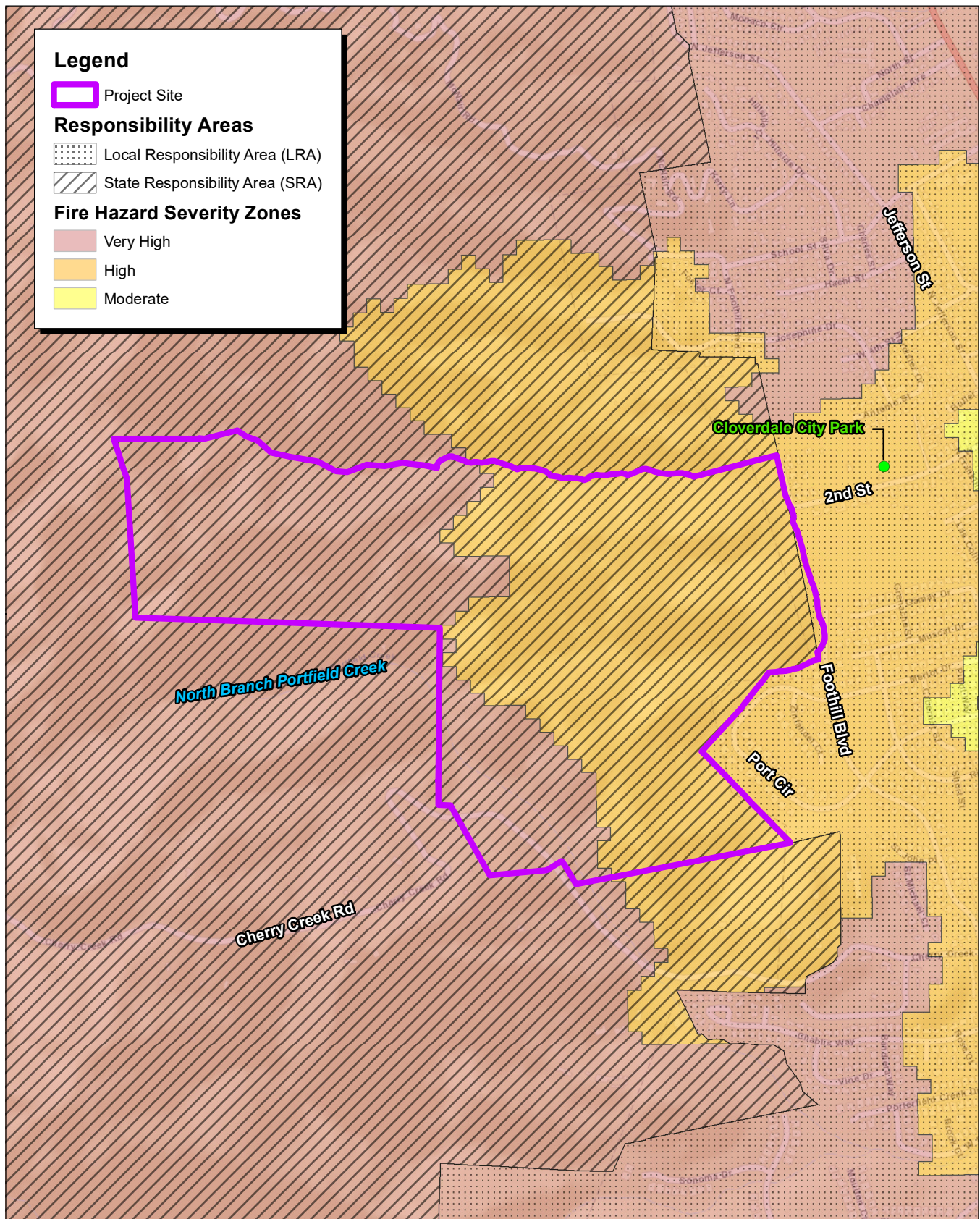
Environmental Evaluation

Setting

An SRA refers to areas of the State in which the financial responsibility of preventing and suppressing fires has been determined to be primarily the responsibility of the State. The project site is located in a designated as a High Fire Hazard Severity Zone in an SRA. It is surrounded by areas of similar or higher fire hazard severity, including a Very Fire Hazard Severity Zone to the southeast (refer to Exhibit 6).⁸⁵

⁸⁵ California Department of forestry and Fire Protection (CAL FIRE). Fire Hazard Severity Zone (FHSZ) Viewer. Website: <https://experience.arcgis.com/experience/6a9cb66bb1824cd98756812af41292a0>. Accessed April 16, 2025.

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Source: ESRI Aerial Imagery, County of Sonoma, CAL FIRE FRAP, City of Cloverdale.



Exhibit 6 Fire Hazard Severity Zones

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Would the project:

a) Substantially impair an adopted emergency response plan or emergency evacuation plan?

Less than significant impact. The City's Public Health and Safety Element identifies emergency evacuation routes for each of its identified emergency evacuation zones within City boundaries, as shown in Figure 10-26 of the General Plan.⁸⁶ The proposed project is closest to Evacuation Zone 3, which borders the eastern boundary of the project site, and identifies Healdsburg Avenue as a primary emergency evacuation route and West First Street as a secondary emergency evacuation route.

