Quail Valley Subarea 4 Project

Draft Programmatic Environmental Impact Report

SCH Number 2025090047

Lead Agency:

Eastern Municipal Water District

2270 Trumble Road

Perris, CA 92570

April 3, 2026

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Prepared for:

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Perris, CA 92570

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April 3, 2026

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List of Abbreviated Terms

°F	degrees Fahrenheit
µg/m^3	micrograms per cubic meter
2014 CAP	2014 Subregional Climate Action Plan
2017 Scoping Plan	2017 Climate Change Scoping Plan Update, the Strategy for Achieving California's 2030 Greenhouse Gas Target
2022 CAP Update	2022 Subregional Climate Action Plan
2022 Scoping Plan	2022 Scoping Plan Update for Achieving Carbon Neutrality
AAQS	Ambient Air Quality Standards
AB	Assembly Bill
ACC	Advanced Clean Cars
AQMP	air quality management plan
B.P.	Before Present
BACT	Best Available Control Technology
Basin	South Coast Air Basin
BAU	business as usual
BMP	Best Management Practice
BUG	Backlight, Uplight, and Glare
CAA	Clean Air Act
CAAQS	California Ambient Air Quality Standards
CAFE	Corporate Average Fuel Economy
CAL FIRE	California Department of Forestry and Fire Protection
Cal/OSHA	California Occupational Safety and Health Agency
CalEEMod	California Emissions Estimator Model
CALGreen	California Green Building Standards Code
Caltrans	California Department of Transportation
CAP	Climate Action Plan
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CBC	California Building Code
CBI	Conservation Biology Institute
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFC	California Fire Code
CFGC	California Fish and Game Code
CFR	Code of Federal Regulations
CGS	California Geological Survey
CH_4	methane

City	City of Menifee
CNEL	Community Noise Equivalent Level
CNPS	California Native Plant Society
CO	carbon monoxide
CO_2	carbon dioxide
Cortese List	Hazardous Waste and Substances Sites
County	Riverside County
CP	concrete pipe
CPUC	California Public Utilities Commission
CRHR	California Register of Historic Resources
CRPR	California Rare Plant Rank
CWA	Clean Water Act
CZMA	Coastal Zone Management Act
DAC	disadvantaged community
dB	decibel
dB(A)	A-weighted decibel
DEH	Department of Environmental Health
District	Eastern Municipal Water District
DOC	California Department of Conservation
DPF	diesel particulate filter
DPM	diesel particulate matter
DTSC	California Department of Toxic Substances Control
DWR	Department of Water Resources
EIR	Environmental Impact Report
EMFAC2025	California Air Resources Board 2025 EMissions FACtor
Energy Code	California Energy Efficiency Standards for Residential and Nonresidential Buildings
EO	Executive Order
EOP	Emergency Operations Plan
ESA	Endangered Species Act
FAR	Federal Air Regulations
FC	federally listed candidate
FE	federally listed endangered
FEMA	Federal Emergency Management Agency
FESA	Federal Endangered Species Act
FHSZ	Fire Hazard Severity Zone
FMMP	Farmland Mapping and Monitoring Program
FPT	federally listed proposed threatened
FT	federally listed threatened
FTA	Federal Transit Authority
Geotracker	State Water Resources Control Board Geotracker Database
GHG	greenhouse gas
GWP	global warming potential
HCP	Habitat Conservation Plan
HMBEP	Hazardous Materials Business Emergency Plan

HSC	State of California Health and Safety Code
HU	Hydrologic Unit
HWCL	Hazardous Waste Control Law
I-15	Interstate 15
I-215	Interstate 215
IEPR	Integrated Energy Policy Report
in/sec	inch per second
ITS	Incidental Take Statement
kWh	kilowatt-hours
L_{eq}	hourly equivalent sound level
LHMP	Local Hazard Mitigation Plan
L_{max}	maximum equivalent noise level
L_{PW}	sound power
LRA	Local Responsibility Area
LS	lift station
LST	Localized Significance Threshold
MATES	Multiple Air Toxics Exposure Study
MBTA	Migratory Bird Treaty Act
MLD	Most Likely Descendent
MMT CO_2E	million metric tons of carbon dioxide equivalent
MSHCP	Multiple Habitat Conservation Program
MT CO_2E	metric tons of carbon dioxide equivalent
MWD	Metropolitan Water District of Southern California
N_2O	nitrous oxide
NAAQS	National Ambient Air Quality Standards
NAGPRA	Native American Graves Protection and Repatriation Act
NAHC	Native American Heritage Commission
NEHRP	National Earthquake Hazards Reduction Program
NETR	Nationwide Environmental Title Research, LLC.
NFIP	National Flood Insurance Program
NHPA	National Historic Preservation Act
NHTSA	National Highway Traffic Safety Administration
NO_2	nitrogen dioxide
NOP	Notice of Preparation
NO_X	oxides of nitrogen
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places
O_3	ozone
Pb	lead
PEIR	Program Environmental Impact Report
PM_{10}	particulate matter less than 10 microns
$PM_{2.5}$	particulate matter less than 2.5 microns
ppb	parts per billion
ppm	parts per million

PPV	peak particle velocity
PRC	Public Resources Code
proposed Project	Quail Valley Subarea 4 Project
RCFCWCD	Riverside County Flood Control and Water Conservation District
RCFD	Riverside County Fire Department
RCHCA	Riverside County Habitat Conservation Authority
RCRA	Resource Conservation and Recovery Act
RECON	RECON Environmental, Inc.
ROG	reactive organic gases
ROW	right-of-way
RPS	Renewable Portfolio Standard
RTA	Riverside Transit Agency
RTP	Regional Transportation Plan
RWQCB	Regional Water Quality Control Board
RWRF	Regional Water Reclamation Facilities
SB	Senate Bill
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCE	Southern California Edison
SCIC	South Coastal Information Center
Scoping Plan	*2017 Climate Change Scoping Plan Update, the Strategy for Achieving California's 2030 Greenhouse Gas Target*
SCS	Sustainable Communities Strategy
SGMA	Sustainable Groundwater Management Act
SHMA	Seismic Hazard Mapping Act
SIP	State Implementation Plan
SO_2	sulfur dioxide
SoCalGas	Southern California Gas Company
SO_X	oxides of sulfur
SR	State Route
SRA	State Responsibility Area
SRF	Clean Water State Revolving Fund
SVP	Society of Vertebrate Paleontology
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TAC	toxic air contaminants
TCP	Traffic Control Plan
U.S. EPA	U.S. Environmental Protection Agency
U.S.C.	U.S. Code
USACE	U.S. Army Corps of Engineers
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
VMT	vehicle miles traveled
VOC	volatile organic compounds

WPLT	Western Pluvial Lakes Tradition
WRCOG	Western Riverside Council of Governments
WRCRCA	Western Riverside County Regional Conservation Authority
ZEV	zero-emission vehicle

Executive Summary

S.1 Introduction

This chapter has been prepared pursuant to Section 15123 of the California Environmental Quality Act (CEQA) Guidelines, which states that an Environmental Impact Report (EIR) Summary shall (1) contain a brief summary of the proposed action; (2) identify each significant effect with proposed mitigation measures that would reduce or avoid that effect; (3) identify alternatives that were designed to reduce or avoid identified significant effects; (4) identify areas of controversy known to the Lead Agency including issues raised by agencies and the public; and (5) identify issues to be resolved, including the choice among alternatives and whether or how to mitigate the significant effects.

This Program EIR (PEIR) analyzes the environmental effects associated with the Eastern Municipal Water District (District) Quail Valley Sub-Area 4 Project, referred to herein as "proposed Project." This PEIR (State Clearinghouse Number 2025090047) has been prepared pursuant to CEQA Guidelines Section 15168 to address potential environmental effects associated with construction and operation of the proposed Project. The Quail Valley community in Riverside County has experienced private septic system failures that pose a threat to public health and water quality within the Quail Valley community and downstream in Canyon Lake. As a vital water source, residential area, and recreational destination, Canyon Lake serves the public in multiple capacities.

In response to this public health issue, the District and other key stakeholders (State of California Regional Water Quality Control Board (RWQCB) Santa Ana Region, Riverside County Department of Public Health, Elsinore Valley Municipal Water District, City of Canyon Lake, and City of Menifee (City) have collaboratively explored long-term solutions. The goal of this multi-agency effort is to implement a comprehensive, community-wide sewer collection system that protects water resources, improves public health, and enhances overall quality of life for Quail Valley and Canyon Lake residents.

The proposed Project would result in the construction of a series of gravity sewer lines, force mains, and lift stations to transport wastewater out of the Quail Valley community to be treated by the District's Perris Valley Regional Water Reclamation Facility. All proposed pipelines would be below ground. The proposed lift stations would be primarily below ground, with above-ground features including access hatches, piping appurtenances, electrical control panels, an emergency generator within an enclosure, and other associated equipment enclosed within six-foot-tall perimeter walls.

S.2 Issues to be Resolved by the Decision-Making Body

Pursuant to CEQA Guidelines Section 15123(b)(3), issues to be resolved by the decision-making body include the choice between approving the proposed Project or selecting the No Project Alternative. The decision-making body must consider whether to adopt the mitigation measures identified in this PEIR and the associated Mitigation Monitoring and Reporting Program to ensure their implementation. In addition, the decision-making body must also consider adoption of appropriate

Findings of Fact and a Statement of Overriding Considerations. Finally, the decision-making body must consider implementation factors, including securing funding for the proposed Project, as outlined in Section 3.3.

S.3 Project Alternatives

CEQA Guidelines Section 15126.6 requires that the EIR compare the effects of a "reasonable range of alternatives" to the effects of the proposed Project. The CEQA Guidelines further specify that the alternatives selected should attain most of the basic project objectives and avoid or substantially lessen one or more significant effects of the proposed Project. The "range of alternatives" is governed by the "rule of reason," which requires the EIR to set forth only those project alternatives necessary to permit an informed and reasoned choice by the City, as the Lead Agency, and to foster meaningful public participation (CEQA Guidelines Section 15126.6[f]). CEQA generally defines "feasible" to mean an alternative that is capable of being accomplished in a successful manner within a reasonable period of time, while also taking into account economic, environmental, social, technological, and legal factors.

Project alternatives are evaluated in Chapter 9.0 of this PEIR. While alternative "build" approaches were considered, including variations in pipeline alignments, conveyance configurations, and lift station siting, all such alternatives would require similar construction activities, such as trenching, equipment operation, and temporary site disturbance. As a result, these alternatives would not substantially reduce construction-related noise impacts or other temporary construction impacts identified for the proposed Project.

Conceptual alternatives involving non-traditional or above-ground conveyance methods were also considered but rejected because they would not meet District design or operational standards, would present long-term reliability and public health concerns, and would still require construction activities that would result in similar environmental impacts. In addition, alternatives that would reduce connector pipes by increasing the number of lift stations were considered; however, these alternatives could require additional lift station sites and expanded construction footprints, potentially increasing impacts to biological resources and adjacent land uses, and would not result in a net reduction of the proposed Project's significant impacts prior to mitigation.

No feasible build alternatives were identified that would meet the proposed Project objectives while avoiding or substantially reducing the proposed Project's significant environmental impacts prior to mitigation. Accordingly, the No Project Alternative was selected for detailed analysis in this PEIR.

S.3.1 No Project Alternative

Under the No Project Alternative, the District would not convert Subarea 4 from septic to sewer, and existing private septic systems would remain in use. As discussed in Chapter 3.0, these septic systems are aging and, due to small lot sizes and existing soil and groundwater conditions, are prone to system failures. Under reasonably foreseeable future conditions, continued reliance on private septic systems would likely perpetuate ongoing public health and water quality concerns, including localized raw sewage discharges, within the Quail Valley community and could contribute to adverse

effects on downstream receiving waters, including Canyon Lake, which serves as a potable water source, residential area, and recreational resource.

In addition, continued septic system use under the No Project Alternative could result in ongoing land use constraints, including continuation of the existing building moratorium for Quail Valley issued by the Santa Ana RWQCB in 2005 to prevent further degradation of public health and water quality generated by the conditions described above. Continued reliance on septic systems could also result in the potential for localized wastewater discharged associated with septic system failures. While such conditions would continue to be addressed through existing regulatory oversight and enforcement by responsible agencies, the underlying constraints and risks associated with reliance on individual septic systems would remain.

S.3.2 Environmentally Superior Alternative

CEQA Guidelines Section 15126.6(e)(2) requires an EIR to identify the environmentally superior alternative. Typically, if the No Project Alternative is the environmentally superior alternative, the EIR must identify an environmentally superior alternative from the other alternatives. The project itself may not be identified as the environmentally superior alternative. However, as explained above, there are no feasible build alternatives to the proposed Project. While the No Project Alternative would avoid some construction-related impacts, it would result in greater impacts related to hydrology and water quality and land use as continued use of aging septic systems and associated water quality and land use constraints, would remain. Furthermore, this alternative would not meet any of the project objectives. The proposed Project, by providing a gravity sewer system supported by lift stations, would address these issues and meet the project objectives. Therefore, due to the unique situation associated with the proposed Project, it is identified as the environmentally superior alternative because it provides the greatest overall environmental benefit by eliminating the ongoing risks associated with existing septic systems while achieving the project objectives.

S.4 Summary Table

Table S-1 summarizes the results of the environmental analysis including the potentially significant environmental impacts of the proposed Project and proposed mitigation measures to reduce or avoid these impacts. Impacts and mitigation measures are organized by issue in Chapter 4.0, Environmental Analysis.

Table S-1 Summary of Environmental Impacts			
Threshold	Impact Discussion	Mitigation Measure	Significance After Mitigation
4.1 Aesthetics			
Would the project have a substantial adverse effect on a scenic vista?	The proposed Project would not have a substantial adverse effect on scenic vistas, and impacts would be less than significant.	No mitigation is required.	Less than Significant
Would the project substantially damage scenic resources, including but not limited to trees, rock outcroppings, and historic buildings within a State Scenic Highway?	The proposed Project would not substantially damage scenic resources, including but not limited to trees, rock outcroppings, and historic buildings within a State Scenic Highway, and impacts would be less than significant.	No mitigation is required.	Less than Significant
In non-urbanized areas, would the project 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 points)? If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	The proposed Project would not adversely affect the quality of public views of the proposed Project site and its surroundings, and impacts would be less than significant.	No mitigation is required.	Less than Significant
Would the project create a new source of substantial light or glare which would adversely affect daytime or nighttime views in the area?	The proposed Project would not create a new source of substantial light or glare that would adversely affect day or nighttime views in the area, and impacts would be less than significant.	No mitigation is required.	Less than Significant
4.2 Air Quality			
Would the project conflict with or obstruct implementation of the applicable air quality plan?	The proposed Project would not conflict with or obstruct implementation of the applicable air quality plan, and impacts would be less than significant.	No mitigation is required.	Less than Significant
Would the project 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 standards?	The proposed Project would not result in a cumulatively considerable net increase in emissions of ozone, particulate matter less than 10 microns, or particulate matter less than 2.5 microns, and impacts would be less than significant.	No mitigation is required.	Less than Significant
Would the project expose sensitive receptors to substantial pollutant concentrations?	a. Diesel Particulate Matter–Construction Residential uses in the proposed Project area that are exposed to diesel particulate matter concentrations of 0.01465 micrograms per cubic meter or greater would be exposed to a maximum incremental cancer risk greater than 10 in a million, resulting in a potentially significant impact (Impact AQ-1). b. Diesel Particulate Matter–Freeway Impacts would be less than significant. c. Diesel Particulate Matter–Emergency Generators Impacts would be less than significant. d. Carbon Monoxide Hot Spots Impacts would be less than significant.	a. Diesel Particulate Matter–Construction AQ-1: Tier 4 Construction Equipment with Diesel Particulate Filtration a. The Quail Valley Subarea 4 Project (proposed Project) shall require the construction contractor to provide a construction fleet that uses heavy-duty diesel-powered equipment equipped with Tier 4 Final diesel engines. An exemption from these requirements may be granted by the Eastern Municipal Water District if corresponding reductions in criteria air pollutant emissions are achieved from other construction equipment. b. The proposed Project shall require the construction contractor to provide a construction fleet that uses heavy-duty diesel-powered equipment equipped with diesel particulate filters. c. Construction equipment shall be outfitted with best available control technology devices certified by the California Air Resources Board. A copy of each unit's best available control technology documentation shall be provided to the Eastern Municipal Water District at the time of mobilization of each applicable unit of equipment. b. Diesel Particulate Matter–Freeway No mitigation is required. c. Diesel Particulate Matter–Emergency Generators No mitigation is required. d. Carbon Monoxide Hot Spots No mitigation is required.	a. Diesel Particulate Matter–Construction Impact AQ-1: Less than Significant b. Diesel Particulate Matter–Freeway Less than Significant c. Diesel Particulate Matter–Emergency Generators Less than Significant d. Carbon Monoxide Hot Spots Less than Significant

Table S-1 (cont.) Summary of Environmental Impacts			
Threshold	Impact Discussion	Mitigation Measure	Significance After Mitigation
Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	Operation of the proposed Project would not generate odors adversely affecting a substantial number of people, and impacts would be less than significant.	No mitigation is required.	Less than Significant
4.3 Biological Resources			
Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS?	At this program level of analysis, the impacts summarized in Table 4.3-4 would be potentially significant.	BIO-1: Biological Resource Surveys. Prior to the construction of any project phase or component sited within or adjacent to an undeveloped open space area (i.e., an area supporting naturalized habitat, sensitive habitat, and/or habitat potentially suitable for special-status species), the Eastern Municipal Water District (District) shall retain a qualified biologist to perform a general biological survey/habitat assessment to verify existing biological resources on and adjacent to the Quail Valley Subarea 4 Project (proposed Project) construction areas. The general biological survey/habitat assessment shall occur within 500 feet of the proposed Project components where access is allowed, with binocular surveys conducted to the extent possible in areas where access is not secured. The District shall provide the biologist with a copy of project plans that clearly depict the construction work limits, including construction staging, storage, and access areas, to determine which specific portion(s) of the proposed Project will require inspection of adjacent open space areas. The survey shall verify whether sensitive natural communities, including habitat suitable for special-status species, in addition to potential jurisdictional aquatic resources occur within 500 feet from planned project activities. The biologist shall perform a visual inspection of the survey area, characterize the existing habitat types, and determine the likelihood for special-status species to occur, including but not limited to the coastal California gnatcatcher, least Bell's vireo, burrowing owl, Crotch's bumble bee, migratory songbirds, and other bird species with the potential to breed in the area. The survey results shall be submitted to the District to determine the need to implement project-specific mitigation measures (provided below) to avoid, minimize, and mitigate impacts to such resources. The report shall verify whether the construction activities result in direct or indirect impacts to sensitive natural communities, special-status species, and potential jurisdictional aquatic resources. BIO-2a: Rare Plant Surveys. If it is confirmed through the implementation of BIO-1 that project components could impact suitable habitat for special-status plant species, the Eastern Municipal Water District shall retain a qualified biologist to conduct focused presence/absence surveys for rare plants prior to project construction within 500 feet of project work activities, if accessible. Surveys shall follow protocols and guidelines approved by the U.S. Fish and Wildlife Service, California Department of Fish and Wildlife, and/or California Native Plant Society and shall be conducted by qualified biologists. Surveys for sensitive plants should occur during the blooming period of target species which may require two surveys to cover the spring and summer blooming species. One survey should occur in the spring (March to April), and a second survey should occur in summer (late May to early July). The specific timing shall be determined by the qualified biologist. BIO-2b: Rare Plant Avoidance. If a rare plant species is identified within a project impact area, then the Eastern Municipal Water District (District) shall avoid impacts to the occurrence to the extent feasible through project-level design changes and/or construction methods (e.g., trenchless installation of pipelines, working on the other side of the road). Prior to initiating construction activities, the District shall require that the rare plant locations detected during focused rare plant surveys are provided to the construction contractor and that the locations also are demarcated in the field by a qualified biologist. The rare plant	As shown in Table 4.3-4, Impacts BIO-1 through BIO-8 would be Less than Significant with mitigation.

Table S-1 (cont.)
Summary of Environmental Impacts

Threshold	Impact Discussion	Mitigation Measure	Significance After Mitigation
		construction fencing or alternative means that are approved by the qualified biologist. Staking and installation of construction fencing shall be monitored by the qualified biologist and conform to the conditions stated in mitigation measure BIO-11. The qualified biologist shall monitor construction activities, as appropriate and consistent with mitigation measure BIO-11, to help ensure avoidance of the demarcated areas and to ensure the fencing is kept in good condition. BIO-2c: Rare Plant Mitigation. If project design (BIO-2b) cannot be modified to avoid impacts to rare plants species, the Eastern Municipal Water District shall consult with a qualified biologist to determine the severity of those impacts. Significant impacts shall be assumed if more than five percent of a mapped rare plant occurrence (i.e., all individuals mapped within 500 feet of project work activities) of a California Rare Plant Rank 1 or 2 species or a regionally-significant population of California Rate Plant Rank 4 species will be permanently impacted (i.e., removed). If significant impacts occur to rare plants, the Eastern Municipal Water District (District) shall provide mitigation for those significant impacts that include one or a combination of the following: a. Purchase of preservation credits at a 1:1 mitigation ratio for habitat occupied by that species from a conservation bank approved by the U.S. Fish and Wildlife Service and/or California Department of Fish and Wildlife; b. Acquisition and preservation of off-site mitigation land containing occupied habitat for that species; and/or c. Preparation and implementation of a rare plant salvage and relocation plan, to include the following requirements, at a minimum: i. Evaluation of options for plant salvage and relocation, including native plant mulching, selective soil salvaging, application of plant materials on manufactured slopes, and application/relocation of resources within existing or proposed preserved lands; ii. Seed collection and/or transplantation to a suitable receptor site based on the most reliable methods of successful relocation; iii. Recommendation for the method of salvage and relocation/application based on feasibility of implementation and likelihood of success; and iv. Implementation plan, maintenance and monitoring program, estimated completion time, and any relevant contingency measures. In addition, a post-construction monitoring report shall be prepared by the qualified biologist and submitted to the District for their records summarizing monitoring activities conducted for special-status plants. The post-construction report shall be prepared within one month of the completion of construction activities and shall document what impacts occurred, if any, to special-status plant species. The report shall provide documentation showing where and how many special-status plants were (1) observed during pre-construction surveys, and (2) were impacted and/or avoided. Details on the duration and frequency of monitoring also shall be provided. BIO-3a: Federal and State Wildlife Species Surveys and Avoidance. If it is confirmed through implementation of BIO-1 that the Quail Valley Subarea 4 Project would impact suitable habitat for federally or state listed wildlife species, the Eastern Municipal Water District shall retain a qualified biologist to conduct focused, protocol-level surveys for special-status wildlife species	

Table S-1 (cont.) Summary of Environmental Impacts			
Threshold	Impact Discussion	Mitigation Measure	Significance After Mitigation
		prior to commencement of construction activities. Surveys shall follow protocols and guidelines approved by U.S. Fish and Wildlife Service and/or California Department of Fish and Wildlife and shall be conducted by qualified biologists permitted by the U.S. Fish and Wildlife Service and the California Department of Fish and Wildlife, as applicable. The qualified biologist shall prepare a Gantt Chart outlining the schedule for these needed protocol surveys. If listed wildlife species are identified within a project impact area, the Eastern Municipal Water District shall avoid impacts to species and their habitat through project-level design changes and/or construction methods (e.g., trenchless installation of pipelines) or implement BIO-3b if avoidance is infeasible. BIO-3b: Listed Wildlife Species Permitting. If impacts to listed wildlife cannot be avoided, the Eastern Municipal Water District (District) shall seek incidental take authorization by one of two methods, described below. Habitat-based compensatory mitigation for impacts to listed species shall be determined through the applicable regulatory mechanism. 1. <u>Participating Special Entity process under the Multiple Species Habitat Conservation Plan (MSHCP)</u>. To obtain MSHCP coverage as a Participating Special Entity, the Quail Valley Subarea Project (proposed Project) is required to demonstrate MSHCP compliance through specific habitat assessments, applicable biological surveys, the provision of an MSHCP consistency analysis, and payment of impact fees. Additionally, impacts to certain species under the MSHCP will require a Determination of Biologically Equivalent or Superior Preservation. A Determination of Biologically Equivalent or Superior Preservation shall be prepared as appropriate and will be used to demonstrate avoidance and mitigation related to impacts. 2. <u>Using the federal and/or state endangered species acts standard process</u>. The District may elect to seek incidental take authorization from the U.S. Fish and Wildlife Service (USFWS) pursuant to Federal Endangered Species Act Sections 7 or 10 and/or California Department of Fish and Wildlife (CDFW) under California Fish and Game Code Sections 2080.1 and 2081(b), as applicable. a. Where species protected under federal law may be impacted, the District shall either consult directly with the USFWS to develop and implement a habitat conservation plan and obtain an Incidental Take Permit pursuant to Federal Endangered Species Act Section 10(a) or, in the case of projects with a federal action agency, the District shall adhere to the requirements of Federal Endangered Species Act Section 7, which requires the federal action agency to consult with the USFWS to obtain a Biological Opinion and Incidental Take Statement for the proposed Project; and/or b. Where species protected under state law may be impacted, the District shall consult with the CDFW pursuant to Sections 2081 or 2080.1 of the California Endangered Species Act. For projects with direct or indirect impacts to species that are only state listed and not federally listed as endangered or threatened, the District shall obtain a California Endangered Species Act Section 2081 Incidental Take Permit from the CDFW. For projects with impacts to species that are both state and federally listed as endangered or threatened, the District shall obtain a California Endangered Species Act Section 2080.1 Consistency Determination from the CDFW, unless otherwise required by the CDFW.	

Table S-1 (cont.) Summary of Environmental Impacts			
Threshold	Impact Discussion	Mitigation Measure	Significance After Mitigation
		BIO-3c: Non-Listed Special-Status Wildlife Species Mitigation. For non-listed wildlife species, particularly reptiles and small mammals, an analysis shall be made after biological resource surveys are conducted in accordance with BIO-1, above to determine the potential level of impact the Quail Valley Subarea 4 Project (proposed Project) may have on these species. Unless there is a regionally significant population of a non-listed special-status wildlife species (e.g., multiple species within high-quality habitat, etc.) mitigation provided below such as biological construction monitoring, temporary construction fencing (BIO-11), revegetation of temporarily-impacted native vegetation (BIO-12), and worker training (BIO-13) shall be sufficient to reduce impacts to non-listed wildlife species. If a regionally significant population of non-listed special-status wildlife are noted during surveys, the Eastern Municipal Water District shall compensate for the loss of occupied habitat through one or a combination of the following, at a minimum ratio of 1:1, as determined by the Eastern Municipal Water District in consultation with the U.S. Fish and Wildlife Service and/or California Department of Fish and Wildlife, as applicable: a. Purchase of credits from a conservation bank approved by U.S. Fish and Wildlife Service and/or California Department of Fish and Wildlife; and/or b. Acquisition and preservation of off-site mitigation land containing occupied habitat. BIO-4: Direct Impact Avoidance for Crotch's Bumble Bee. To avoid direct impacts to Crotch's bumble bee, the following seasonal restrictions shall be implemented: • Removal, trimming or trampling of habitat (i.e., any areas with floral resources) in the proposed area of disturbance must occur outside of the Colony Active Period between April 1 and August 31. If removal of floral resources in the proposed area of disturbance must occur during the Colony Active Period, a foraging bumble bee survey shall be conducted within a year of project or phase commencement. • Within potential overwintering or nest sites, no soil disturbance (grading, digging, etc.) will occur between August 31 and April 1. If ground disturbance must occur between September 1 and March 31, a qualified biologist shall conduct an overwintering/nest survey to determine the presence or absence of Crotch's bumble bee within the proposed area of disturbance. The surveys shall be conducted within 300 feet of project work resulting in removal, trimming or trampling of habitat within one year prior to the initiation of project activities (including removal of vegetation). Survey methods will be developed in consultation with the California Department of Fish and Wildlife (CDFW) and follow existing guidance (e.g., Survey Considerations for California Endangered Species Act Candidate Bumble Bee Species, dated June 6, 2023). Based on current standards, surveys may consist of three separate visits spaced two to four weeks apart. Survey results will be considered valid until the start of the next colony active period. Survey methods that involve lethal take of species are not acceptable. The qualified biologist and the District shall submit the results (including positive or negative survey results) of the pre-activity survey to CDFW for review. If pre-activity surveys do identify Crotch's bumble bee individuals on-site, the qualified biologist shall notify and consult with CDFW to determine whether an avoidance plan would be an option. If it is determined that project activities would result in impacts to Crotch's bumble bee, an Incidental Take Permit (ITP) may be required. Take of any endangered, threatened, or candidate species that results from the Quail Valley Subarea 4 Project is prohibited, except as authorized by state law (CFGC Sections 86, 2062, 2067, 2068, 2080,	

Table S-1 (cont.)
Summary of Environmental Impacts

Threshold	Impact Discussion	Mitigation Measure	Significance After Mitigation
		2085; California Code of Regulations, Title 14, Section 786.9) under the California Endangered Species Act. Regardless of the outcome of the pre-activity survey, a qualified biologist shall conduct a pre-construction survey for Crotch's bumble bee within 14 days prior to ground-disturbing or vegetation removal activities, during suitable weather conditions. Surveys shall follow existing guidance (e.g., Survey Considerations for California Endangered Species Act Candidate Bumble Bee Species) for pre-construction surveys. If Crotch's bumble bee or their nests are observed, the biologist shall defer to the avoidance plan (if applicable) and/or ITP (if applicable). If there is no existing Crotch's bumble bee avoidance plan, or ITP conservation measures, a no-disturbance buffer around the observation or nest site will be established until the completion of the colony active period. BIO-5: Avoidance of Nesting Birds and Raptors. To prevent direct impacts to nesting migratory birds, or raptors, protected under the Migratory Bird Treaty Act and California Fish and Game Code, the Eastern Municipal Water District shall implement the following: Any proposed activity that could affect nesting migratory birds or raptors shall occur outside of the general bird breeding season of February 15 to August 31. If such activities cannot be conducted outside the general bird breeding season, a qualified biologist with experience in conducting nesting bird surveys shall be retained to conduct a pre-activity nesting bird survey (i.e., prior to any project activities, such as ground disturbance or vegetation removal, that could disrupt nesting birds). The pre-activity survey shall occur within 500 feet of the construction activity and no more than three days prior to the activities to confirm the presence or absence of active bird nests. These survey parameters (i.e., within 500 feet and no more than three days prior) shall be implemented for linear construction projects such as pipelines, as well as work within a specific parcel such as for construction of the lift stations. If an active nest is found by the qualified biologist, a nest avoidance buffer of 300 feet for passerine birds and 500 feet for raptors should be demarcated by temporary fencing, flagging, and or staking as deemed appropriate to avoid impacts. No project construction activities, including vegetation removal and/or trimming activities, will be allowed within the buffer until the qualified biologist has determined that the nest is no longer active. The qualified biologist shall monitor the active nest with sufficient frequency and duration to determine if the buffer distances are appropriately sized to protect the breeding success of the nest. Avoidance buffers may be either increased or decreased by the qualified biologist based on such factors as the avian species involved, ambient levels of human activity, and screening vegetation. BIO-6a: Coastal California Gnatcatcher Protocol Surveys and Avoidance. A qualified biologist (possessing a valid Federal Endangered Species Act Section 10(a)(1)(A) Recovery Permit) shall survey those habitat areas (i.e., Riversidian sage scrub and buckwheat scrub) within the Quail Valley Subarea 4 Project limits and up to a 500-foot buffer where access permits. The protocol survey shall be conducted per the current U.S. Fish and Wildlife Service protocol that currently requires six surveys during the period of March 15 to June 30, or nine surveys between July 1 and March 14. If coastal California gnatcatchers are confirmed as not present, then no mitigation for this species is required. If coastal California gnatcatchers are confirmed as present, then no clearing, grubbing, ground-disturbing, or other construction activity shall occur within 500 feet of occupied coastal sage scrub during the coastal California gnatcatcher breeding season (March 1 through August 15). If avoidance is not possible and construction activities must occur during the breeding season within 500 feet of occupied habitat, or if clearing of occupied	

Table S-1 (cont.)
Summary of Environmental Impacts

Threshold	Impact Discussion	Mitigation Measure	Significance After Mitigation
		habitat is required, the Eastern Municipal Water District shall implement BIO-3b and BIO-6b. If the Project elects to be a Participating Special Entity in the Multiple Species Habitat Conservation Program, this measure is not required. BIO-6b: Coastal California Gnatcatcher Mitigation. If construction activities are proposed within 500 feet of an occupied nest, a biological monitor shall be required to observe the behavior of breeding coastal California gnatcatchers where accessible. The construction supervisor shall be notified if the construction activities appear to be altering the birds' normal breeding behavior, work will be halted if necessary and as determined by the qualified biologist, and the nest avoidance buffer shall be expanded and/or work activities shall be modified until there is no discernible disturbance to the nest occupants. No construction activities will be allowed within 500 feet of an occupied nest until additional minimization measures have been performed. For habitat that is accessible, such measures may include retaining a qualified acoustician to determine ambient noise levels and project-related noise levels at the edge of the occupied habitat. Noise levels at the edge of the occupied habitat shall not exceed an hourly average of 60 decibels (dB[A]), or a 3 dB(A) increase in noise levels if ambient noise levels exceed 60 dB(A). If Project-related noise levels at the edge of the occupied habitat are above 60 dB(A) or the 3 dB(A) increase in noise occurs or the habitat is not accessible for measuring the noise levels, additional minimization measures shall be taken to reduce project-related noise levels to an acceptable level as determined by the biological monitor. Measures may include, but are not limited to, limitations on the use of certain equipment, placement of equipment, restrictions on the simultaneous use of equipment, use of noise barriers, or other noise attenuation methods as deemed appropriate by the biologist and acoustician. If the biological monitor determines the construction activities are posing a potential risk to the nest after implementing the additional minimization measures, the noise generating construction activities shall cease until alternative methods are applied or the breeding season is over. The biological monitor shall prepare written documentation of all gnatcatcher monitoring activities at the end of each monitoring day, and also a compiled monitoring report at the completion of construction activities, both of which shall be submitted to the District. BIO-7a: Least Bell's Vireo Protocol Surveys and Avoidance. Construction activities (i.e., earthwork, clearing, and grubbing) within 500 feet of potential least Bell's vireo habitat shall occur outside of the breeding season for least Bell's vireo (March 15 through August 31). If construction activities (i.e., earthwork, clearing, grubbing, etc.) must occur within 500 feet of least Bell's vireo habitat during the breeding season, protocol surveys for least Bell's vireo shall be conducted prior to commencement of construction activities, within all suitable habitat located within a 500-foot buffer of project activities to determine whether the habitat is occupied. Habitat withing the 500-foot buffer that is not accessible will be surveyed audibly from the accessible limits. Protocol surveys for least Bell's vireo shall be conducted by a qualified biologist and during the breeding season in accordance with the most recent U.S. Fish and Wildlife Service guidelines. Current survey guidelines require eight surveys 10 days apart from April 10 to July 31. The results of the protocol surveys shall be documented by the qualified biologist and submitted to the U.S. Fish and Wildlife Service and California Department of Fish and Wildlife. If the qualified biologist determines that least Bell's vireo does not occur within 500 feet of the proposed construction, the activities shall be allowed to proceed without any further requirements. If the qualified biologist determines that the habitat is occupied by least Bell's vireo, the Eastern Municipal Water District shall clearly delineate the required avoidance within 500 feet of the occupied habitat, or if clearing of occupied habitat is required, then	

Table S-1 (cont.)
Summary of Environmental Impacts

Threshold	Impact Discussion	Mitigation Measure	Significance After Mitigation
		the Eastern Municipal Water District shall follow BIO-3b and BIO-7b. BIO-7b: Least Bell's Vireo Mitigation. If construction activities are proposed within 500 feet of an occupied nest, a biological monitor shall be required to observe the behavior of breeding least Bell's vireo where accessible. The construction supervisor shall be notified if the construction activities appear to be altering the birds' normal breeding behavior work will be halted if necessary and as determined by the qualified biologist, and the nest avoidance buffer shall be expanded and/or work activities shall be modified until there is no discernible disturbance to the nest occupants. No construction activities will be allowed within 500 feet of an occupied nest until additional minimization measures have been performed. For habitat that is accessible, such measures may include retaining a qualified acoustician to determine ambient noise levels and project-related noise levels at the edge of the occupied habitat. Noise levels at the edge of the occupied habitat shall not exceed an hourly average of 60 decibels (dB[A]), or a 3 dB(A) increase in noise levels if ambient noise levels exceed 60 dB(A). If project-related noise levels at the edge of the occupied habitat are above 60 dB(A) or the 3 dB(A) increase in noise occurs or the habitat is not accessible for measuring the noise levels, additional minimization measures shall be taken to reduce project-related noise levels to an acceptable level as determined by the biological monitor. Measures may include, but are not limited to, limitations on the use of certain equipment, placement of equipment, restrictions on the simultaneous use of equipment, use of noise barriers, or other noise attenuation methods as deemed appropriate by the biologist and acoustician. If the biological monitor determines the construction activities are posing a potential risk to the nest after implementing the additional minimization measures, the noise generating construction activities shall cease until alternative methods are applied or the breeding season is over. The biological monitor shall prepare written documentation of all monitoring activities at the completion of construction activities, which shall be submitted to the Eastern Municipal Water District. BIO-8a: Burrowing Owl Focused Survey and Pre-Construction Burrowing Owl Survey. The Eastern Municipal Water District shall have a qualified biologist conduct focused burrowing owl surveys in accordance with the current guidelines at the time of the survey. At the time of this report, the survey would follow the California Department of Fish and Wildlife 2012 *Staff Report for Burrowing Owl Mitigation* unless the Quail Valley Subarea 4 Project has elected to be a Participating Special Entity under the Multiple Species Habitat Conservation Program, in which case the survey would follow the 2006 burrowing owl instruction for the Multiple Species Habitat Conservation Program. These focused surveys should be conducted either during the breeding season or non-breeding season in the year or months prior to the specific project phase if potential burrowing owl habitat is located within 500 feet of the proposed impact footprint for that project phase. Additionally, 14-day and a 24-hour pre-construction "take avoidance" surveys for burrowing owls are required by the California Department of Fish and Wildlife 2012 guidelines (or a single survey 30-days prior if the project is permitted using the Participating Special Entity process) prior to initial ground-disturbing activities (e.g., vegetation clearing, clearing and grubbing, grading, tree removal, site watering, equipment staging and trenching/excavation) to ensure that no owls have colonized the site in the days or weeks preceding the ground-disturbing activities. These take avoidance surveys are required both inside and outside of the breeding season whenever work would occur within 500 feet of potential burrowing owl habitat. Working in collaboration with the construction contractor, the qualified biologist will ensure these survey parameters (i.e., within 14 days and again within 24 hours prior to the start of the activity) are implemented for linear construction projects such as pipelines, as well as work within a specific parcel such as for construction of the lift stations. If burrowing	

Table S-1 (cont.)
Summary of Environmental Impacts

Threshold	Impact Discussion	Mitigation Measure	Significance After Mitigation

owl are not detected during the take avoidance survey, no further action is required. If burrowing owl are detected, the Eastern Municipal Water District will follow BIO-8b.

BIO-8b: Burrowing Owl Mitigation. A Burrowing Owl Take Avoidance Plan (BUOW Plan) shall be prepared by a qualified biologist. The BUOW Plan must be sent for approval by the California Department of Fish and Wildlife (CDFW) prior to initiating ground disturbance. The BUOW Plan shall include the number and location of occupied or known burrow sites, if applicable, and shall describe proposed avoidance (setback), shelter-in-place, unoccupied burrow/burrow surrogate collapse procedures, monitoring, minimization, and/or mitigation actions. The project proponent shall implement the BUOW Plan following CDFW review and approval. Avoidance and minimization measures may include:

a) Setback: No construction activities shall occur within specified setback distances. The default setback distances from the CDFW 2012 Staff Report are provided below.

Time of Year	Level of Disturbance (meters/feet)		
	Low	Medium	High
April 1–Aug 15	200/656	200/656	500/1,640
Aug 16–Oct 15	200/656	200/656	200/656
Oct 16–Mar 31	50/164	100/328	500/1,640

When setback distances are applied to occupied burrows, an intensive monitoring program shall be implemented to ensure that the setback distance applied to the burrow is considered an effective buffer. Once a setback distance is applied to an occupied burrow, the biological monitor shall be present at all times during construction activities that occur adjacent to the setback distance to monitor the burrowing owl's behavior. The biological monitor will have the authority to increase the setback distance if the construction activities are affecting the burrowing owl. Setback distances may be reduced through shelter-in-place methods described below, which would be determined by the biological monitor.

b) Shelter in Place: If a reduced setback is needed to complete construction, shelter-in-place can be implemented to minimize impacts while allowing existing burrows to remain intact. Where appropriate, the setback buffers may be reduced by screening burrows (i.e., installing hay bales to create a visual and auditory barrier between construction and the burrow) to minimize disturbance. During the breeding season, hay bales (or other similar material) shall be stacked up to three bales high and 25 feet on either side of the burrow for a total of 50 feet. During the non-breeding season, hay bales shall be stacked up to two bales high and 25 feet on either side of the burrow for a total of 50 feet. Hay bales are generally three feet long and 18 inches tall. A minimum distance of five feet between the hay bales and the occupied burrow shall be left, allowing for perches near the burrow to be maintained. The minimum distance may be increased depending on the slope and topography of the area adjacent to the burrows.

If shelter-in-place is determined feasible, the biological monitor will provide guidance to the construction contractor regarding the location of the hay bales. During and following installation of the hay bales, a biological monitor shall be present daily to evaluate the effectiveness of the hay bales, monitor burrowing owl behavior for signs of stress or disturbance due to construction, and make adjustments to the buffer and/or hay bales in order to minimize impacts on the burrowing owl. If the burrowing owl continues to appear distressed from construction, the biological monitor will have the authority to halt

Table S-1 (cont.)
Summary of Environmental Impacts

Threshold	Impact Discussion	Mitigation Measure	Significance After Mitigation
		construction until the project proponent and the CDFW can be contacted to determine the best course of action. Following installation of the hay bales, the biological monitor shall provide a report to the Eastern Municipal Water District and the CDFW describing the installation time frame; a map of the area; photographs of hay bales and construction activities; and a description of site conditions (e.g., surrounding vegetation, topography, observed species, burrowing owl line-of-sight conditions). c) Burrow Collapse Procedures: No collapsing of occupied or known (i.e., those exhibiting signs of current or past burrowing owl use) burrows shall be conducted without a Section 2081 Incidental Take Permit, regardless of the time of year. Procedures for the collapse of unoccupied/potential (i.e., any subterranean hole three inches or larger for which no evidence is present to conclude that the burrow is being used or has been used by a burrowing owl) burrows shall be included in the BUOW Plan. Unoccupied and potential burrowing owl burrows may be excavated under the direct supervision of the burrowing owl Authorized Biologist after approval of the BUOW Plan. d) If ground-disturbing activities occur but the site is left undisturbed for more than 14 days, another pre-construction "take avoidance" survey for burrowing owl shall be conducted and reported to CDFW as described above. If a burrowing owl is found, the same coordination described above shall be necessary. No take of burrowing owl shall be conducted unless the project secures a Section 2081 Incidental Take Permit from CDFW. Take includes any actions that could harm burrowing owl, including but not limited to burrow exclusions on occupied or known burrows, passive relocation activities, and burrow collapse of an occupied or known burrow. Those activities shall only be conducted in accordance with the permit conditions contained in an Incidental Take Permit. BIO-9: Stephens' Kangaroo Rat HCP Mitigation Fee. The Quail Valley Subarea 4 Project (proposed Project) is within the limits of the Stephens' Kangaroo Rat Habitat Conservation Plan Area. As such the proposed Project will pay the Stephens' Kangaroo Rat Mitigation fee of $500 per acre of impact to the Riverside County Habitat Conservation Agency, which implements the Stephens' Kangaroo Rat Habitat Conservation Plan. BIO-10: Maternal Bat Roost Avoidance. Prior to construction, the Eastern Municipal Water District shall have a qualified biologist conduct a survey of potential bat roosts located within and/or immediately adjacent to the areas where Quail Valley Subarea 4 Project activities have the potential to directly impact active roosts or disrupt bat breeding activities. Potential roost sites (e.g., palm fronds, trees, rock crevices, abandoned buildings, etc.) will be identified by a qualified bat biologist and searched for signs of bat use, such as urine streaking, grease marks and droppings, moth wings, and dead bats. If any project activities are proposed during the bat maternity season (April 1 through August 31), a qualified biologist will conduct a dusk emergent bat survey of potential roost sites that have signs of bat use, no more than two weeks prior to construction. Dusk emergence count surveys shall be conducted on a warm night when nighttime lows are not less than 45 degrees Fahrenheit and during dry weather conditions. Surveys should be conducted from approximately 15 minutes before sunset to 1 hour after sunset. Prior to any dusk emergence count, the lead biologist shall identify the primary locations where bats may be roosting so these locations can be targeted during the emergence count. Surveys should include both a visual component using	