During project construction, construction vehicles and equipment would access the project site via the proposed entrance on West Second Street from Cloverdale Avenue on the project site's eastern boundary. The proposed project would involve only minor accessibility improvements to surrounding streets (e.g., curb striping, signage) and would thus not require diversion routes or temporary street closures along designated evacuation routes, including Healdsburg Avenue and West First Street. As a result, the proposed project would not impair emergency evacuation because access to the main evacuation route in the project area, Healdsburg Lane and West First Street, would still be accessible. Therefore, impacts would be less than significant.

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?

Less than significant impact. The northwest portion of the project site is interspersed with oak woodland and forest habitat, at 780 MSL and 1100 MSL respectively, whereas the southern and eastern portions of the site comprise grassland and forest habitat at 390 MSL and 473 MSL. As such, the slope of the project site is a contributing factor to wildfire risk.

The University of California Davis's McLaughlin Reserve, located approximately 33 miles east of the project site, is an open space reserve with a field station that monitors weather data, including average wind speeds. The McLaughlin Reserve is located in an area with a similar climate as the City and as such, similar average wind speeds. At the McLaughlin Reserve/Knoxville Creek Station, the average wind speed from April 2024 to April 2025 was 5.9 mph.⁸⁷ The project site would be expected to experience similar wind speed conditions as experienced at the McLaughlin Reserve/Knoxville Creek Station and would thus not be susceptible to significantly high wind speeds that could exacerbate risk due to the spread of wildfires.

⁸⁶ City of Cloverdale. 2021. General Plan. Chapter 10: Public Health and Safety Element Background Report. Website: https://www.cloverdale.net/DocumentCenter/View/4949/Cloverdale_GP_BG_Chap_10_PHS_2021-11-10. Accessed April 16, 2025.

⁸⁷ Western Regional Climate Center. 2019. Knoxville Creek California Station Daily Summary. Website: <https://wrcc.dri.edu/cgi-bin/rawMAIN.pl?caCKNO>. Accessed April 16, 2025.

The recreational uses at the project site would not change. As such, the proposed project would not result in increased exposure to wildfire risks. In fact, part of the proposed project is to maintain an existing shaded fuel break between the conservation space and the residences along Port Circle, reducing wildfire risks. As such, impacts would be less than significant.

- 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?**

Less than significant impact. The proposed project would not require any modification to existing sewer lines, electricity, or natural gas lines. The proposed project would involve the maintenance of an existing fuel break in partnership with the Northern Sonoma County Fire Department. This is expected to reduce wildfire risk. Vegetation management typically does not result in ongoing impacts to the environment. Therefore, impacts would be less than significant.

- 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?**

Less than significant impact. The last fire to occur within the project site was in 1945; since then, the project site has not been affected by previous wildfires in recent years that could have resulted in drainage changes or loss of vegetation.⁸⁸ Although the project site contains steep slopes that range from 780 MSL to 1100 MSL, and thus risks of landslides, the majority of these slopes would be preserved as open space. Additionally, the closure of the 0.90 miles of existing trail and the construction of 0.94 miles of new trail would not result in a net loss in vegetation. Furthermore, modifications to the existing on-site drainage system would be limited to improvements to existing on-site features to prevent post-fire slope instability or runoff, including the removal of several large culverts to prevent trail erosion. Thus, impacts related to flooding and landslide hazards due to post-fire slope instability or drainage changes would be less than significant.

Mitigation Measures

None.

⁸⁸ California Department of Fire (CAL FIRE). California Historical Fire Perimeters ArcGIS Map Viewer. Website: <https://gis.data.ca.gov/maps/c3c10388e3b24cec8a954ba10458039d/about>. Accessed April 16, 2025.

Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
2.20 Mandatory Findings of Significance				
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐	☐
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☐	☒	☐
c) Does the project have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☒	☐

Environmental Evaluation

- a) **Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?**

Less than significant impact with mitigation incorporated. The proposed project may result in impacts associated with air quality, GHG emissions, biological, cultural, geology and soils, hazards and hazardous materials, noise, and transportation resources that could be significant if left

unmitigated. Implementation of mitigation measures as outlined in the respective sections of this Draft IS/MND would fully mitigate all potential impacts on these resources to levels that are less than significant.

- b) Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?**

Less than significant cumulative impact with mitigation incorporated. Implementation of mitigation as outlined in this Draft IS/MND would reduce all potentially significant impacts to less than significant. Given the proposed project’s size and impacts with associated mitigation measures, the incremental effects of this project are not considerable relative to the effects of past, current, and probable future projects. Therefore, the proposed project would not result in cumulatively considerable impacts and impacts would be less than significant.

- c) Does the project have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?**

Less than significant impact with mitigation incorporated. As described throughout the preceding checklist portion of this Draft IS/MND, the proposed project would not have any substantial environmental effects on human beings, either directly or indirectly. All impacts identified throughout this document either do not require mitigation or would be mitigated to levels that are less than significant. The proposed mitigation measures, once implemented, would ensure that no substantial adverse effects on human beings would result from the project. Therefore, impacts would be less than significant with mitigation.

Mitigation Measures

Implement MM AIR-1, MM BIO-1, MM CUL-1, MM GEO-1a, MM GEO-1b, MM GEO-1c, and MM HAZ-1.

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