Table S-1 (cont.)
Summary of Environmental Impacts

Threshold	Impact Discussion	Mitigation Measure	Significance After Mitigation
		night visions googles as appropriate, as well as an electronic acoustic monitoring device / bat detector (e.g., AnaBat). If bats are detected during the dusk emergence surveys, the District will not trim or remove the roost (e.g., palm trees) until it can be determined that the bats no longer are present. In addition, if a maternal roost is identified, no construction will occur within 200 feet of the maternal roost during the pupping season (typically April 1 through August 31). BIO-11: Biological Construction Monitoring and Temporary Construction Fencing. If it is confirmed through pre-construction surveys that the Quail Valley Subarea 4 Project would occur within or immediately adjacent to sensitive habitat areas (including aquatic resources) and/or habitat occupied by special-status species, then the Eastern Municipal Water District (District) shall retain a qualified biologist to monitor construction activities and supervise the installation of temporary construction fencing, which clearly delineates the edge of the approved limits of grading and clearing, and the edges of environmentally sensitive areas that occur beyond the approved limits. This fencing shall be installed prior to construction and maintained by the contractor for the duration of construction activity. Fencing shall be installed in a manner that does not impact habitats to be avoided. Once the fencing is installed, the District and qualified biologist shall determine the need for additional inspections and monitoring activities throughout the duration of construction, not to be less than once per week. If determined necessary by the District and qualified biologist, the monitoring shall include the inspection of construction work areas, including staging and storage areas, to confirm that activities are kept within the approved limits and that best management practices are in place to prevent incidental animal entrapment and burrow and nest establishment within equipment and staged materials. Temporary construction fencing shall be maintained regularly and repairs to the fencing shall be made with one calendar day of any damage being noted. If work occurs beyond the fenced or demarcated limits of impact, or if a trapped animal or burrow or nest is found, work in the affected areas shall cease until the problem has been remedied to the satisfaction of the District and qualified biologist. Temporary construction fencing shall be removed upon completion of construction of the Quail Valley Subarea 4 Project. BIO-12: Revegetation of Upland Native Vegetation. Prior to impacts to upland native vegetation, a biologist shall make a list of native plants occurring in each community. As soon as practical after construction is complete, temporary impacts to upland native vegetation shall be reseeded with a seed mix containing species observed within the habitat being impacted. Additionally, native vegetation being cleared and grubbed (duff) shall be collected, stored on-site, and pulled/raked back over the disturbed area after construction to allow for passive restoration over time. The construction contractor shall be responsible for the collection, storing and raking activities at the appropriate times during construction. BIO-13: Worker Environmental Awareness Program. If it is confirmed through the implementation of pre-construction surveys that the Quail Valley Subarea 4 Project would occur within or immediately adjacent to sensitive habitat areas and/or habitat potentially suitable for special-status species, the Eastern Municipal Water District shall retain a qualified biologist to prepare and present a Worker Environmental Awareness Program to inform construction crews of the sensitive resources and associated avoidance and/or minimization requirements. The Worker Environmental Awareness Program shall be developed and presented prior to ground-disturbing activities by a qualified biologist and shall be available in both English and Spanish. Handouts summarizing potential impacts on special-status biological resources and the potential penalties for impacts on these resources shall be	

Table S-1 (cont.)
Summary of Environmental Impacts

Threshold	Impact Discussion	Mitigation Measure	Significance After Mitigation
		provided to all construction personnel. At a minimum, the education program shall include the following: • a description of special-status species observed or potentially on the Project site including representative photographs and general ecology; • sensitivity of the species to human activities; • regulatory framework for biological resource protection and consequences if violated; • occurrences of aquatic resource features regulated by the U.S. Army Corps of Engineers, Regional Water Quality Control Board and/or the California Department of Fish and Wildlife in the project area; • avoidance and minimization measures designed to reduce the impacts on special-status biological resources; • environmentally responsible construction practices; • reporting requirements and communication protocol to resolve conflicts that may arise at any time during the construction process. It shall be the responsibility of the construction contractor to maintain a copy of the Worker Environmental Awareness training materials on the jobsite for the duration of project activities. The construction contractor shall also ensure that all workers, including any new members entering the Project site for the first time, review the training materials. All construction workers shall sign an acknowledgement form indicating their understanding of the material before beginning work.	
Would the project 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 CDFW or USFWS?	At this program level of analysis the impacts summarized in Table 4.3-5 would be potentially significant.	Mitigation measures BIO-11, BIO-12, and BIO-13, as outlined above. BIO-14a: Acquire Permits for Impacts to Jurisdictional Aquatic Resources. Prior to construction or ground-disturbing activities occurring within potentially jurisdictional aquatic resources for any phase or component of the Quail Valley Subarea 4 Project , the Eastern Municipal Water District (District) shall apply for and obtain the following regulatory permits and approvals from the U.S. Army Corps of Engineers, Regional Water Quality Control Board, and/or California Department of Fish and Wildlife, as applicable: • Clean Water Act Section 404 Permit; • Clean Water Act Section 401 Water Quality Certification; and/or • California Fish and Game Code Section 1602 Streambed Alteration Agreement. If the District elects to seek incidental take authorization through the Multiple Species Habitat Conservation Act Participating Special Entity process, the District shall also prepare for approval by the Western Riverside County Regional Conservation Authority, U.S. Fish and Wildlife Service, and California Department of Fish and Wildlife a Determination of Biologically Equivalent or Superior Preservation for impacts to Multiple Species Habitat Conservation Program Section 6.1.2, Riparian and Riverine Areas. BIO-14b: Mitigation for Jurisdictional Impacts. The Eastern Municipal Water District shall mitigate for permanent and temporary impacts to jurisdictional aquatic resources off-site in accordance with the applicable permit condition(s) described in mitigation measure BIO-14a, estimated at no less than a 1:1 ratio. Temporary impacts are to be restored in place and permanent impacts shall include a minimum 1:1 establishment/ re-establishment component, unless otherwise negotiated by the Eastern Municipal Water District with the regulatory agencies.	As shown in Table 4.3-5, Impact BIO-9 and Impact BIO-10 would be less than significant with mitigation.

Table S-1 (cont.) Summary of Environmental Impacts			
Threshold	Impact Discussion	Mitigation Measure	Significance After Mitigation
Would the project have a 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?	At this program level of analysis the impacts summarized in Table 4.3-7 would be potentially significant.	Mitigation measures BIO-11, BIO-13, BIO-14a and BIO-14b, as outlined above.	As shown in Table 4.3-7, Impact BIO-11 would be less than significant with mitigation.
Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	At this program level of analysis the impacts summarized in Table 4.3-8 would be potentially significant.	Mitigation measures BIO-5 and BIO-10, as outlined above.	As shown in Table 4.3-8, Impact BIO-7 and Impact BIO-8 would be less than significant with mitigation.
Would the project conflict with any local policies or ordinances protecting biological resources, such as tree preservation policy or ordinance? or Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	The proposed Project would not conflict with an adopted Habitat Conservation Plan intended to protect biological resources, and impacts would be less than significant.	No mitigation is required.	Less than Significant
4.4 Cultural and Tribal Cultural Resources			
Would the project cause a substantial adverse change in the significance of a historic-era resource pursuant to CEQA Section 15064.5?	The proposed Project would not result in an adverse effect to any historic resources per CEQA criteria, and impacts would be less than significant.	No mitigation is required.	Less than Significant
Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Section 15064.5?	At a program level of analysis, it cannot be known with certainty that impacts to archaeological resources could be fully avoided, which would be considered a potentially significant impact (Impact CUL-1).	CUL-1: Pre-Construction Phase I Cultural Resources Study. As future phases are funded and development parcels are acquired by the Eastern Municipal Water District, a Phase I Cultural Resources Survey of those parcels shall be completed by a qualified archaeologist during the planning phase of the project. In the event that archaeological resources are identified during the Phase I study, then such resources must be recorded using Department of Parks and Recreation 523 forms in accordance with all applicable regulations. In addition, these resources must be evaluated for significance and eligibility for inclusion in federal, state, and local registers of significant resources. This evaluation shall be undertaken by a cultural resource professional who minimally meets the Secretary of Interior's Professional Qualifications Standards for Archaeology. In the event that such resources are recommended to historic properties per the National Register of Historic Places or historical resources pursuant to the California Environmental Quality Act and avoidance is not feasible, a data recovery and construction monitoring program must be implemented to reduce the impacts the archaeological resource to below a significant level. The data recovery program must be approved by the Eastern Municipal Water District and Traditionally and Culturally Affiliated tribe(s) and completed prior to ground-disturbing activities. CUL-2: Pre-excavation Agreement. Prior to construction of projects that are determined to have the potential to encounter cultural resources, the Eastern Municipal Water District (District) shall enter into a pre-excavation agreement with the Luiseño Consulting Tribe(s). The agreement shall address the treatment of archaeological resources inadvertently discovered on the Quail Valley Subarea 4 Project site; project grading; ground disturbance and development scheduling; the designation, responsibilities, and participation of tribal monitor(s) during grading, excavation, and ground disturbing activities; and compensation for the tribal monitors, including overtime, weekend rates, and mileage reimbursements. The agreement will also indicate the disposition of artifacts recovered during monitoring.	Impact CUL-1: Less than Significant

Table S-1 (cont.)
Summary of Environmental Impacts

Threshold	Impact Discussion	Mitigation Measure	Significance After Mitigation
		The District shall relinquish ownership of all cultural resources to the Luiseño Consulting Tribe, including sacred items, burial goods, and all archaeological artifacts and non-human remains as part of the required mitigation for impacts to cultural resources, and adhere to the following: 1. Preservation-in-place is the preferred option; preservation-in-place means avoiding the resources and leaving them in the place where they were found with no development affecting the integrity of the resource. 2. If preservation-in-place is not feasible, the pre-excavation agreement shall determine an on-site reburial of the discovered items as the next preferable treatment measure. This shall include measures and provisions to protect the future reburial area from any future impacts in perpetuity. Reburial shall not occur until all legally required cataloging and basic recordation have been completed. No recordation of sacred items is permitted without the written consent of all Consulting Native American Tribal Governments. 3. In the event that on-site reburial is not feasible, the District will enter into a curation agreement with an appropriate qualified repository within Riverside County that meets federal standards per Title 36 of the Code of Federal Regulations, Parts 79 and 800 and therefore would be curated and made available to other archaeologists/researchers for further study. The collections and associated records shall be transferred, including title, to an appropriate curation facility within Riverside County, to be accompanied by payment of the fees necessary for permanent curation. CUL-3: Construction Monitoring. For projects that are determined to have the potential to encounter cultural resources during CUL-1, construction monitoring by a qualified archaeologist and Luiseño Native American monitor shall be implemented. A qualified archaeologist and Luiseño Native American monitor would attend a pre-construction meeting with the Eastern Municipal Water District (District), contractor, and any applicable subcontractors. The archaeologist and Luiseño Native American monitor would be present during the original cutting of previously undisturbed soils. Inspections would vary based on materials excavated and presence of artifacts and features. If subsurface cultural resources are encountered during construction, all ground-disturbing activity shall cease within 50 feet of the resources, and the resources should be evaluated for significance. Isolated artifacts shall be minimally documented in the field. Significant archaeological discoveries include intact features, stratified deposits, previously unknown archaeological sites, and human remains. The project archaeologist shall inform the District of the discovery. The significance of the resource would be determined by the project archaeologist and Native American monitor in consultation with the District. To mitigate potential impacts to significant cultural resources, a Research Design and Data Recovery Program should be prepared by the project archaeologist in consultation with the Native American monitor, approved by the District, and implemented using professional archaeological methods. Construction activities would be allowed to resume after the completion of the recovery of an adequate sample and the recordation of features. CUL-4: Final Monitoring Report and Curation. After monitoring completion, a report shall be prepared. If no significant cultural resources are discovered, a brief letter shall be prepared. If significant cultural resources are discovered, a report with the results of the monitoring and data recovery (including the interpretation of the data within the research context) shall be prepared. All cultural material collected during the monitoring and data recovery program shall be processed and conveyed to a Native American group of appropriate tribal affinity. Alternatively, the cultural material may be curated at a local curation facility.	

Table S-1 (cont.) Summary of Environmental Impacts			
Threshold	Impact Discussion	Mitigation Measure	Significance After Mitigation
Would the project disturb any human remains, including those interred outside of dedicated cemeteries?	At a program level of analysis, it cannot be known with certainty that impacts to human remains could be fully avoided, which would be considered a potentially significant impact (Impact CUL-2).	CUL-5: Procedure for Inadvertent Discovery of Human Remains. If human remains are unintentionally disturbed during archaeological excavations or construction activities, implementation of the procedures set forth in Public Resources Code Section 5097.98 and California State Health and Safety Code 7050.5 would be implemented in consultation with the Most Likely Descendant as identified by the Native American Heritage Commission (NAHC). California State Health and Safety Code Section 7050.5 dictates that no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition pursuant to Public Resources Code Section 5097.98. If the remains are determined by the County Coroner to be Native American, the NAHC shall be notified within 24 hours. The NAHC shall identify the Most Likely Descendant with whom consultation shall occur to determine in the treatment and disposition of the remains.	Impact CUL-2: Less than Significant
Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in PRC Section 21074 as either a site, features, 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. Listed or eligible for listing in the CRHR, or in a local register or ii. 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 PRC Section 5024.1?	At a program level of analysis, it cannot be known with certainty that impacts to tribal cultural resources could be fully avoided, which would be considered potentially significant (Impact CUL-3).	Mitigation measures CUL-1 through CUL-4, as outlined above.	Impact CUL-3: Less than Significant
4.5 Energy			
Would the project result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	Construction and operation of the proposed Project would not result in the wasteful, inefficient, and unnecessary consumption of energy resources, and impacts would be less than significant.	No mitigation is required.	Less than Significant
Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	Construction and operation of the proposed Project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency, and impacts would be less than significant.	No mitigation is required.	Less than Significant
4.6 Geology/Soils			
Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: (i) Rupture of a known earthquake fault, (ii) Strong seismic ground shaking, (iii) Seismic-related ground failure, including liquefaction, (iv) Landslides? or Would the project be located on a geologic unit or soil that is unstable, or that would become	The proposed Project would not result in any impacts related to seismic hazards (rupture, shaking, liquefaction, and landslides), or result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse, and impacts would be less than significant.	No mitigation is required.	Less than Significant

Table S-1 (cont.)
Summary of Environmental Impacts

Threshold	Impact Discussion	Mitigation Measure	Significance After Mitigation
unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?			
Would the project result in substantial soil erosion or the loss of topsoil?	The proposed Project would not result in substantial soil erosion or the loss of topsoil, and impacts would be less than significant.	No mitigation is required.	Less than Significant
Would the project 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?	The proposed Project would not be located on expansive soils, as defined in Table 18-1-B of the Uniform Building Code (1994), and impacts would be less than significant.	No mitigation is required.	Less than Significant
Would the project 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?	The proposed Project would not place septic tanks or alternative wastewater disposal systems on soils incapable of adequately supporting the tanks or system. No impact would occur.	No mitigation is required.	Less than Significant
Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	The proposed Project would not directly or indirectly destroy a unique paleontological resource or site or unique geologic feature, and impacts would be less than significant.	No mitigation is required.	Less than Significant
4.7 Greenhouse Gas Emissions			
Would the project result in GHG emissions that may have a significant impact on the environment?	The proposed Project would not generate greenhouse gas (GHG) emissions, either directly or indirectly, that may have a significant impact on the environment, and impacts would be less than significant.	No mitigation is required.	Less than Significant
Would the project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emission of GHGs?	The proposed Project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions, and impacts would be less than significant.	No mitigation is required.	Less than Significant
4.8 Hazards and Hazardous Materials			
Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? or Would the project 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?	The proposed Project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials, and impacts would be less than significant.	No mitigation is required.	Less than Significant
Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	The proposed Project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school, and impacts would be less than significant.	No mitigation is required.	Less than Significant
Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, create a significant hazard to the public or the environment?	The proposed Project would not create a significant hazard to the public or the environment, and impacts would be less than significant.	No mitigation is required.	Less than Significant
Would the project be located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, result in a safety hazard or	The proposed Project site is not located within an airport land use plan or within two miles of a public airport. Additionally, the proposed Project site is not located within the vicinity of a private airstrip. No impact would occur.	No mitigation is required.	No Impact

Table S-1 (cont.)
Summary of Environmental Impacts

Threshold	Impact Discussion	Mitigation Measure	Significance After Mitigation
excessive noise for people residing or working in the project area?			
Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	The project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan, and impacts would be less than significant.	No mitigation is required.	Less than Significant
Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	The proposed Project would not expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires and impacts would be less than significant.	No mitigation is required.	Less than Significant
4.9 Hydrology/Water Quality			
Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	The proposed Project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality, and impacts would be less than significant.	No mitigation is required.	Less than Significant
Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	The proposed Project would not significantly decrease groundwater supplies or interfere with groundwater recharge or obstruct sustainable groundwater management, and impacts would be less than significant.	No mitigation is required.	Less than Significant
Would the project 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 a 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.	The proposed Project would not result in substantial erosion or siltation, surface runoff, pollution that would affect water quality, or the impediment or redirection of flood flows, and impacts would be less than significant.	No mitigation is required.	Less than Significant
In flood hazard, tsunami, or seiche zones, would the project risk release of pollutants due to project inundation.	No impacts would occur.	No mitigation is required.	No Impact
Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	The proposed Project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan, and impacts would be less than significant.	No mitigation is required.	Less than Significant
4.10 Land Use and Planning			
Would the project physically divide an established community?	The proposed Project would not physically divide an established community, and impacts would be less than significant.	No mitigation is required.	Less than Significant
Would the project 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 impact?	The proposed Project would not conflict with any applicable land use plan, policy, or regulation and impacts would be less than significant.	No mitigation is required.	Less than Significant

Table S-1 (cont.)
Summary of Environmental Impacts

Threshold	Impact Discussion	Mitigation Measure	Significance After Mitigation
4.11 Noise			
Would the project generate 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?	a. Construction Noise Noise impacts due to construction activities at LS-1 (Option 1), LS-1 (Option 2), LS-2, and LS-4 would be less than significant. Noise levels would exceed 80 dB(A) L_{eq} at the residence located closest to LS-3 (Receiver 2; Impact NOI-1) and at the residence located closest to LS-5 (Receiver 1; Impact NOI-2). Noise barriers would be required as mitigation (mitigation measures NOI-1 and NOI-2) in order to reduce potential construction noise impacts to residential receivers. Additionally, although noise levels are not anticipated at other lift station locations, due to the close proximity of residential uses to active construction throughout the Project site, best management practices presented in Section 3.5.1 would be implemented to reduce noise at all lift station sites would be required. Residential uses are located closer than 55 feet from the pipeline construction areas, and noise levels would have the potential to exceed 80 dB(A) L_{eq} at the residential uses located throughout the Project site if no noise reduction techniques are implemented. Construction noise BMPs presented in Section 3.5.1 would be required to reduce noise from all construction activities; however, the degree to which construction noise levels would be reduced cannot be known at a program level of analysis. Due to the close proximity of residential uses throughout the project areas, noise impacts associated with construction activities would remain a temporary significant impact (Impact NOI-3). b. Construction-Related Traffic Noise Noise levels would be less than the land use compatibility levels for community noise environments as outlined in the City General Plan Noise Element. Therefore, impacts would be less than significant. c. Operational Noise Without emergency generator sound enclosures, noise levels would exceed those shown in Table 4.11-5 and impacts would be significant (Impact NOI-4). In order to ensure that noise levels do not exceed those modeled in this Program Environmental Impact Report, the emergency generator must meet the performance requirements specified in mitigation measure NOI-3.	a. Construction Noise NOI-1: Lift Station 3 (LS-3) Temporary Construction Barrier. Prior to the commencement of construction activities at Lift Station 3 (LS-3), a temporary 8-foot barrier along the eastern residential property line shall be constructed as identified in Figure 4.11-2d. The barrier must be solid and free of cracks or holes and may be constructed of materials such as plywood. The temporary barrier shall be identified on the construction plans for Lift Station 3 (LS-3). NOI-2: Lift Station 5 (LS-5) Temporary Construction Barrier. Prior to the commencement of construction activities at Lift Station 5 (LS-5), a temporary 6-foot barrier along the eastern residential property line shall be constructed as identified in Figure 4.11-2f. The barrier must be solid and free of cracks or holes and may be constructed of materials such as plywood. The temporary barrier shall be identified on the construction plans for Lift Station 5 (LS-5). b. Construction-Related Traffic Noise No mitigation is required. c. Operational Noise NOI-3: Emergency Generator Sound Enclosure. The emergency backup generators located at each lift station site shall be equipped with a Level 3 sound enclosure that results in noise levels not exceeding 73 A-weighted decibels at 23 feet (7 meters).	a. Construction Noise Impact NOI-1: Less than Significant Impact NOI-2: Less than Significant Impact NOI-3: Significant and Unavoidable b. Construction-Related Traffic Noise Less than Significant c. Operational Noise Impact NOI-4: Less than Significant
Would the project generate excessive groundborne vibration or groundborne noise levels?	During construction, vibration levels are not anticipated to exceed 0.2 in/sec PPV and construction vibration impacts would be less than significant. Once operational, the proposed Project would not expose persons to or generate excessive groundborne vibration or groundborne noise, and impacts would be less than significant.	No mitigation would be required.	Less than Significant
Would the project expose people residing or working in the project area to excessive aircraft noise levels?	The proposed Project would not expose people to excessive noise levels, and impacts would be less than significant.	No mitigation would be required.	Less than Significant

Table S-1 (cont.)
Summary of Environmental Impacts

Threshold	Impact Discussion	Mitigation Measure	Significance After Mitigation
4.12 Transportation			
Would the project conflict with a plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?	The proposed Project would not conflict with a program, plan, ordinance, or policy addressing the circulation system, and impacts would be less than significant.	No mitigation is required.	Less than Significant
Would the project conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?	Preparation of a VMT Analysis per CEQA Guidelines Section 15064.3, subdivision (b) is not required because the proposed Project meets the City's screening criteria, and impacts would be less than significant.	No mitigation is required.	Less than Significant
Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	The proposed Project would not substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses, and impacts would be less than significant.	No mitigation is required.	Less than Significant
Would the project result in inadequate emergency access?	The proposed Project would not result in inadequate emergency access, and impacts would be less than significant.	No mitigation is required.	Less than Significant
4.13 Utilities and Service Systems			
Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electrical power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	The proposed Project would not require the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electrical power, natural gas, or telecommunications facilities, and would be less than significant.	No mitigation is required.	Less than Significant
Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?	Sufficient water supplies are available to serve construction of the proposed Project and impacts would be less than significant.	No mitigation is required.	Less than Significant
Would the project 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?	Adequate wastewater treatment capacity would exist to serve the proposed Project, and impacts would be less than significant.	No mitigation is required.	Less than Significant
Would the project 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? or Would the project comply with federal, state, or local management and reduction statutes and regulations related to solid waste?	The proposed Project would not generate solid waste in excess of the capacity of local infrastructure, and construction waste would be disposed of in compliance with applicable requirements in the City's Municipal Code. Impacts would be less than significant.	No mitigation is required.	Less than Significant
4.14 Wildfire			
Would the project substantially impair an adopted emergency response plan or emergency evacuation plan?	The proposed Project would not substantially impair an adopted emergency response plan or emergency evacuation plan, and impacts would be less than significant.	No mitigation is required.	Less than Significant
Due to slope, prevailing winds, and other factors, would the project exacerbate wildfire risks, and thereby expose project occupants to pollutant	Impacts related to risk of loss, injury or death involving wildland fires would be less than significant.	No mitigation is required.	Less than Significant

Table S-1 (cont.) Summary of Environmental Impacts			
Threshold	Impact Discussion	Mitigation Measure	Significance After Mitigation
concentrations from a wildfire or the uncontrolled spread of a wildfire?			
Would the project 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?	Impacts related to the installation or maintenance of associated infrastructure that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment would be less than significant.	No mitigation is required.	Less than Significant
Would the project expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	The proposed Project would not expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes, and impacts would be less than significant.	No mitigation is required.	Less than Significant

Chapter 1.0
Introduction

1.1 Type of EIR

This PEIR (State Clearinghouse Number 2025090047) has been prepared consistent with CEQA Guidelines Section 15168 to address potential environmental effects associated with implementation of the proposed Project.

As described in CEQA Guidelines Section 15168, program-level environmental review documents are appropriate when a project consists of a series of actions related to the issuance of rules, regulations, and other planning criteria. The proposed Project, which is the subject of this PEIR, consists of a long-term plan to improve the community's wastewater infrastructure. The purpose of this PEIR is to inform decision-makers and the public of the potential significant environmental impacts associated with construction and operation of the proposed Project. This PEIR also considers the availability of mitigation measures as required by State CEQA Guidelines Section 15126.4 to minimize the Project's significant impacts, as well as evaluating a reasonable range of alternatives to the proposed Project that may reduce or avoid one or more significant environmental effects as required by State CEQA Guidelines Section 15126.6.

1.2 List of Project Approvals

The proposed Project would require adoption by the District Board of Directors. Subsequent site-specific improvements under the proposed Project may require approval of federal, state, and responsible or trustee agencies that may rely on this PEIR for decisions in their areas of expertise. Permits and approvals that would be required are presented in **Table 3-3** in Chapter 3.0 of this PEIR.

1.3 Statement of Legal Authority

The District is the Lead Agency for the proposed Project pursuant to State CEQA Guidelines Article 4 (Sections 15050 and 15051). The Lead Agency, as defined by State CEQA Guidelines Section 15367, is the public agency which has the principal responsibility and authority for carrying out or approving a project. The analysis and findings in this document reflect the independent, impartial conclusions of the District.

1.4 Responsible and Trustee Agencies

State law requires that all EIRs be reviewed by Responsible and Trustee Agencies. A Responsible Agency, defined pursuant to State CEQA Guidelines Section 15381, includes all public agencies other than the Lead Agency which have discretionary approval power over the proposed Project. A Trustee Agency is defined in State CEQA Guidelines Section 15386 as a state agency having jurisdiction by law over natural resources affected by a project that are held in trust for the people of the state of

California. Only state agencies can serve as Responsible or Trustee Agencies. Implementation of the proposed Project would require subsequent actions or consultation from Responsible or Trustee Agencies. A brief description of some of the primary Responsible or Trustee Agencies that may have an interest in the proposed Project is provided below.

1.4.1 Responsible Agencies

a. California State Water Resources Control Board

The California State Water Resources Control Board (SWRCB) is considered a Responsible Agency under CEQA for the proposed Project because it has discretionary authority to approve financing through the Clean Water State Revolving Fund (SRF) Program. The SRF Program is administered by the SWRCB and is partially funded by the U.S. Environmental Protection Agency (U.S. EPA). As a funding agency, the SWRCB is responsible for ensuring that projects receiving financial assistance comply with applicable state and federal environmental requirements, including those under CEQA and the federal cross-cutting environmental regulations.

b. California Regional Water Quality Control Board–Santa Ana Region

The Santa Ana RWQCB regulates water quality through the federal Clean Water Act (CWA) Section 401 certification process and oversees the National Pollutant Discharge Elimination System (NPDES), to protect water resources and control pollutants in runoff. The RWQCB is responsible for implementing permitting, compliance, and other activities to reduce pollutants in municipal, construction, and industrial storm water runoff. No permits from RWQCB are required at this time; however, future phased development under the proposed Project may require review and/or CWA Section 401 certifications.

c. South Coast Air Quality Management District

The South Coast Air Quality Management District (SCAQMD) is the regional agency responsible for regulating air quality in the South Coast Air Basin (Basin), including oversight of stationary sources, construction emissions, and operational emissions under the California Clean Air Act (CAA) and federal CAA. SCAQMD implements permitting, compliance, and enforcement programs to reduce air pollutant emissions from industrial, commercial, and construction activities. No permits from SCAQMD are required at this time; however, future phased development under the proposed Project may require review or approval of permits for specific equipment, such as emergency generators, and compliance with SCAQMD rules and regulations regarding air emissions.

d. Riverside County Department of Environmental Health

The Riverside County Department of Environmental Health (DEH) is the local agency responsible for regulating public and environmental health, including oversight of private septic systems, wastewater treatment, and related activities under the California Health and Safety Code (HSC). DEH implements permitting, inspection, and compliance programs to ensure that septic systems are installed, operated, and decommissioned in a manner that protects soil, groundwater, and public health. No

DEH permits are required at this time; however, future phased development under the proposed Project may require review or approval of septic system abandonment permits when existing septic systems are removed or decommissioned as properties connect to the new sewer system, and compliance with DEH regulations regarding safe system closure and wastewater handling.

e. City of Menifee

The City is the local municipal agency responsible for managing public streets, traffic safety, and encroachments within City rights-of-way (ROWs). The City implements permitting, inspection, and compliance programs to ensure that construction activities, encroachments, and traffic control measures meet City standards and maintain public safety. No permits from the City are required at this time; however, future phased development under the proposed Project may require approval of encroachment permits and traffic control plans for work within public streets or ROWs, and compliance with City requirements regarding safe construction practices, traffic management, and protection of public infrastructure.

1.4.2 Trustee Agencies

a. California Department of Fish and Wildlife

An Agreement Regarding Proposed Stream or Lake Alteration (Streambed Alteration Agreement) with an agency or private party proposing to alter the bed, banks, or floor of any watercourse/stream, is under the authority of the California Department of Fish and Wildlife (CDFW) pursuant to Section 1600 et seq. of the California Fish and Game Code (CFGC). The purpose of CFGC Sections 1600–1616 is to protect and conserve fish and wildlife resources that could be substantially adversely affected by a substantial diversion or obstruction of natural flow of, or substantial change or use of material from the bed, bank, or channel of, any river, stream, or lake. No permits from the CDFW are required at this time; however, future phased development under the proposed Project may require review and/or Streambed Alteration Agreements in the future.

1.5 Notice of Preparation

Pursuant to CEQA Guidelines Section 15082, the lead agency is required to send a Notice of Preparation (NOP) stating that an EIR will be prepared to the Responsible and Trustee Agencies, as well as to the public, including affected local agencies, organizations, and interested parties who may wish to provide comments on the scope and content of the EIR. Agency and public comments received in response to the NOP, which was circulated for public comment from September 3 to October 3, 2025, are included as Appendix A of this PEIR. These comments were reviewed and considered in the preparation of this PEIR, and where appropriate, the analysis, alternatives, and mitigation measures have been revised to address issues raised.

1.6 PEIR Scope

The scope of analysis for this PEIR was determined by the District as a result of initial project review and consideration of agency and public comments received in response to the NOP. A brief overview of each PEIR chapter is provided below.

Executive Summary: This chapter summarizes the PEIR by providing an overview of the proposed Project; a summary of the potentially significant environmental impacts that could result from the proposed Project; a list of mitigation measures identified to reduce or avoid such impacts; and a review of the alternatives to the proposed Project, including the identification of an environmentally superior alternative to the proposed Project.

1.0 Introduction: This chapter provides an overview of the applicable legal authority, introduces the purpose for the PEIR, and explains the PEIR process and the intended uses of the PEIR.

2.0 Environmental Setting: This chapter provides a description of the proposed Project's regional context, location, and existing physical characteristics. More detailed descriptions of the environmental context pertaining to specific environmental topics are provided in each section of Chapter 4.0: Environmental Analysis.

3.0 Project Description: This chapter provides a detailed description of the proposed Project, including the purpose and objectives of the proposed Project and descriptions of each component of the proposed Project.

4.0 Environmental Analysis: This chapter analyzes the environmental impacts of the proposed Project. Impacts are organized by the following topic areas:

- 4.1 Aesthetics
- 4.2 Air Quality
- 4.3 Biological Resources
- 4.4 Cultural and Tribal Cultural Resources
- 4.5 Energy
- 4.6 Geology and Soils
- 4.7 Greenhouse Gas Emissions
- 4.8 Hazards and Hazardous Materials
- 4.9 Hydrology and Water Quality
- 4.10 Land Use and Planning
- 4.11 Noise
- 4.12 Transportation
- 4.13 Utilities and Service Systems
- 4.14 Wildfire

Each topic area respectively provides a contextual description of the proposed Project's environmental setting, significance criteria, methodology, and potential impacts.

5.0 Federal Cross-Cutting Environmental Regulation Evaluation: This chapter addresses CEQA-Plus requirements and evaluates whether the proposed Project would comply with the following federal regulations: Federal Air Quality Act, Section 7 of the Endangered Species Act (ESA), Migratory Bird Treaty Act (MBTA), Section 106 of the National Historic Preservation Act (NHPA), Protection of Wetlands, Coastal Zone Management Act (CZMA), Farmland Protection Policy Act, Floodplain Management, and the Wild and Scenic Rivers Act.

6.0 CEQA Mandated Analysis: This chapter summarizes the proposed Project's significant and unavoidable environmental impacts, significant irreversible environmental changes, and growth-inducing impacts per State CEQA Guidelines Section 15065, Mandatory Findings of Significance.

7.0 Effects Found Not to be Significant: This chapter identifies all the issues determined in the scoping and preliminary environmental review process to be not significant based on CEQA criteria and briefly summarizes the basis for these determinations. These topics include agricultural and forestry resources, mineral resources, population and housing, public services, and recreation.

8.0 Cumulative Impact Analysis: This chapter evaluates the potential cumulative environmental impacts of the proposed Project in combination with other past, present, and reasonably foreseeable future projects.

9.0 Project Alternatives: This chapter presents alternatives to the proposed Project and includes the following:

- a discussion of the environmental impacts associated with each alternative,
- a comparison of the relative impacts of each alternative to those of the proposed Project,
- a discussion of the relationship of each alternative to the proposed Project's objectives, and
- identification of the environmentally superior alternative.

10.0 References: This chapter lists documents and other information sources relied upon in the preparation of the PEIR and identifies the persons and organizations that contributed to the preparation of the PEIR.

11.0 List of Preparers: This chapter lists persons involved in the preparation of the PEIR.

Technical appendices, used as a basis for portions of the environmental analysis in the PEIR, have been summarized in the PEIR, and are included as attachments to the PEIR.

1.7 PEIR Intended Use and Review Process

1.7.1 PEIR Intended Use

This PEIR is intended to be used by the District, as Lead Agency, in evaluating the proposed Project and to ensure compliance with applicable regulations and mitigation framework identified herein. As a PEIR, this document is intended to be used by the District when acting on subsequent

applications for consideration of future phased development. The District intends for the PEIR to be used for the following purposes:

- To inform the public and decision-makers of the potential environmental consequences of the implementation of the proposed Project and on the range of reasonable alternatives and mitigation measures that may feasibly reduce or avoid the Project's potentially significant environmental effects; and

- To facilitate CEQA compliance by agencies with discretionary authority over the proposed Project.

1.7.2 PEIR Process

The PEIR review and certification process occurs in two basic stages. The first stage is the Draft PEIR, which offers agencies and the public the opportunity to comment on the document. The second stage is the Final PEIR, which provides the basis for approving the proposed Project.

1.7.2.1 Draft PEIR

In accordance with Sections 15085 and 15087(a)(1) of the State CEQA Guidelines, upon completion of the Draft PEIR a Notice of Completion is filed with the State Office of Planning and Research and Notice of Availability of the Draft PEIR is issued in a newspaper of general circulation in the area.

The Draft PEIR is distributed for review to the public and interested and affected agencies for the purpose of providing comments "on the sufficiency of the document in identifying and analyzing the possible impacts on the environment and ways in which the significant effects of the proposed Project might be avoided or mitigated" (Section 15204, State CEQA Guidelines).

The Draft PEIR was circulated for public review for a period beginning on April 3, 2026 and ending on May 18, 2026. The Draft PEIR and all related appendices have been made available for public review and inspection during the Public Review Period at the District, located on 2270 Trumble Road, Perris, California, and on the District's website: https://www.emwd.org/who-we-are/public-affairs/plans-reports-and-studies.

Copies of the Notice of Availability of the Draft PEIR have also been made available at Menifee Public Library, located at 29798 La Piedra Road, Menifee, California.

1.7.2.2 Final PEIR

Following public review of the Draft PEIR, the District will provide written responses to comments per State CEQA Guidelines Section 15088 and will consider all comments in making its decision whether to certify the Final PEIR. Responses to the comments received during public review, associated revisions to the Draft PEIR sections, a Mitigation Monitoring and Reporting Program, Findings of Fact, and a Statement of Overriding Considerations (if applicable for any impacts identified in the Draft PEIR as significant and unmitigated), will be prepared and compiled as part of the Final PEIR.

The culmination of this process is a public hearing where the District Board of Directors will determine whether to certify the Final PEIR as being complete and in accordance with CEQA. The Final PEIR will be available for public review at least 10 days before the District Board of Directors makes a recommendation or final determination, in order to provide commenters the opportunity to review the written responses to the PEIR comment letters.

1.7.3 Subsequent Environmental Review

As allowed in State CEQA Guidelines Section 15168, Program EIR, future development proposals will be reviewed in comparison to the findings of the Final PEIR. The PEIR and subsequent project review process, defined in Section 15168 of the State CEQA Guidelines, allows a PEIR to serve as the basis for environmental review of subsequent projects. If any future phases developed under the proposed Project have potentially significant adverse environmental effects that were not examined in this PEIR, an Initial Study shall be prepared for that project, leading to the preparation of a Mitigated Negative Declaration, Focused EIR, Supplement or Subsequent to this PEIR, or other appropriate environmental documentation. When additional environmental documentation for a new project is necessary, this PEIR may be incorporated by reference to address regional context, secondary effects, cumulative impacts, alternatives, and other factors that apply to the program as a whole. CEQA Guidelines Section 15168(c) provides guidance pertaining to the environmental review process for implementing individual activities within the Project:

1. Where the subsequent activities involve site-specific operations, the agency should use a written checklist or similar device to document the evaluation of the site and the activity to determine whether the environmental effects of the operation were covered in the PEIR.

2. If the agency finds that pursuant to CEQA Guidelines Section 15162, no new effects could occur or no new mitigation measures would be required, the agency can approve the activity as being within the scope of the project covered by the PEIR, and no new environmental document would be required.

3. If a later activity would have effects that were not examined in the PEIR, a new initial study would need to be prepared to determine the appropriate level of CEQA analysis.

4. An agency shall incorporate feasible mitigation measures and alternatives developed in the PEIR into subsequent actions in the program.

Chapter 2.0
Environmental Setting

2.1 Project Location

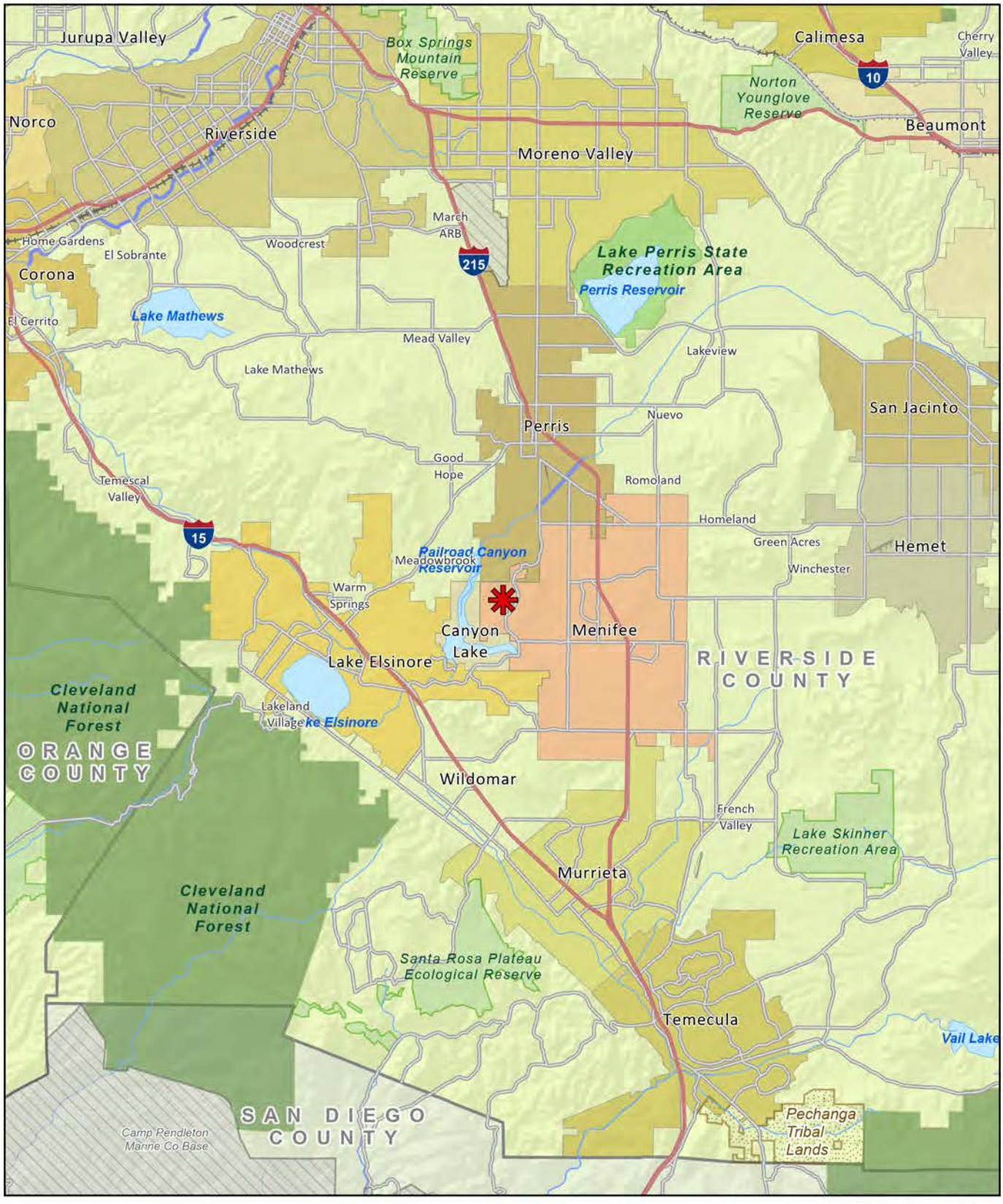
The proposed Project is located within the Quail Valley community in the City, Riverside County, California (**Figure 2-1**). The Project site encompasses a subarea of the community (Subarea 4), which is one of nine in the Quail Valley community (**Figure 2-2**). Subarea 4 lies approximately 1.5 miles north of Newport Road and 2.8 miles west of Interstate 215 (I-215) in southwestern Riverside County. It is located within Sections 25 and 36, Township 05 South, Range 04 West, as depicted on the U.S. Geological Survey (USGS) 7.5-minute topographic map, Romoland quadrangle (**Figure 2-3**; USGS 2003). The Project site consists of Subarea 4 and the potential site options for LS-1 (Options 1 and 2). The Project site consists of a mix of developed and undeveloped land with single-family residences found on a grid of small neighborhood roads (**Figure 2-4**). In total, Subarea 4 contains 1,368 lots, approximately 525 of which are currently served by septic systems. The Project site consists of a series of small hills, with elevations ranging from approximately 1,400 feet above mean sea level in a stream in the southwest corner, to 1,700 feet above mean sea level on a hill in the eastern portion.

2.2 Existing Physical Site Conditions

2.2.1 Air Quality and Climate Conditions

Air quality in Riverside County is influenced by both topographical and meteorological conditions. The San Gabriel, San Bernardino, and San Jacinto Mountains bound the South Coast Air Basin (Basin) to the north and east, trapping ambient air and pollutants within the Los Angeles and Inland Empire valleys below. The Project site, like other inland areas in southern California, has a Mediterranean climate characterized by warm, dry summers and mild, wet winters. Based on measurements taken at the Elsinore climate monitoring station (ID 042805), the average annual precipitation is 12 inches, falling primarily from November to April (Western Regional Climate Center 2025). Annual temperatures average about 64 degrees Fahrenheit (°F), winter low temperatures average about 37°F, and summer high temperatures average about 96°F.

The dominant meteorological feature affecting the region is the Pacific High Pressure Zone, which produces the prevailing westerly to northwesterly winds. These winds tend to blow pollutants away from the coast toward the inland areas. Consequently, air quality near the coast is generally better than that which occurs at the base of the coastal mountain range. The prevailing westerly wind pattern is sometimes interrupted by regional "Santa Ana" conditions. A Santa Ana occurs when a strong high pressure develops over the Nevada–Utah area and overcomes the prevailing westerly coastal winds, sending strong, steady, hot, dry northeasterly winds over the mountains and out to sea.



Project Location

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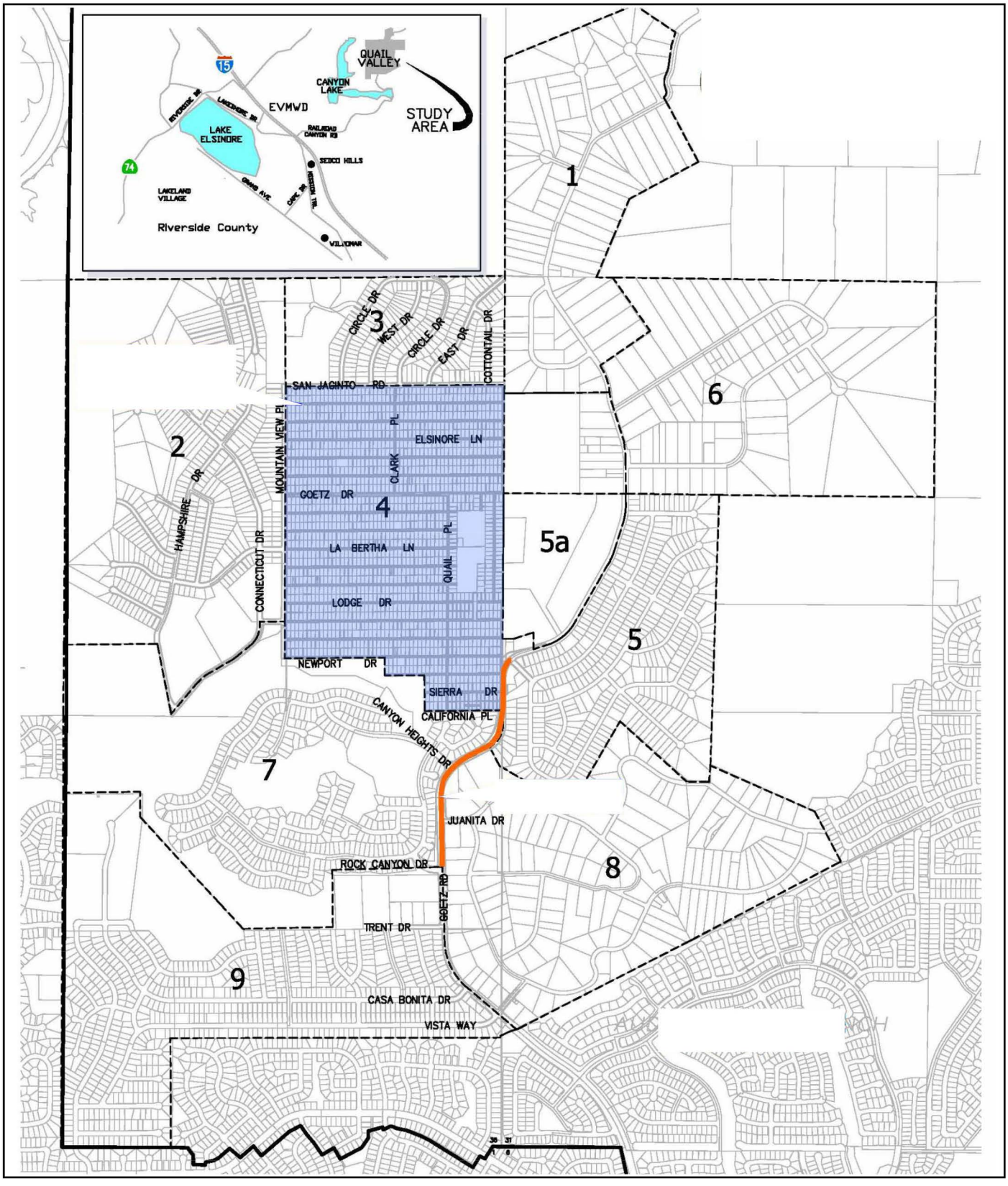
FIGURE 2-1
Regional Location



Sewer Subarea Basin Boundary
EMWD Service Area Boundary
Goetz Road Sewer Backbone
Subarea 4

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FIGURE 2-2
Quail Valley Subareas

Map Source: USGS 7.5 minute topographic map series, Romoland & Lake Elsinore quadrangles, 1979 & 1988, 05S 04W

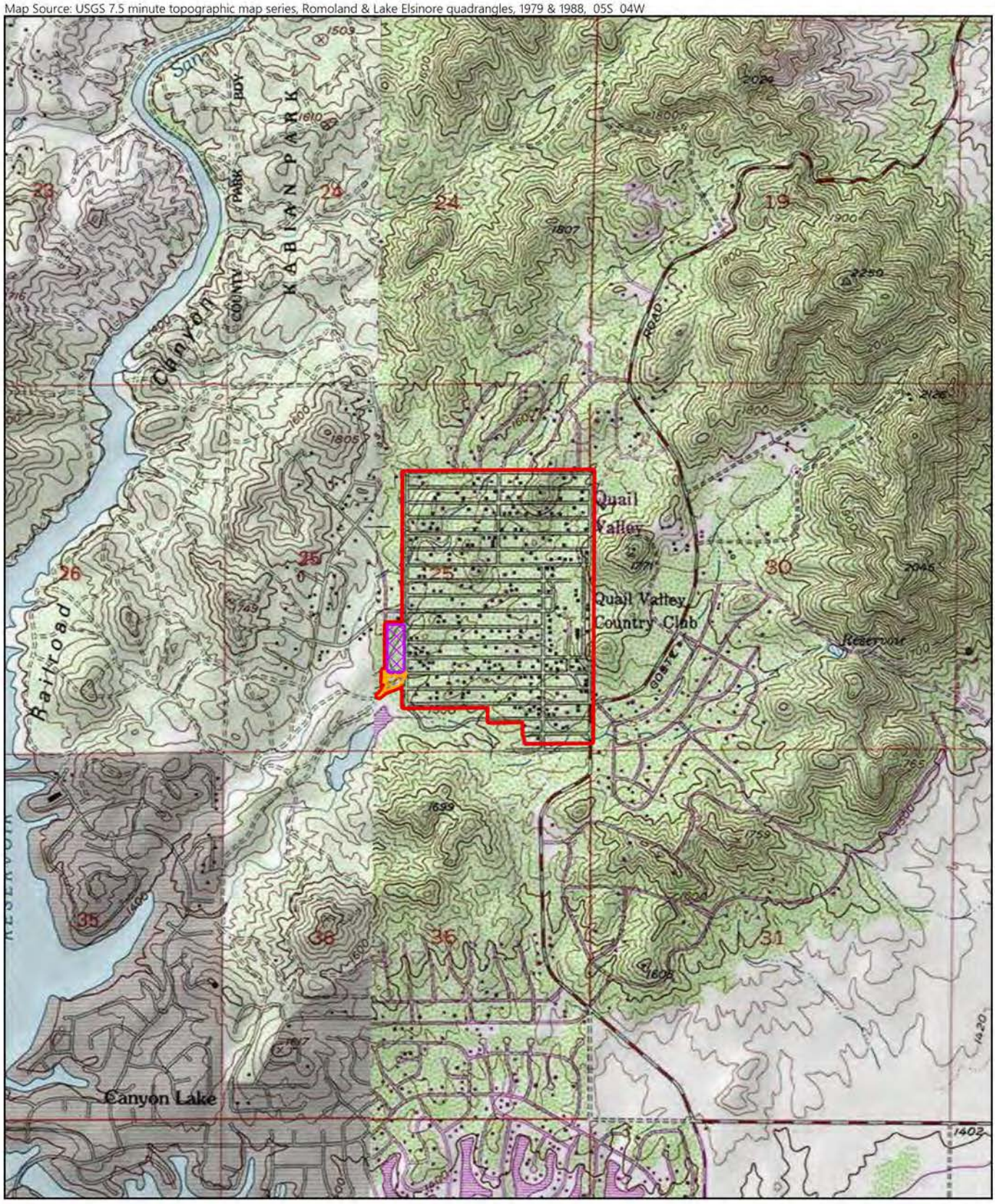

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FIGURE 2-3
Project Location on USGS Map

Image Source: Nearmap (flown May 2025)

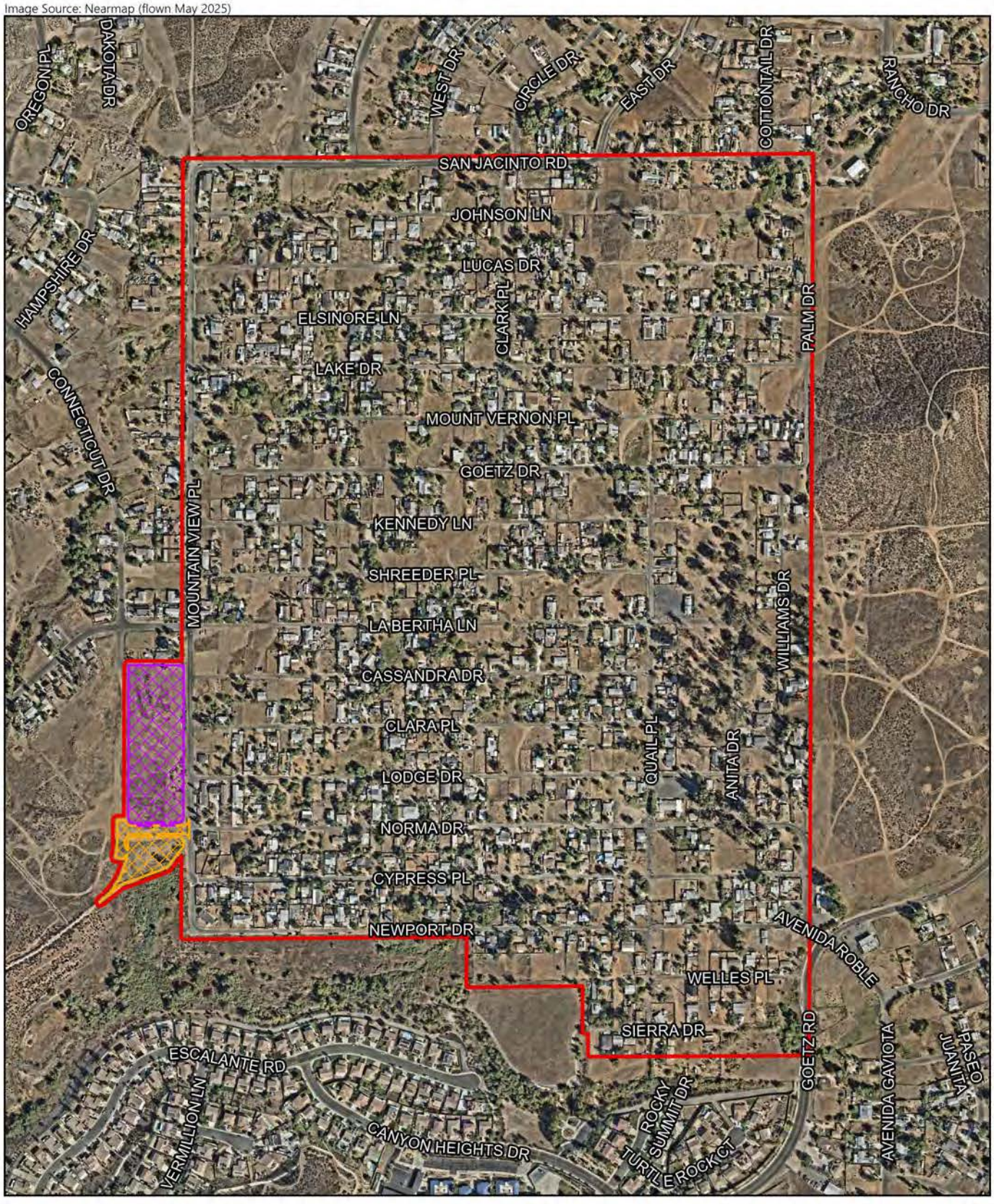

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FIGURE 2-4
Project Location on Aerial Photograph

2.2.2 Biological Resources

Most of the Project site consists of disturbed habitat and urban/developed land. LS-1 (Option 1) consists primarily of Riversidian sage scrub–disturbed and LS-1 (Option 2) consists primarily of Non-Native Grassland: Broadleaf-Dominated. There are several small drainages generally flowing northeast to southwest in low areas through the main portion of the Project site. A larger unnamed stream flows east to west south of the Project site. This larger stream drains into Canyon Lake, approximately 0.8 miles to the southwest of the Project site. See Section 4.3 for a full discussion of biological resources.

2.2.3 Cultural and Tribal Cultural Resources

The prehistory of western Riverside County is grouped into prehistoric, ethnohistoric, and historic periods. The prehistory of Riverside County spans four general temporal periods: Early Holocene, Middle Holocene, Late Holocene, and ethnohistory. The ethnohistory of the Project site includes an area where the traditional territories of the Cahuilla, Luiseño, and the Gabrielino intersect, according to Kroeber (1925) and Bean and Smith (1978). Previously recorded historic-era resources within the Project site include a recreational building and two single-family houses. See Section 4.4 for a full discussion of cultural history.

2.2.4 Geology and Soils

The Project site is located within a prominent natural geomorphic province in southwestern California known as the Peninsular Ranges. It is characterized by steep, elongated ranges and valleys that trend northwestward. More specifically, the Project site is situated within the Perris Block, an eroded mass of Cretaceous and older crystalline rock. The Project site is situated in an old alluvial valley formed by a tributary of the San Jacinto River. Site geology generally consists of very old alluvium underlain by Mesozoic age metasedimentary bedrock. The Project site is located within a seismically active southern California region, located near the active margin between the North American and Pacific tectonic plates. The principal source of seismic activity is movement along the northwest-trending regional fault systems such as the Elsinore, San Jacinto, and San Andreas Fault Zones. Based on published geologic hazard maps, the site is not located within a currently designated Alquist-Priolo Earthquake Fault Zone, or a County Fault Zone. See Section 4.6 for a full discussion of geology and soils.

2.2.5 Hydraulic Conditions

According to Figure 5.9-1, Santa Ana and San Jacinto River Watershed, of the City's General Plan EIR (City of Menifee 2013), the Project site is located within the San Jacinto Valley Hydrologic Unit of the larger Santa Ana River Watershed. The San Jacinto Hydrologic Unit (HU) is approximately 480 square miles and extends from the San Jacinto Mountains from the east towards Lake Elsinore and into Temescal Creek, which flows northwest and discharges into the Santa Ana River. The San Jacinto watershed is regulated by several lakes and reservoirs that include Lake Elsinore, Canyon Lake, Lake Perris, and Mystic Lake. Major tributaries include Bautista Creek, Poppet Creek, Potrero Creek, Perris Valley Drain and Salt Creek. See Section 4.9 for a full discussion of hydraulic conditions.

2.2.6 Transportation

Local access to the Project site is provided via Newport Road and Goetz Road. Newport Road is an urban arterial six lane roadway, and Goetz Road is a major four lane roadway. I-215 is designated as a truck route within the City and would be utilized during construction for the transport of materials to and from the Project site. Construction trucks would travel on I-215 and use the Newport Road interchange, then proceed west on Newport Road and north on Goetz Road to reach the Project site.

Chapter 3.0
Project Description

Consistent with Section 15168 of the CEQA Guidelines, this PEIR provides a programmatic analysis of the potential environmental impacts associated with implementation of the proposed Project. The proposed Project includes construction of new sewer collection infrastructure, serving as the replacement of existing private septic systems. As described in Section 15168 of the CEQA Guidelines, program-level environmental review documents are appropriate when a project consists of a series of actions that can be characterized as one large project. The proposed Project, which is the subject of this PEIR, consists of a long-term plan to enhance the community's wastewater infrastructure and will guide future development activities.

3.1 Project Background and History

Situated within the District's service area, the Quail Valley community was initially developed in the 1920s utilizing individual septic systems. These septic systems are now prone to unacceptable system failures due to age, small lot sizes and existing soil and groundwater conditions. The ongoing failures of private septic system pose an ongoing threat to public health and water quality, both within the community and downstream in Canyon Lake. As a vital potable water source, residential area, and recreational destination, Canyon Lake serves the public in multiple capacities.

In response to these challenges, the District and other key stakeholders—including Riverside County Department of Public Health, Santa Ana RWQCB, the Elsinore Valley Municipal Water District, the City of Canyon Lake, and the City—have collaboratively explored long-term solutions. The goal of this multi-agency effort is to implement a comprehensive, community-wide sewer collection system that would protect water resources, improve public health, and enhance the overall quality of life for Quail Valley residents.

In 2005, the District completed the Quail Valley Sewer Improvements Alternatives Study, which divided the community into nine subareas and provided planning level cost estimates for each subarea. The proposed Project would consist of improvements mostly within Quail Valley Subarea 4, which represents the second phase of the overall sewer infrastructure effort, following upgrades associated with Subarea 9 that began in 2017.

3.2 Project Objectives

In accordance with CEQA Guidelines Section 15124(b), the following primary objectives support the purpose of the proposed Project, assist the Lead Agency in developing a reasonable range of alternatives to be evaluated in this report, and ultimately aid decision-makers in preparing findings and overriding considerations, if necessary. The project objectives are as follows:

- Establish a robust and comprehensive wastewater collection and conveyance system that provides consistent and reliable service to all Quail Valley Subarea 4 residences consistent with established District standards; and

- Safeguard public health, public water resources, and enhance the overall well-being of the Quail Valley and Canyon Lake communities.

3.3 Funding

The District is pursuing funding from several sources, including:

- SWRCB: Clean Water State Revolving Fund Program
- U.S. EPA: State and Tribal Assistance Grants
- U.S. Department of Housing and Urban Development
- RWQCB: Supplemental Environmental Projects

Chapter 5.0 of this PEIR addresses CEQA-Plus requirements and evaluates whether the proposed Project would comply with the following federal regulations: Federal Air Quality Act, Section 7 of the ESA, MBTA, Section 106 of the NHPA, Protection of Wetlands, CZMA, Farmland Protection Policy Act, Floodplain Management, and the Wild and Scenic Rivers Act.

3.4 Project Location

The proposed Project is located within the Quail Valley community of Menifee, California (see Figure 2-1). It encompasses Subarea 4, which is one of nine subareas within the Quail Valley community (see Figure 2-2). Subarea 4 lies approximately 1.5 miles north of Newport Road and 2.8 miles west of I-215 in southwestern Riverside County, California. It is located within Sections 25 and 36, Township 05 South, Range 04 West, as depicted on the USGS 7.5-minute topographic map, Romoland quadrangle (see Figure 2-3; USGS 2003). Figure 2-4 shows the proposed Project location on an aerial photograph. In total, Subarea 4 contains 1,368 lots, approximately 525 of which are currently served by septic systems.

3.5 Project Description

The proposed Project would construct approximately 10 miles of 8-inch and 12-inch polyvinyl chloride gravity main pipe, approximately 1.1 miles of force mains, 247 manholes, 24 connector pipes, 1 regional lift station (LS-1), and 4 smaller lift stations (LS-2, LS-3, LS-4, and LS-5). LS-1 would convey the majority of wastewater flows originating from Subarea 4. To connect Subarea 4 to LS-1, 24

connector pipes would be installed to link streets and facilitate gravity flows. To accomplish this, connector pipes would be required to traverse private properties.

Due to varied topography in the northwest portion of the Project site, gravity flows cannot remove all wastewater from Subarea 4. To address this situation, LS-2 through LS-5 would pump wastewater via a shared force main to Collection Manhole 2, located at the intersection of La Bertha Lane and Mountain View Place, before ultimately discharging to LS-1. From LS-1, flows would be pumped to Collection Manhole 1 located at the intersection of Wells Place and Goetz Road. Collection Manhole 1 would connect to sewer infrastructure in Goetz Road ("Goetz Road Sewer Backbone"). The Goetz Road Sewer Backbone Project underwent its own environmental review in 2024 and was approved by the District Board of Directors on March 4, 2026.

3.5.1 Project Phasing

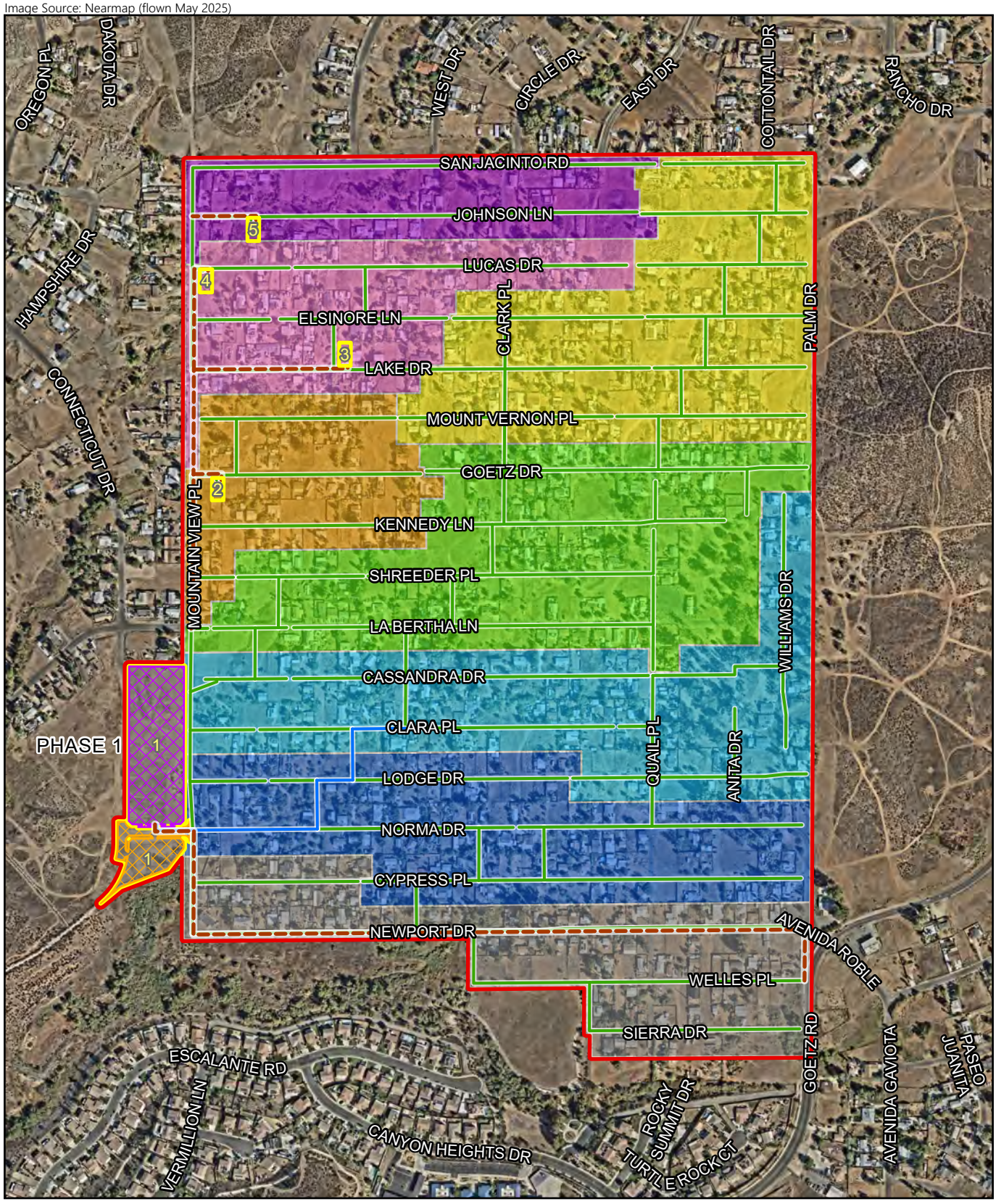
Construction is planned to be carried out in eight phases[1], to be implemented over an approximately 20-year period. **Figure 3-1** shows the proposed Project phases and lift station locations, while **Table 3-1** summarizes the sewer system elements by phase. Construction phasing may be adjusted based on grant funding availability, stakeholder participation, and implementation of the District's Capital Improvement Program.

Table 3-1
Sewer System Elements by Phase

Phase	Length of Sewer (linear feet)	Length of Force Main (linear feet)	Lift Stations	Number of Manholes	Number of Septic Systems Replaced
Phase 1	6,568	3,421	LS-1	27	80
Phase 2	7,504	0	-	29	84
Phase 3	8,426	0	-	42	86
Phase 4	8,740	0	-	45	83
Phase 5	8,631	0	-	45	75
Phase 6	3,994	994	LS-2	18	36
Phase 7	4,770	1,598	LS-3, LS-4	24	53
Phase 8	4,280	283	LS-5	17	28
SOURCE: Appendix B.					

[1] Depending on funding availability.

Image Source: Nearmap (flown May 2025)



Project Boundary
Lift Station (LS)
LS-1 Option 1
LS-1 Option 2

Sewer Force Main
12" Gravity Sewer
8" Gravity Sewer

Phase
1
2
3
4
5
6
7
8

0 Feet 600

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FIGURE 3-1
Proposed Project

3.5.2 Regional Lift Station (LS-1) Options

The proposed Project identifies two potential site options for LS-1, which are based on proximity to sewer infrastructure, terrain, size, and accessibility. The site chosen requires adequate space to accommodate station facilities, designated areas for chemical storage, and access for maintenance vehicles. Although the regional lift station options are located immediately west of the boundaries of Subarea 4, both would be constructed and designed to serve the proposed Project.

Both LS-1 options would be designed in accordance with the District's Small Sewage Lift Station Guidelines, Standard Drawings, and Specifications (Eastern Municipal Water District 2021). Both LS-1 options would consist primarily of subterranean features, with visible aboveground features limited to access hatches, electrical control panels, an emergency backup diesel generator within an enclosure, and other associated equipment. Both LS-1 options would require roadway improvements to Norma Drive, which is currently unpaved and has an existing slope of approximately 12 percent. To ensure safe and reliable access for maintenance vehicles, Norma Drive would be graded to a flatter slope, ideally between 5 and 6 percent.

3.5.2.1 LS-1 Option 1

LS-1 Option 1 is located southwest of the intersection of Norma Drive and Mountain View Place. The site is currently undeveloped and would require acquisition of assessor parcel number 351-200-006. Access to the site would be provided via 20-foot-wide driveways connecting to Connecticut Road and Norma Drive. LS-1 Option 1 would require roadway improvements to Connecticut Drive in addition to roadway improvements to Norma Drive. This site would require extensive regrading, including construction of a retaining wall along the southwest side of the site. The estimated minimum height for the retaining wall would be approximately 5 feet, plus an additional 8 feet of wall extending above the finished grade. In addition, 6-foot-high fencing would be installed above the retaining wall. The proposed site plan for LS-1 Option 1 is shown in **Figure 3-2**.

3.5.2.2 LS-1 Option 2

LS-1 Option 2 is located northwest of the intersection of Norma Drive and Mountain View Place. The site is currently undeveloped and would require acquisition of assessor parcel number 350-020-025. Access to LS-1 Option 2 would be provided via two 20-foot-wide driveways connecting to Norma Drive. The site would require extensive regrading, including construction of retaining walls around the entire perimeter of the site. The estimated minimum height for the retaining wall would be approximately 10 feet, plus an additional 8 feet of wall extending above the finished grade. In addition, 6-foot-high fencing would be installed above the retaining wall. The proposed site plan for LS-1 Option 1 is shown in **Figure 3-3**.

Map Source: Michael Baker International

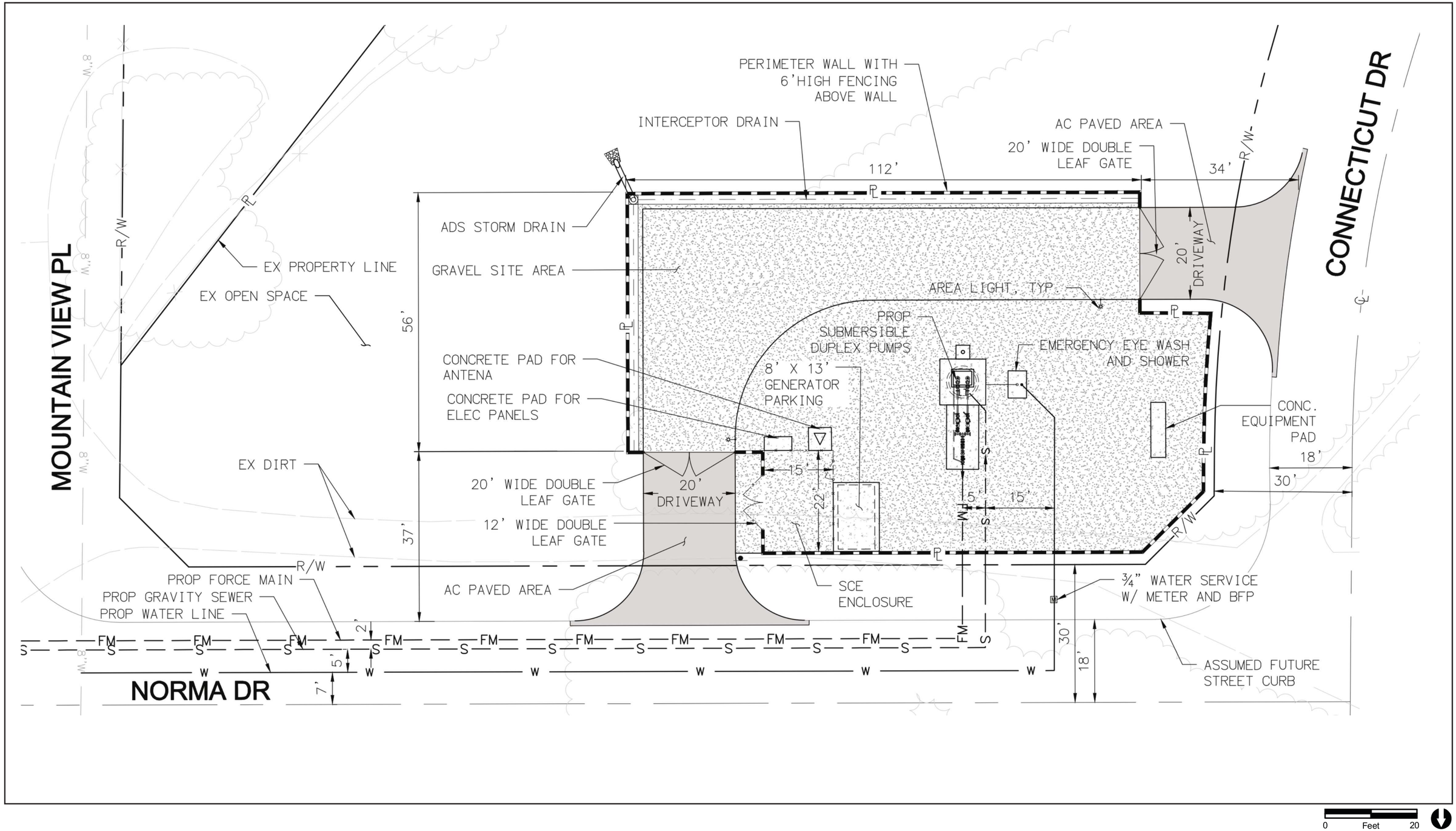

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FIGURE 3-2
LS-1 Option 1 Site Plan

Map Source: Michael Baker International

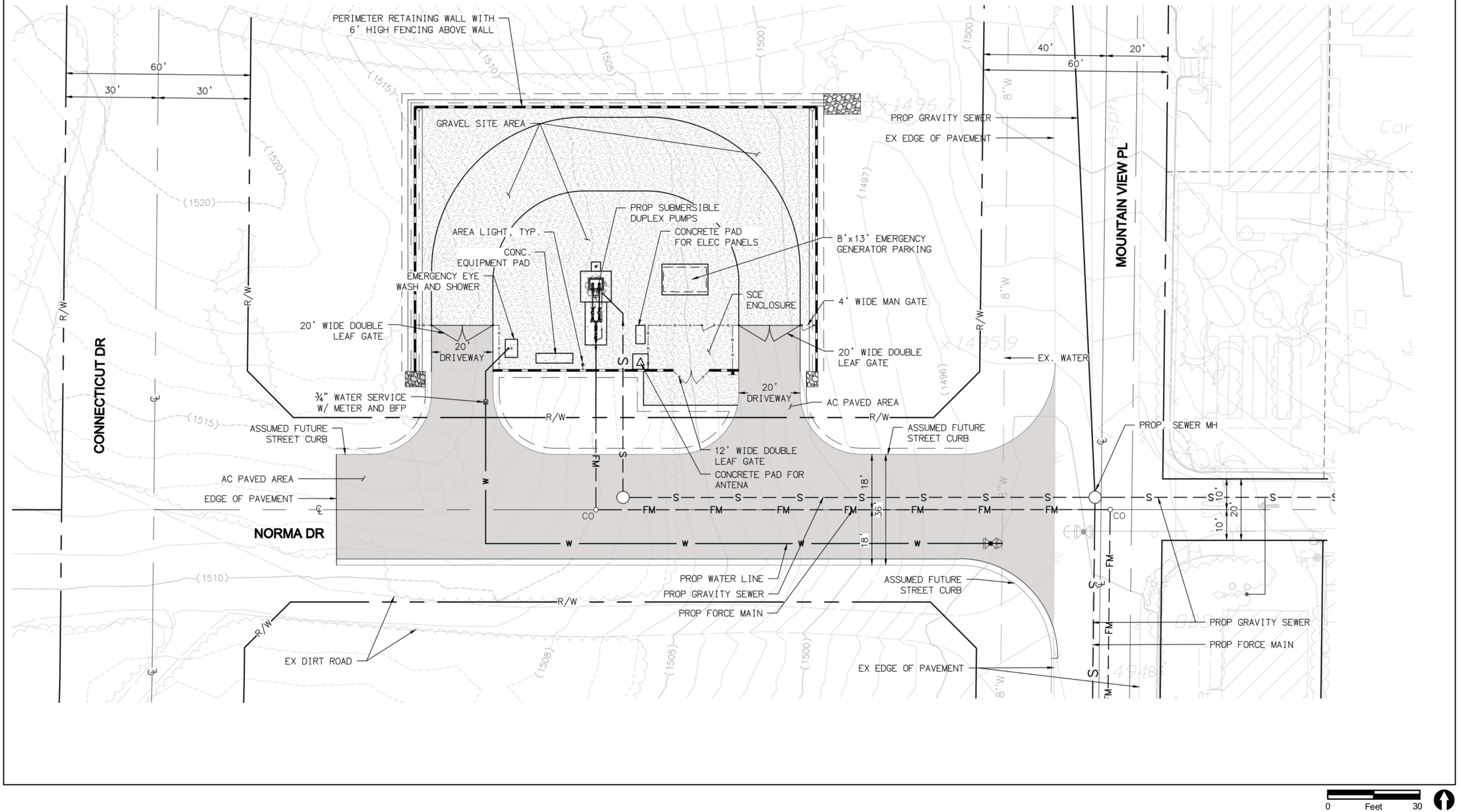

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FIGURE 3-3
LS-1 Option 2 Site Plan

3.5.3 LS-2, LS-3, LS-4, and LS-5

The four smaller lift stations (LS-2, LS-3, LS-4, and LS-5) would be located on vacant land adjacent to residential uses (see **Figure 3-1**). As identified in **Table 3-2**, each of the four lift stations would require acquisition of property. Each site would include a smaller lift station equipped with a pre-packaged pumping system that would be enclosed within six-foot-tall concrete masonry unit walls. Each of the four smaller lift stations would include a generator receptacle to allow connection of a portable or standby generator in the event of a power outage, ensuring continued operation of the lift station pumps and controls until utility power is restored.

3.5.4 Property Acquisitions and Easements

To minimize the need for lift stations, pipelines would be strategically routed between parallel streets via undeveloped parcels. The 24 connector pipes are planned to cross undeveloped parcels the District intends to acquire or gain access to by acquiring ownership or obtaining sewer easements. **Figure 3-4** identifies potential property acquisition or easement needs and the various routing options.

The District would need to acquire properties for development of the five proposed lift stations. **Table 3-2** lists the parcels that the District anticipates would need to be acquired for the proposed lift stations. The final lift station locations would ultimately depend on successful property acquisition and would be finalized during each phase.

Table 3-2
Property Acquisition Needs for Lift Station Sites

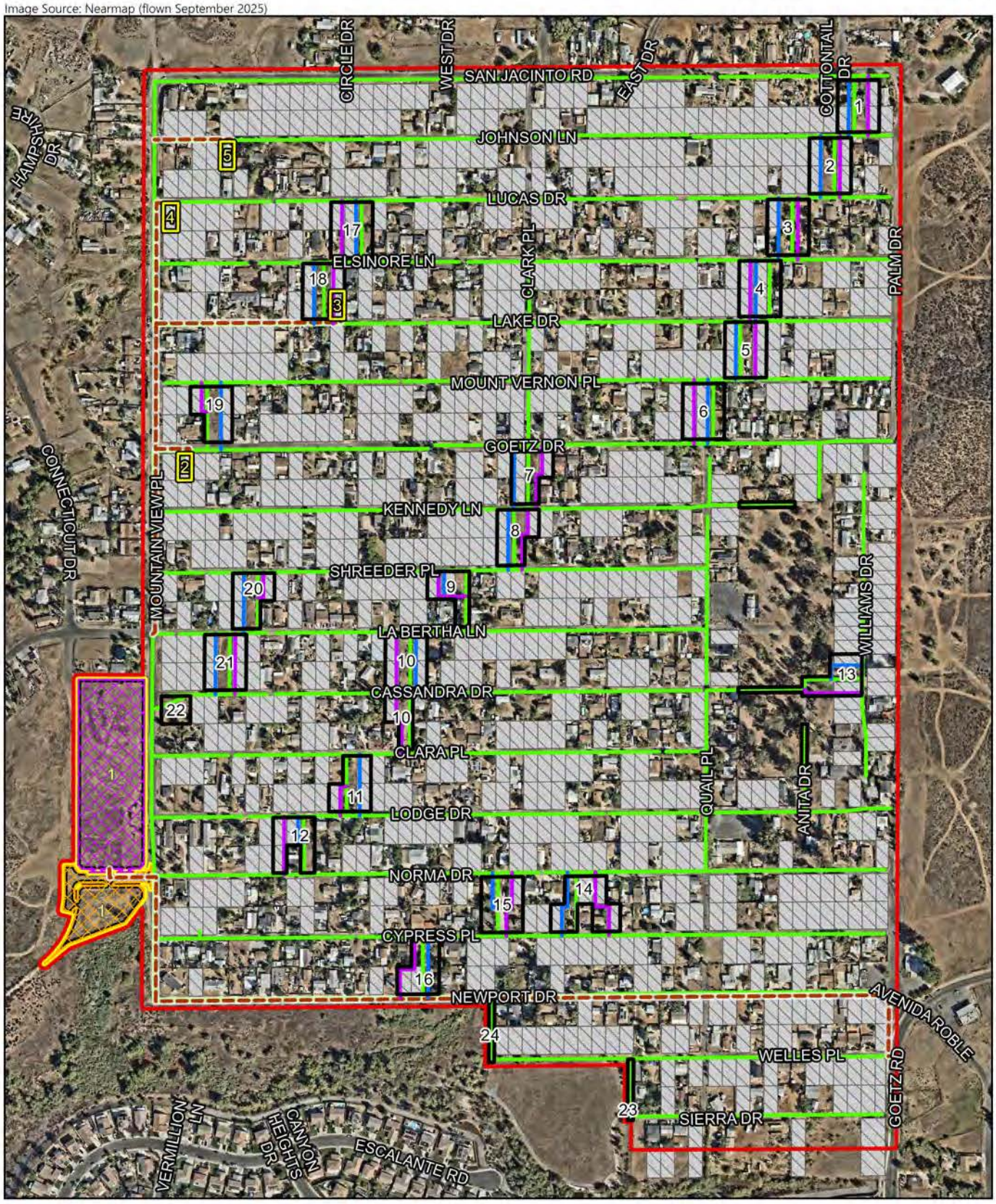
Lift Station	Property Acquisition Needs (Assessor Parcel Number)
LS-1 (Option 1)[1]	351-200-006
LS-1 (Option 2)	350-020-025
LS-2	350-221-002
LS-3	350-191-039
LS-4	350-113-001
LS-5	350-112-005

[1]Alternative 2 in the Preliminary Design Report
SOURCE: Appendix B.

3.5.5 Construction Access and Staging

Narrow street widths within the Project site present construction access and staging challenges. While excavation equipment is expected to fit within the existing ROW, navigating around obstacles such as electrical poles with light fixtures, and mailboxes constrains access. It is anticipated that street closures would be required during construction given that all interior street ROW are 20 feet wide and have one-way access. Special excavation equipment, such as rock drills or breakers, may be required when excavating in locations with shallow bedrock subsurface conditions.

Image Source: Nearmap (flown September 2025)



Project Boundary
Lift Station (LS)
LS-1 Option 1
LS-1 Option 2
Vacant Lots

Property Acquisition or Easement Needs
Gravity Sewer w/Connector Pipe Option 1
Connector Pipe Option 2
Connector Pipe Option 3
Sewer Force Main

0 Feet 500

RECON

M:\JOBS6\10667\common_gis\PRO\standard_figures\standardfigures.aprx 3/12/2026 FMM

FIGURE 3-4
Property Acquisition or Easement Needs

Temporary staging and stockpiling of materials during construction is expected to occur within the street ROW. When construction is inactive, excavation equipment and pipe materials would be relocated to designated staging/spoils areas such as those properties targeted for acquisition. It is assumed that these properties could be graded. Grading and erosion control plans would be required for these stockpile areas. Easements could also accommodate staging needs, but not spoil storage.

3.5.6 Septic Tank Conversion

Construction and operation of the lift stations and sewer system would occur prior to initiating septic sewer conversions. The District would need right-of-entry agreements prior to constructing sewer laterals and abandoning existing septic tanks. The conversion process involves several key steps to ensure continued service for homeowners while adhering to environmental and safety standards:

- Trench to the property line;
- Locate, trench, and expose the lateral between the house and septic tank, which involves trenching and removing obstructions, such as existing hard-surface paving, vegetations, landscaping, planters, access gate, fencing/blockwall, etc.;
- For some laterals and septic tanks that are under existing structures, alternative lateral alignment would be designed and property owner's approval obtained;
- Install a 4-inch Schedule 40 polyvinyl chloride sewer lateral;
- Backfill trench and restore in kind obstructions mentioned above;
- Pump out all water and puncture the septic tank;
- Fill the emptied tank with concrete; and
- Obtain inspection and approval of the abandonment from the County of Riverside.

If the septic tank conversion for existing residences cannot proceed within 12 months of completion of the District's wastewater collection system due to the absence of a right-of-entry agreement, the parcel owner would be responsible for coordinating the design, construction, and associated costs of septic tank abandonment and connection to the main sewer line stub.

3.6 Environmental Commitments

Environmental commitments consist of physical design features and operational practices that are integral to the proposed Project. Environmental commitments apply to the proposed Project and to subsequent phase-specific projects, as applicable. Environmental commitments represent inherent characteristics of the proposed Project that avoid or reduce the potential for environmental impacts. Accordingly, these commitments are assumed in the impact analysis and are considered in determining the significance of environmental effects.

3.6.1 Construction Noise Best Management Practices

The following best management practices (BMPs) related to noise would be implemented during construction:

1. The District shall require its contractor to implement the following actions relative to construction noise: the District shall conduct construction activities between 6:30 a.m. to 7:00 p.m. Monday through Saturday in accordance with the City Municipal Code Sections 8.01.010 and 9.210.060(C).

2. Prior to construction, the District in coordination with the construction contractor, shall provide written notification to all properties within 300 feet of the proposed Project informing occupants of the type and duration of construction activities. Prior to construction commencement, the District program manager shall establish a noise complaint process to allow for resolution of noise problems. This process shall be clearly described in the notifications.

3. Stationary noise-generating equipment shall be located as far from sensitive receptors as possible. Such equipment shall also be oriented to minimize noise that would be directed toward sensitive receptors. Whenever possible, other non-noise generating equipment (e.g., roll-off dumpsters) shall be positioned between the noise source and sensitive receptors.

4. Equipment and staging areas shall be located as far from sensitive receptors as possible. At the staging location, equipment and materials shall be kept as far from adjacent sensitive receptors as possible.

5. Construction vehicles and equipment shall be maintained in the best possible working order; operated by an experienced, trained operator; and shall utilize the best available noise control techniques (including mufflers, use of intake silencers, ducts, engine enclosures and acoustically attenuating shields or shrouds).

6. Unnecessary idling of internal combustion engines shall be prohibited. In practice, this would require turning off equipment if it would idle for five or more minutes.

7. Electrically powered equipment shall be used instead of pneumatic or internal combustion powered equipment, where feasible.

8. The use of noise-producing signals, including horns, whistles, alarms, and bells, shall be for safety warning purposes only.

3.6.2 Construction Best Management Practices

The following BMPs would be implemented during construction:

1. Construction of the above-ground components associated with the proposed lift stations would be in accordance with the California Building Code (CBC) to meet all seismic design parameters. Additionally, future construction would be required to apply the geotechnical recommendations and construction considerations set forth in the Geotechnical Exploration report (see Appendix F to Appendix B), as applicable to each phase of development.

2. Construction activities would be required to comply with SCAQMD Rule 403 for dust control that would ensure the prevention and/or management of wind erosion and subsequent topsoil loss (see Section 4.2, Air Quality, for information about SCAQMD Rule 403). Compliance with SCAQMD Rule 403 would ensure that construction activities generating wind-induced soil erosion are below SCAQMD significance thresholds.

3. Construction activities would be required to comply with the requirements of the NPDES Construction General Permit, which are designed to minimize erosion potential by controlling storm water flows and minimization of topsoil loss.

4. Construction activities would be required to comply with the requirements of SCAQMD Rule 1403 for the assessment and removal of asbestos containing materials, Title 22, Division 4.5 of the California Code of Regulations (CCR) for the removal of hazardous materials during demolition activities, and Title 8 of the CCR, regarding limits, exposure monitoring, respiratory protection, and good working practices during demolition, grading, and excavation, as well as management and disposal in accordance with the applicable provision of the HSC.

5. All personnel would be required to comply with Public Resources Code (PRC) Sections 4427, 4428, 4431, and 4442, which include regulations relating to the handling of combustible fuels and equipment that can exacerbate fire risks.

3.7 Intended Uses of the PEIR

This PEIR examines the potential environmental impacts of implementing the proposed Project and identifies mitigation measures required to address significant impacts. This evaluation is programmatic and does not evaluate the potential project-specific environmental impacts. This means subsequent phase-specific projects would be reviewed by the District for consistency with the proposed Project and this PEIR, and future project-level environmental review could be required under CEQA. Pursuant to PRC Sections 21093 and 21094 and the State CEQA Guidelines Sections 15168 and 15152, future phases consistent with the proposed Project may tier from this PEIR to streamline review. If this programmatic analysis provides sufficient detail to address certain impacts, subsequent projects may rely on it, provided those impacts can be mitigated through project revisions, conditions of approval, or other means. Only new or site-specific impacts not addressed in this PEIR would require further analysis and mitigation.

3.8 Required Permits and Approvals

The proposed Project would require adoption by the District's Board of Directors. Subsequent site-specific development under the proposed Project may require approval of federal, state, and responsible or trustee agencies that may rely on this PEIR for decisions in their areas of expertise.

3.8.1 Responsible/Trustee Agencies

State law requires that all environmental impact reports be reviewed by Responsible and Trustee Agencies. A Responsible Agency, defined pursuant to State CEQA Guidelines Section 15381, includes all public agencies other than the Lead Agency which have discretionary approval power over the proposed Project or a component of the Project, including mitigation. Section 15379 of the CEQA Guidelines defines a "public agency" as "…any state agency, board, or commission and any local or regional agency…" It goes on to state that the term public agency "…does not include agencies of the federal government." A Trustee Agency is defined in Section 15386 of the State CEQA Guidelines as a state agency which has jurisdiction by law over natural resources affected by a project that are held in trust for the people of the state of California. Implementation of the proposed Project would require subsequent actions or consultation from Responsible or Trustee Agencies. Primary Responsible or Trustee Agencies that may have an interest in the proposed Project are listed below:

- California SWRCB (Responsible Agency)
- California RWQCB–Santa Ana Region (Responsible Agency)
- CDFW (Trustee Agency)
- SCAQMD (Responsible Agency)

3.8.2 Subsequent Permits and Approvals

Future site-specific projects would be required to obtain the permits and approvals presented in Table 3-3.

Table 3-3
Required Permits and Approvals

Permit/Approval	Permitting/Approving/Responsible Agency	Permit/Approval Trigger
National Pollutant Discharge Elimination System Construction General Permit[1]	California Regional Water Quality Control Board, Region 8	Required prior to construction activity, upon completion of Notice of Intent and Storm Water Pollution Prevention Program.
Encroachment Permit	City of Menifee	Required for any proposed sewer in the public street.
South Coast Air Quality Management District Permit	South Coast Air Quality Management District	Required for the emergency generators.
Traffic Control Plan	City of Menifee	Required for each construction phase.

Table 3-3 (cont.) Required Permits and Approvals		
Permit/Approval	Permitting/Approving/Responsible Agency	Permit/Approval Trigger
Septic Abandonment Permit	Riverside County Department of Environmental Health	When a property that is currently served by an existing septic system connects to a new public sewer system, the existing septic tank must be properly decommissioned/ abandoned under a Department of Environmental Health permit.
Streambed Alteration Agreement	California Department of Fish and Wildlife	Future phased development under the proposed Project may require review and/or the issuance of Streambed Alteration Agreements.
[1]The Eastern Municipal Water District currently operates under a District-wide National Pollutant Discharge Elimination System Permit. This permit would be followed if needed for groundwater discharges.		

Chapter 4.0
Environmental Analysis

The following sections analyze the potential environmental impacts that may occur through implementation of the proposed Project. Construction of the Project is currently planned to occur over eight phases[1], spanning approximately 20 years; therefore, due to the long-term buildout horizon, circumstances and impacts have the potential to change over time. The environmental issues in the following sections include those identified as potentially significant during the initial screening process. This chapter analyzes fourteen environmental issues in accordance with the CEQA Guidelines and Statutes. For each issue, the analysis includes the following:

- **Existing Conditions:** Describes the current environmental setting, including baseline conditions.
- **Applicable Regulatory Requirements:** Summarizes federal, state, and local laws, regulations, and policies that govern or influence the environmental issue.
- **Significance Determination Thresholds:** Identifies criteria and thresholds used to determine whether an impact is considered significant under CEQA.
- **Methodology:** Explains the approach, analytical tools, and data sources used to evaluate potential environmental impacts.
- **Impact Evaluation:** Assesses the potential effects of the proposed Project relative to the significance thresholds, considering both construction and operation.
- **Significance of Impacts:** Classifies each impact as less than significant, potentially significant, or significant and unavoidable based on the evaluation.
- **Mitigation Measures:** Describes measures proposed to avoid, minimize, or offset impacts that are potentially significant.
- **Significance of Impacts After Mitigation:** Concludes whether mitigation measures reduce impacts to a less-than-significant level or if any impacts remain significant and unavoidable.

The remaining five environmental issues were found to be less than significant and are addressed in a more abbreviated manner in Chapter 7.0. Cumulative impacts associated with the proposed Project are addressed in Chapter 8.0.

[1] Depending on funding availability.

4.1 Aesthetics

This section analyzes aesthetic impacts that could result from implementation of the proposed Project. Construction of the proposed Project is planned to be carried out in eight phases implemented over a 20-year period. This evaluation is programmatic, focusing on the environmental impacts that could occur from implementation of all phases of construction (see Chapter 3). As each phase is constructed, project-level analyses may be required to further quantify any identified significant impacts.

This section includes a setting discussion that describes existing aesthetic conditions in and around the Project site and summarizes applicable regulations related to aesthetics. This section also includes an evaluation of potential impacts of the proposed Project related to aesthetics.

4.1.1 Existing Conditions

4.1.1.1 Visual and Community Character

The Project site encompasses Subarea 4 of the Quail Valley community, which has been divided into nine subareas for planning purposes (Figure 2-2). Two site options for the regional lift station are located outside but contiguous with the west side of Subarea 4 (assessor parcel numbers 351-200-006 and 350-020-025). Subarea 4 consists of a mix of developed and undeveloped land, with predominately one-story, single-family residences located within a grid of neighborhood roads. Existing development reflects a low-density residential pattern that gives the area a generally rural appearance. A small portion of the southeastern area of Subarea 4 includes limited commercial uses, such as the Quail Valley Liquor Market. The two regional lift station site options consist of vacant land. The Project site topography consists of a series of small hills. Elevations range from approximately 1,400 feet above mean sea level at a stream in the southwestern portion of the site to approximately 1,700 feet above mean sea level on a hill in the eastern portion. Undeveloped land with natural hills is located directly east of Subarea 4. Subarea 4 contains 1,368 lots, approximately 525 of which are currently served by septic systems. The area impacted by the proposed Project consists of roadways, existing septic drain fields (various sizes), and vacant lots for proposed lift stations.

4.1.1.2 Scenic Vistas and Viewsheds

Scenic vistas are defined as natural landscapes that provide views of unique flora, geologic features, or other natural features that are generally free from urban intrusions. Typical scenic vistas include views of mountains and hills; large, uninterrupted open spaces; and water bodies. Scenic vistas generally play a large role in the way a community defines itself and can influence development patterns, particularly as projects are designed to preserve or take advantage of viewsheds (the surrounding geographic area from which the landscape can be seen; City of Menifee 2013a).

Scenic vistas can be impacted by development through changes to the vista itself or by obstructing views from locations within the vista's viewshed. First, a structure may be constructed that blocks the

view of the vista. Second, the vista itself may be altered (i.e., development on a scenic hillside). Portions of the Project site are within the viewsheds of the San Jacinto Mountains to the east, the San Bernardino Mountains to the northeast, the San Gabriel Mountains to the northwest, and the Santa Ana Mountains to the west, depending on elevation and orientation. However, there are no officially designated scenic vistas, nor any officially designated viewsheds, within the City.

Topography within Subarea 4 consists of small hills, which have influenced development patterns in the area. However, Subarea 4 is not considered a scenic vista, as it includes existing development and is not free from urban intrusions. The two site options for the regional lift station, located outside but contiguous with the west side of Subarea 4, consist of vacant land and are also not considered scenic vistas.

4.1.1.3 Scenic Highways

According to the California Department of Transportation (Caltrans) State Scenic Highway System Map, there are no designated scenic highways within the Project site or City. The nearest eligible state designated highway is State Route (SR) 74, approximately 4.4 miles northeast of the Project site, and SR-15, located approximately 3.93 miles southwest of the Project site. The nearest officially designated state highway is a segment of SR-74 located approximately 23 miles east of the Project site (Caltrans 2025).

4.1.1.4 Enhanced Landscape Corridors and Scenic Corridors

Enhanced landscape corridors and scenic corridors are designated by the City to protect visual resources, reinforce community identity, and guide streetscape design along major transportation routes. Scenic corridors are essential for circulation and can reinforce the City's community identity through streetscape design and preservation of scenic resources. Design treatments within scenic corridors can contain cohesive, yet differentiated design features reflecting the type and extent of uses along the corridor. To help foster identity along major corridors, the City has designated a number of north-south and east-west roadways as "enhanced landscape corridors" (City of Menifee 2013b). Roadways within enhanced landscape corridors are considered major transportation routes and receive special design considerations to ensure they complement the existing community. The protection of the City's visual resources along its scenic corridors, including I-215, is particularly important because these corridors help visually frame some of the community's most distinctive features. The closest enhanced landscape corridors to the Project site are located approximately 1.62 miles south along Newport Road and approximately 2 miles east along Murrieta Road. The nearest scenic corridor is approximately 3.42 miles east of the proposed Project site, along I-215.

4.1.2 Applicable Regulatory Requirements

4.1.2.1 Federal Regulations

a. National Scenic Byways Program

The National Scenic Byways Program is part of the U.S. Department of Transportation, Federal Highway Administration. The program was established under the Intermodal Surface Transportation Efficiency Act of 1991 and was reauthorized in 1998 under the Transportation Equity Act for the 21st Century. Under the program, the U.S. Secretary of Transportation recognizes certain roads as National Scenic Byways or All-American Roads based on their archaeological, cultural, historic, natural, recreational, and scenic qualities. The nearest National Scenic Byway is the Arroyo Seco Historic Parkway–Route 110 in Los Angeles County.

4.1.2.2 State Regulations

a. The California Scenic Highways and Historic Parkways Program

The California Scenic Highways and Historic Parkways Program was created in 1963 to preserve and protect highway corridors located in areas of outstanding natural beauty from changes that would diminish the aesthetic value of the adjacent lands. Caltrans maintains its State Scenic Highways and Historic Parkways Program, through which segments of the state highway system are designated as being of particular scenic value or interest. A highway may be designated scenic depending upon how much of the natural landscape can be seen by travelers, the scenic quality of the landscape, and the extent to which development intrudes upon the traveler's enjoyment of the view. Interstates, state highways, byways, and parkways are eligible for designation or for recognition as eligible for designation. The program is governed by the regulations found in the California Streets and Highways Code Section 260 et seq.

State Scenic Highways in California are either formally recognized by Caltrans or meet the criteria outlined in the Streets and Highway Code, Section 260 of the California Scenic Highway Program. Caltrans has not officially designated any State Scenic Highways, or identified segments that qualify, that traverse the proposed Project site or City. The nearest eligible state designated highway is SR-74, approximately 4.4 miles northeast of the Project site, and SR-15 located approximately 3.93 miles southwest of the Project site. The nearest officially designated state highway is a segment of SR-74 located approximately 23 miles east of the Project site (Caltrans 2025).

b. California Building Standards Code

Title 24 of the California Building Standards Code serves as the basis for the design and construction of buildings in the state of California. In addition to addressing structural safety, energy efficiency, sustainability, and the incorporation of new technologies, the California Building Standards Code includes standards intended to minimize light pollution and glare hazards. These standards establish maximum allowable Backlight, Uplight, and Glare (BUG) ratings for exterior lighting fixtures, which help reduce excessive nighttime illumination and protect visual quality in developed areas. Specifically, Title 24, Part 6, Section 130.2(b) requires that outdoor luminaires of 6,200 initial lumens

or greater comply with BUG rating standards, and the corresponding maximum allowable BUG ratings are specified in Title 24, Part 11, Section 5.106.8. These requirements minimize light trespass and glare visible from surrounding areas.

4.1.2.3 Local Regulations

a. City of Menifee General Plan

The City's General Plan includes the following goal and policies related to aesthetics.

Community Design Element

Goal CD-4: Recognize, preserve, and enhance the aesthetic value of the City's enhanced landscape corridors and scenic corridors.

- Policy CD-4.1: Create Unifying streetscape elements for enhanced landscape streets, including coordinated streetlights, landscaping, public signage, street furniture, and hardscaping.
- Policy CD-4.4: Frame views along streets through the use of wide parkways and median landscaping.
- Policy CD-4.5: Orient new streets to maximize the view of open space, parks, mountains, and built landmarks where possible.
- Policy CD-4.7: Design new landscaping, structures, equipment, signs, or grading within the scenic corridors for compatibility with the surrounding scenic setting or environment.

b. City of Menifee Municipal Code

Chapter 6.01–Dark Sky, Light Pollution

The Dark Sky, Light Pollution chapter of the City's Municipal Code establishes and outlines general requirements for outdoor lighting facilities within the City to preserve the aesthetic characteristics and benefits of dark skies and to reduce the potential of light pollution.

Chapter 9.200–Tree Preservation

The Tree Preservation chapter of the City's Municipal Code establishes and outlines requirements to protect trees considered to be a valuable community resource from indiscriminate cutting or removal, to ensure and enhance public health, safety and welfare through proper care, maintenance, and preservation of trees. Section 9.200.050, Protection of Existing Trees, requires construction projects to preserve and protect the health of trees remaining on development sites, relocated trees and new trees planted to replace those removed.

4.1.3 Significance Determination Thresholds

Thresholds used to evaluate impacts to aesthetic resources are based on applicable criteria in the CEQA Guidelines (CCR Sections 15000–15387), Appendix G. The proposed Project would have a significant impact on the environment if it would:

1) Have a substantial adverse effect on a scenic vista;

2) Substantially damage scenic resources, including but not limited to trees, rock outcroppings, and historic buildings within a State Scenic Highway;

3) 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 points). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality; or

4) Create a new source of substantial light or glare which would adversely affect daytime or nighttime views in the area.

4.1.4 Methodology

The visual resource analysis is based on field review of the proposed Project site and review of topographic and scenic conditions. The analysis includes an evaluation of how the proposed Project would alter the existing visual environment.

4.1.5 Threshold 1: Scenic Vistas

Would the proposed Project have a substantial adverse effect on a scenic vista?

4.1.5.1 Impact Analysis

As described in Section 4.1.1.2 above, scenic vistas potentially visible from the Project site include the San Jacinto Mountains to the east, the San Bernardino Mountains to the northeast, the San Gabriel Mountains to the northwest, and the Santa Ana Mountains to the west. The Project site consists of a series of small hills, with elevations ranging from approximately 1,400 to 1,700 feet above mean sea level. Depending on the elevation and orientation within the Project site, views toward each of these mountain ranges may be available.

There are no designated scenic vistas within the City, and the proposed Project site is not within an official viewshed. As discussed in 4.1.1.4 above, neither scenic corridors nor enhanced landscape corridors are visible from the Project site.

Construction activities would be temporarily visible within the Project site; however, these activities would not have scale, massing, or permanence to significantly impact recognized scenic vistas. Operation of the proposed Project would result in minimal long-term visual change. The wastewater pipelines would be located underground, and impact areas restored to pre-project conditions once construction is complete. The four smaller lift stations, LS-2, LS-3, LS-4, and LS-5, and associated

equipment would be enclosed within six-foot-tall concrete masonry unit walls. For LS-1, both Option 1 and Option 2 would require retaining walls to accommodate site topography. Only approximately eight feet of these walls would extend above finished grade, with the remaining wall height located below grade. Lift station structures would be largely subterranean. Above-ground features, including access hatches, electrical control panels, and emergency generators, would remain low-profile relative to surrounding residential development. Because project features, including walls, would be similar in height to perimeter walls and fences already present within Subarea 4, the proposed Project would not obstruct or provide contrast views of the San Jacinto Mountains, San Bernardino Mountains, San Gabriel Mountains, or Santa Ana Mountains.

4.1.5.2 Significance of Impacts

The proposed Project would not have a substantial adverse effect on scenic vistas, and impacts would be less than significant.

4.1.5.3 Mitigation

No mitigation is required.

4.1.5.4 Significance of Impacts After Mitigation

No mitigation is required.

4.1.6 Threshold 2: Scenic Resources

Would the proposed Project substantially damage scenic resources, including but not limited to trees, rock outcroppings, and historic buildings within a State Scenic Highway?

4.1.6.1 Impact Analysis

As discussed in 4.1.1.3 above, there are no state-designated or eligible scenic highways near the proposed Project site. The nearest eligible state designated highways are SR-74, approximately 4.4 miles northeast of the proposed Project site, and SR-15, approximately 3.93 miles southwest of the proposed Project site. The nearest officially designated state highway is a segment of SR-74, approximately 23 miles east of the proposed Project (Caltrans 2025).

As discussed in 4.1.1.4 above, the closest enhanced landscape corridors to the proposed Project site are located approximately 1.62 miles south along Newport Road and approximately 2 miles east along Murrieta Road. The nearest scenic corridor is approximately 3.42 miles east of the proposed Project site along I-215. Scenic corridors and enhanced scenic corridors are located within the proposed Project site and are not visible from the proposed Project site.

The proposed Project would not be located within the viewshed of any designated or eligible State Scenic Highways or any enhanced landscape corridors or scenic corridors identified in the City's General Plan. As described in Section 4.4.5, the proposed Project would not impact any recorded historic-era resources. There are no rock outcroppings located within the proposed Project site.

Although there are some large eucalyptus trees in the eastern portion of the Project site, as well as street trees throughout the Project site, the District may be able to avoid impacting these trees during construction. If project construction activities, such as trenching, require that healthy trees greater than 6 inches diameter at breast height must be removed or trenching occurs within the dripline of trees greater than 6 inches diameter at breast height, the District would comply with the requirements of the City's Municipal Code, Article 4: Site Development Regulations and Performance Standards, Chapter 9.200 Tree Preservation. Specifically, the District would replace trees that must be removed in accordance with the Tree Preservation ordinance, and would ensure that any trenching around parkway trees makes every reasonable effort to avoid the tree's drip line. In those cases where an alternative trenching route is not possible, tunneling under woody roots rather than cutting such roots would be prioritized to preserve roots two inches or greater in diameter. When roots must be cut, sharp saws shall be used to make clean, non-frayed cuts.

4.1.6.2 Significance of Impacts

The proposed Project would not substantially damage scenic resources, including but not limited to trees, rock outcroppings, and historic buildings within a State Scenic Highway, and impacts would be less than significant.

4.1.6.3 Mitigation

No mitigation is required.

4.1.6.4 Significance of Impacts After Mitigation

No mitigation is required.

4.1.7 Threshold 3: Visual Character or Quality

In non-urbanized areas, would the project 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 points). In an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

4.1.7.1 Impact Analysis

The Project site and surrounding area are characterized by existing single-family residential development, paved and unpaved roadways, and vacant parcels. Public views of the Project site are primarily available from adjacent public roadways and nearby residential streets.

Construction activities associated with the proposed Project (e.g., presence of construction vehicles, excavated materials, laydown areas) would create short-term visual effects for the surrounding residential uses. These visual effects would be temporary in nature, would occur intermittently during construction, and are typical of utility infrastructure projects in similar settings. Upon completion of construction, these temporary visual effects would cease.

The proposed Project would result in minimal long-term visual change. The proposed wastewater pipelines would be installed completely underground and would not be visible following construction. The proposed lift stations would be primarily subterranean, with limited above-ground features, including access hatches, electrical control panels, and an emergency generator housed within an enclosure. The four smaller lift stations (LS-2, LS-3, LS-4, and LS-5) and associated equipment would be enclosed within six-foot-tall concrete masonry unit walls. These enclosures would be comparable in height and scale to walls and fences commonly associated with surrounding residential development and would not substantially alter the existing visual character of the area when viewed from public roadways.

The two regional lift station site options are located on vacant land immediately west of the boundaries of Subarea 4. For both LS-1 Option 1 and LS-1 Option 2, retaining walls would be required to accommodate site topography; however, only approximately 8 feet of wall would extend above the finished grade, with the remaining wall height located below grade and not visible from publicly accessible vantage points. As a result, the above-ground portions of the retaining walls would be similar in height to perimeter walls and fences commonly found in the surrounding area and would not substantially degrade the existing visual character or quality of public views.

4.1.7.2 Significance of Impacts

The proposed Project would not adversely affect the quality of public views of the proposed Project site and its surroundings, and impacts would be less than significant.

4.1.7.3 Mitigation

No mitigation is required.

4.1.7.4 Significance of Impacts After Mitigation

No mitigation is required.

4.1.8 Threshold 4: Light or Glare

Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

4.1.8.1 Impact Analysis

Construction of the proposed Project would be limited to daytime hours; therefore, no nighttime construction lighting would be required.

Operation of the proposed lift stations would include security lighting designed and installed in compliance with the City's Municipal Code, Chapter 6.01, which establishes requirements for outdoor lighting to preserve dark skies, minimize glare, and reduce light pollution. In addition, exterior lighting would be subject to Title 24 of the California Building Standards Code. Title 24, Part 6, Section 130.2(b) requires outdoor luminaires of 6,200 initial lumens or greater to comply with BUG rating

standards, with maximum allowable BUG ratings specified in Title 24, Part 11, Section 5.106.8. Compliance with these standards would ensure that exterior lighting is appropriately shielded and directed, minimizing light trespass and glare visible from surrounding areas.

The proposed Project would not include large expanses of reflective materials or highly polished surfaces that could create daytime glare. Lift station structures would be low-profile and consistent with typical utility infrastructure in the area. Accordingly, the proposed Project would not create a new source of substantial light or glare that would adversely affect day or nighttime views in the project vicinity.

4.1.8.2 Significance of Impacts

The proposed Project would not create a new source of substantial light or glare that would adversely affect day or nighttime views in the area, and impacts would be less than significant.

4.1.8.3 Mitigation

No mitigation is required.

4.1.8.4 Significance of Impacts After Mitigation

No mitigation is required.

4.2 Air Quality

This section analyzes impacts related to air quality that could result from implementation of the proposed Project. Construction of the proposed Project is planned to be carried out in eight phases implemented over a 20-year period. This evaluation is programmatic, focusing on the environmental impacts that could occur from implementation of all phases of construction (see Chapter 3). As each phase is constructed, project-level analyses may be required to further quantify any identified significant impacts.

This section includes a setting discussion that describes existing air quality conditions in and around the Project site and summarizes applicable regulations related to air quality. This section also includes an evaluation of potential impacts of the proposed Project related to air quality. The analysis in this section is based on the findings provided in the Air Quality Analysis prepared for the proposed Project (Appendix C).

4.2.1 Existing Conditions

4.2.1.1 Site Conditions

The Project site consists of a mix of developed and undeveloped land with single-family residences found on a grid of small neighborhood roads. Sensitive receptors are located throughout and adjacent to the Project site including residential uses; a Boys and Girls Club, located east of Quail Place and north of Anita Drive; and Quail Valley Elementary School, located 500 feet south of the Project site.

4.2.1.2 Regional Setting and Climate

The proposed Project is located within Riverside County. Air quality in the County is influenced by both topographical and meteorological conditions. The San Gabriel, San Bernardino, and San Jacinto Mountains bound the Basin to the north and east, trapping ambient air and pollutants within the Los Angeles and Inland Empire valleys below. The Project site has a Mediterranean climate characterized by warm, dry summers and mild, wet winters. Based on measurements taken at the Elsinore climate monitoring station (ID 042805; located 5.5 miles southwest of the Project site), the average annual precipitation is 12 inches, falling primarily from November to April (Western Regional Climate Center 2025). Overall annual temperatures in the area of the Project site average about 64°F, winter low temperatures average about 37°F, and summer high temperatures average about 96°F.

The dominant meteorological feature affecting the region is the Pacific High-Pressure Zone, which produces the prevailing westerly to northwesterly winds. These winds tend to blow pollutants away from the coast toward the inland areas. Consequently, air quality near the coast is generally better than that which occurs at the base of the coastal mountain range.

The prevailing westerly wind pattern is sometimes interrupted by regional "Santa Ana" conditions. A Santa Ana occurs when a strong high pressure develops over the Nevada–Utah area and overcomes the prevailing westerly coastal winds, sending strong, steady, hot, dry northeasterly winds over the mountains and out to sea. Typically, about 10 to 25 Santa Ana wind events occur annually.

4.2.1.3 South Coast Air Basin

The state of California is divided geographically into 15 air basins for managing the air resources of the state on a regional basis. Areas within each air basin are considered to share the same air masses and therefore are expected to have similar ambient air quality. The portion of the Basin covering the Project site is currently classified as a federal non-attainment area for ozone (O_3) and particulate matter less than 2.5 microns ($PM_{2.5}$), and a state non-attainment area for ozone, particulate matter less than 10 microns (PM_{10}) and $PM_{2.5}$.

Air quality impacts could result from the construction and operation of the proposed Project. Construction impacts are short term and result from fugitive dust, equipment exhaust, and indirect effects associated with construction workers and deliveries. Operational impacts could occur on two levels: regional impacts resulting from an increase in emissions, or local impacts stemming from sensitive receivers being close to a significant source of emissions. In the case of this proposed Project, operational emissions consist of mobile sources from periodic maintenance trips, area sources, energy sources, and stationary sources.

4.2.2 Applicable Regulatory Requirements

4.2.2.1 Federal Regulations

Ambient Air Quality Standards (AAQS) represent the maximum levels of background pollution considered safe, with an adequate margin of safety, to protect public health and welfare. The federal CAA was enacted in 1970 and amended in 1977 and 1990 (42 United States Code [U.S.C.] 7401) for the purposes of protecting and enhancing the quality of the nation's air resources to benefit public health, welfare, and productivity. In 1971, in order to achieve the purposes of Section 109 of the CAA (42 U.S.C. 7409), the U.S. EPA developed primary and secondary National Ambient Air Quality Standards (NAAQS).

Six criteria pollutants of primary concern have been designated: ozone, carbon monoxide (CO), sulfur dioxide (SO_2), nitrogen dioxide (NO_2), lead (Pb), and PM_{10} and $PM_{2.5}$. The primary NAAQS are requisite to protect public health, and the secondary standards protect public welfare from any known or anticipated adverse effects associated with the presence of such air pollutants in the ambient air (42 U.S.C. 7409[b][2]). The primary NAAQS were established, with a margin of safety, considering long-term exposure for the most sensitive groups in the general population (i.e., children, senior citizens, and people with breathing difficulties). The NAAQS are presented in Table 4.2-1 (California Air Resources Board [CARB] 2024).

Table 4.2-1
Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards[1]		National Standards[2]		
		Concentration[3]	Method[4]	Primary[3,5]	Secondary[3,6]	Method[7]
Ozone[8]	1 Hour	0.09 ppm (180 µg/m^3)	Ultraviolet Photometry	–	Same as Primary Standard	Ultraviolet Photometry
	8 Hour	0.07 ppm (137 µg/m^3)		0.070 ppm (137 µg/m^3)		
Respirable Particulate Matter (PM_{10})[9]	24 Hour	50 µg/m^3	Gravimetric or Beta Attenuation	150 µg/m^3	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 µg/m^3		–		
Fine Particulate Matter ($PM_{2.5}$)[9]	24 Hour	No Separate State Standard		35 µg/m^3	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 µg/m^3	Gravimetric or Beta Attenuation	9 µg/m^3	15 µg/m^3	
Carbon Monoxide (CO)	1 Hour	20 ppm (23 mg/m^3)	Non-dispersive Infrared Photometry	35 ppm (40 mg/m^3)	–	Non-dispersive Infrared Photometry
	8 Hour	9.0 ppm (10 mg/m^3)		9 ppm (10 mg/m^3)	–	
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m^3)		–	–	
Nitrogen Dioxide (NO_2)[10]	1 Hour	0.18 ppm (339 µg/m^3)	Gas Phase Chemi-luminescence	100 ppb (188 µg/m^3)	–	Gas Phase Chemi-luminescence
	Annual Arithmetic Mean	0.030 ppm (57 µg/m^3)		0.053 ppm (100 µg/m^3)	Same as Primary Standard	
Sulfur Dioxide (SO_2)[11]	1 Hour	0.25 ppm (655 µg/m^3)	Ultraviolet Fluorescence	75 ppb (196 µg/m^3)	–	Ultraviolet Fluorescence; Spectro-photometry (Pararosaniline Method)
	3 Hour	–		–	0.5 ppm (1,300 µg/m^3)	
	24 Hour	0.04 ppm (105 µg/m^3)		0.14 ppm (for certain areas)[11]	–	
	Annual Arithmetic Mean	–		0.030 ppm (for certain areas)[11]	–	
Lead[12,13]	30 Day Average	1.5 µg/m^3	Atomic Absorption	–	–	High Volume Sampler and Atomic Absorption
	Calendar Quarter	–		1.5 µg/m^3 (for certain areas)[12]	Same as Primary Standard	
	Rolling 3-Month Average	–		0.15 µg/m^3		
Visibility Reducing Particles[14]	8 Hour	See footnote 14	Beta Attenuation and Transmittance through Filter Tape	No National Standards		
Sulfates	24 Hour	25 µg/m^3	Ion Chroma-tography			
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m^3)	Ultraviolet Fluorescence			
Vinyl Chloride[12]	24 Hour	0.01 ppm (26 µg/m^3)	Gas Chroma-tography			

See footnotes on next page.

Table 4.2-1 (cont.)
Ambient Air Quality Standards

ppm = parts per million; ppb = parts per billion; µg/m^3 = micrograms per cubic meter; – = not applicable.

[1] California standards for ozone, carbon monoxide (except 8-hour Lake Tahoe), sulfur dioxide (1 and 24 hour), nitrogen dioxide, particulate matter (PM_{10}, $PM_{2.5}$, and visibility reducing particles), are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.

[2] National standards (other than ozone, particulate matter, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over three years, is equal to or less than the standard. For PM_{10}, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m^3 is equal to or less than one. For $PM_{2.5}$, the 24-hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. Contact the U.S. EPA for further clarification and current national policies.

[3] Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.

[4] Any equivalent measurement method which can be shown to the satisfaction of the Air Resources Board to give equivalent results at or near the level of the air quality standard may be used.

[5] National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.

[6] National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

[7] Reference method as described by the U.S. EPA. An "equivalent method" of measurement may be used but must have a "consistent relationship to the reference method" and must be approved by the U.S. EPA.

[8] On October 1, 2015, the national 8-hour ozone primary and secondary standards were lowered from 0.075 to 0.070 ppm.

[9] February 7, 2024, the national annual $PM_{2.5}$ primary standard was lowered from 12.0 µg/m^3 to 9.0 µg/m^3. The existing national 24-hour $PM_{2.5}$ standards (primary and secondary) were retained at 35 µg/m^3, as was the annual secondary standards of 15 µg/m^3. The existing 24-hour PM_{10} standards (primary and secondary) of 150 µg/m^3 also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.

[10] To attain the 1-hour national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 ppb. Note that the national standards are in units of ppb. California standards are in units of ppm. To directly compare the national standards to the California standards the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm.

[11] On June 2, 2010, a new 1-hour SO_2 standard was established, and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO_2 national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated non-attainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.
Note that the 1-hour national standard is in units of ppb. California standards are in units of ppm. To directly compare the 1-hour national standard to the California standard the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm.

[12] The Air Resources Board has identified lead and vinyl chloride as 'toxic air contaminants' with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.

[13] The national standard for lead was revised on October 15, 2008, to a rolling 3-month average. The 1978 lead standard (1.5 µg/m^3 as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated non-attainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.

[14] In 1989, the ARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively.

SOURCE: CARB 2024.

An air basin is designated as either attainment or non-attainment for a particular pollutant. Once a non-attainment area has achieved the AAQS for a particular pollutant, it is redesignated as an attainment area for that pollutant. To be redesignated, the area must meet air quality standards for three consecutive years. After redesignation to attainment, the area is known as a maintenance area and must develop a 10-year plan for continuing to meet and maintain air quality standards, as well as satisfy other requirements of the federal CAA. The Basin is designated as in attainment or unclassifiable attainment (expected to be meeting the standard despite a lack of monitoring data) for all federal air quality standards except for the 8-hour ozone and $PM_{2.5}$ standards.

4.2.2.2 State Regulations

a. California Ambient Air Quality Standards

The U.S. EPA allows states the option to develop different (stricter) standards. The State of California has developed the California Ambient Air Quality Standards (CAAQS) and generally has set more stringent limits on the criteria pollutants (see **Table 4.2-1**). In addition to the federal criteria pollutants, the CAAQS also specify standards for visibility-reducing particles, sulfates, hydrogen sulfide, and vinyl chloride (see **Table 4.2-1**). Similar to the federal CAA, the state classifies specific geographic areas as either "attainment" or "nonattainment" areas for each pollutant based on the comparison of measured data with the CAAQS. The California CAA, which became effective on January 1, 1989, requires all areas of the state to attain the CAAQS at the earliest practicable date. The California CAA has specific air quality management plan (AQMP) strategies that must be adopted by the agency responsible for the non-attainment area.

The state of California is divided geographically into 15 air basins for managing the air resources of the state on a regional basis. Areas within each air basin are considered to share the same air masses and therefore are expected to have similar ambient air quality. If an air basin is not in either federal or state attainment for a particular pollutant, the basin is classified as a moderate, serious, severe, or extreme nonattainment area for that pollutant (there is also a marginal classification for federal nonattainment areas). Once a nonattainment area has achieved the air quality standards for a particular pollutant, it may be redesignated to an attainment area for that pollutant. To be redesignated, the area must meet air quality standards and have a 10-year plan for continuing to meet and maintain air quality standards, as well as satisfy other requirements of the federal CAA. Areas that have been redesignated to attainment are called maintenance areas.

b. Toxic Air Contaminants

The public's exposure to toxic air contaminants (TACs) is a significant public health issue in California. Diesel-exhaust particulate matter emissions have been established as TACs. In 1983, the California Legislature enacted a program to identify the health effects of TACs and to reduce exposure to these contaminants to protect the public health (Assembly Bill [AB] 1807: HSC Sections 39650–39674). The California Legislature established a two-step process to address the potential health effects from TACs. The first step is the risk assessment (or identification) phase. The second step is the risk management (or control) phase of the process.

The California Air Toxics Program establishes the process for the identification and control of TACs and includes provisions to make the public aware of significant toxic exposures and for reducing risk. Additionally, the Air Toxics "Hot Spots" Information and Assessment Act (AB 2588, 1987, Connelly Bill) was enacted in 1987 and requires stationary sources to report the types and quantities of certain substances routinely released into the air.

The goals of the Air Toxics "Hot Spots" Act are to collect emission data, to identify facilities having localized impacts, to ascertain health risks, to notify nearby residents of significant risks, and to reduce those significant risks to acceptable levels.

The Children's Environmental Health Protection Act, California Senate Bill (SB) 25 (Chapter 731, Escutia, Statutes of 1999), focuses on children's exposure to air pollutants. The act requires CARB to review its air quality standards from a children's health perspective, evaluate the statewide air monitoring network, and develop any additional air toxic control measures needed to protect children's health. Locally, toxic air pollutants are regulated through the SCAQMD's Regulation XIV. Of particular concern statewide are diesel-exhaust particulate matter emissions. Diesel-exhaust particulate matter was established as a TAC in 1998 and is estimated to represent a majority of the cancer risk from TACs statewide (based on the statewide average). Diesel exhaust is a complex mixture of gases, vapors, and fine particles. This complexity makes the evaluation of health effects of diesel exhaust a complex scientific issue. Some of the chemicals in diesel exhaust, such as benzene and formaldehyde, have been previously identified as TACs by the CARB and are listed as carcinogens either under the state's Proposition 65 or under the federal Hazardous Air Pollutants program.

Following the identification of diesel particulate matter (DPM) as a TAC in 1998, CARB has worked on developing strategies and regulations aimed at reducing the risk from DPM. The overall strategy for achieving these reductions is found in the Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles (CARB 2000). To monitor the effectiveness of the efforts to reduce DPM, CARB has supported field campaigns that measure real-world emissions from heavy-duty vehicles, and results indicate that regulations aimed at reducing emissions of DPM have been successful.

CARB published the *Air Quality and Land Use Handbook: A Community Health Perspective* (CARB 2005). The handbook makes recommendations directed at protecting sensitive land uses from air pollutant emissions while balancing a myriad of other land use issues (housing, transportation needs, economics, etc.). It notes that the handbook is not regulatory or binding on local agencies and recognizes that application takes a qualitative approach. As reflected in the CARB handbook, there is currently no adopted standard for the significance of health effects from mobile sources. Therefore, the CARB has provided guidelines for the siting of land uses near heavily traveled roadways. Of pertinence to this study, the CARB guidelines indicate that siting new sensitive land uses within 500 feet of a freeway or urban roads with 100,000 or more vehicles per day should be avoided when possible.

As an ongoing process, CARB will continue to establish new programs and regulations for the control of DPM and other air-toxics emissions as appropriate. The continued development and implementation of these programs and policies will ensure that the public's exposure to DPM will continue to decline.

c. State Implementation Plan

The State Implementation Plan (SIP) is a collection of documents that set forth the state's strategies for achieving the NAAQS. In California, the SIP is a compilation of new and previously submitted plans, programs (such as AQMPs, monitoring, modeling, permitting, etc.), district rules, state regulations, and federal controls. The CARB is the lead agency for all purposes related to the SIP under state law. Local air districts and other agencies, such as the Department of Pesticide Regulation and the Bureau of Automotive Repair, prepare SIP elements and submit them to CARB for review and approval. The CARB then forwards SIP revisions to the U.S. EPA for approval and publication in the Federal Register. All of the items included in the California SIP are listed in the Code of Federal Regulations (CFR) at 40 CFR 52.220.

d. California Code of Regulations Title 13: Motor Vehicles

CCR Title 13: Division 3, Chapter 10, Article 1, Section 2485: *Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling* seeks to reduce public exposure to DPM and other air contaminants by establishing idling restrictions, emission standards, and other requirements for heavy-duty diesel engines and alternative idle reduction technologies to limit the idling of diesel-fueled commercial motor vehicles. Any person that owns, operates, or causes to operate any diesel-fueled commercial motor vehicle must not allow a vehicle to idle for more than five consecutive minutes at any location or operate a diesel-fueled auxiliary power system for greater than five minutes at any location when within 100 feet of a restricted area.

CCR Title 13: Division 3, Chapter 9, Article 4.8, Section 2449: *General Requirements for In-Use Off-Road Diesel-Fueled Fleets* regulates oxides of nitrogen (NO_X), DPM, and other criteria pollutant emissions from in-use, off-road diesel-fueled vehicles. This measure also requires each fleet to meet fleet average requirements or demonstrate that it has met "best available control technology" requirements. Additionally, this measure requires medium and large fleets to have a written idling policy that is made available to operators of the vehicles informing them that idling is limited to five consecutive minutes or less.

4.2.2.3 Regional Regulations

a. South Coast Air Quality Management District

SCAQMD is the air pollution control agency in the Basin. The role of the local SCAQMD is to protect the people and the environment of the Basin from the effects of air pollution. As SCAQMD is designated as a nonattainment area for state air quality standards for 1-hour and 8-hour ozone, PM_{10}, and $PM_{2.5}$, SCAQMD periodically prepares AQMPs outlining measures to reduce these pollutants. The most recent AQMP is the 2022 AQMP adopted in December 2022.

Emissions that would result from mobile, area, and stationary sources during construction and operation of the proposed Project are subject to the rules and regulations of SCAQMD. The SCAQMD rules and regulations applicable to the proposed Project may include the following:

- **Rule 201, Permit to Construct.** This rule requires any person to obtain a permit from the SCAQMD prior to constructing, modifying, or relocating any equipment or facility that may emit air contaminants.
- **Rule 203, Permit to Operate.** This rule requires that, upon completion of construction and prior to operation, any equipment or facility that may emit air contaminants must obtain a permit to operate, demonstrating compliance with all applicable SCAQMD rules and conditions.
- **Rule 401, Visible Emissions.** This rule establishes the limit for visible emissions from stationary sources.
- **Rule 402, Nuisance.** This rule prohibits the discharge of air pollutants from a facility that cause injury, detriment, nuisance, or annoyance to the public or damage to business or property.
- **Rule 403, Fugitive Dust.** This rule requires fugitive dust sources to implement best available control measures for all sources and prohibits all forms of visible particulate matter from crossing any property line. SCAQMD Rule 403 is intended to reduce PM_{10} emissions from any transportation, handling, construction, or storage activity that has the potential to generate fugitive dust.
- **Rule 431.2, Sulfur Content of Liquid Fuels.** The purpose of this rule is to limit the sulfur content in diesel and other liquid fuels for the purpose of reducing the formation of oxides of sulfur (SO_X) and particulates during combustion and of enabling the use of add-on control devices for diesel-fueled internal combustion engines. This rule applies to all refiners, importers, and other fuel suppliers such as distributors, marketers, and retailers, as well as to users of diesel, low-sulfur diesel, and other liquid fuels for stationary-source applications in the SCAQMD. This rule also affects diesel fuel supplied for mobile sources.
- **Rule 1110.2, Emissions from Gaseous- and Liquid-Fueled Engines.** This rule applies to stationary and portable engines rated at greater than 50 horsepower. The purpose of Rule 1110.2 is to reduce NO_X, volatile organic compounds (VOC), and CO emissions from engines. Emergency engines, including those powering standby generators, are generally exempt from the emissions and monitoring requirements of this rule because they have permit conditions that limit operation to 200 hours or less per year as determined by an elapsed operating time meter.
- **Rule 1113, Architectural Coatings.** This rule requires manufacturers, distributors, and end users of architectural and industrial maintenance coatings to reduce VOC emissions from the use of these coatings, primarily by placing limits on the VOC content of various coating categories.
- **Rule 1401, New Source Review of Toxic Air Contaminants.** This rule requires health risk assessments for new, modified, or relocated sources of toxic air contaminants and establishes

limits to ensure that cancer and non-cancer health risks to the public are below specified significance thresholds.

- Rule 1470, Requirements for Stationary Diesel-Fueled Internal Combustion and Other Compression Ignition Engines. This rule applies to internal combustion engines greater than 50 brake horsepower. It sets the requirements for the fuel that may be used, operating parameters, and necessary emission data and testing methods for these engines.

- Regulation XIII, New Source Review. This regulation establishes the New Source Review program, which requires preconstruction review of new and modified emission sources to ensure the use of Best Available Control Technology, compliance with emission offset requirements, and no net increase of criteria pollutants beyond established thresholds.

- Emergency Backup Generators. An emergency backup generator is defined by SCAQMD as standby internal combustion engine or turbine for non-utility power generation that does not operate more than 200 hours a year and is only operated in the event of an emergency power failure or for routine testing and maintenance. All internal combustion engines greater than 50 brake horsepower are required to obtain a permit to construct from SCAQMD prior to installation of the engines at a site. If a permit is required, SCAQMD is considered a Responsible Agency under CEQA.

b. Southern California Association of Government

In April 2024, Southern California Association of Governments (SCAG) adopted Connect SoCal, the 2024-2045 Regional Transportation Plan/Sustainable Communities Strategy. The Connect SoCal plan identifies that land use strategies that focus on new housing and job growth in areas with a variety of destinations and mobility options would support and complement the proposed transportation network. The overarching strategy in Connect SoCal is to provide for a plan that allows the southern California region to grow in more compact communities in transit priority areas and priority growth areas; provide neighborhoods with efficient and plentiful public transit; establish abundant and safe opportunities to walk, bike, and pursue other forms of active transportation; and preserve more of the region's remaining natural lands and farmlands (SCAG 2024). The Connect SoCal plan contains transportation projects to help more efficiently distribute population, housing, and employment growth as well as projected development that promotes active transport and reduces greenhouse gas emissions.

c. Multiple Air Toxics Exposure Study

The Multiple Air Toxics Exposure Study (MATES) is a monitoring and evaluation study conducted in the Basin that is periodically updated. The MATES V, which is a follow up to previous air toxics studies in the Basin, includes a fixed site monitoring program with 10 stations, an inventory of TACs, and a modeling effort to characterize risk across the Basin. The purpose of the MATES V fixed-site monitoring is to characterize long-term regional air toxics levels in residential and commercial areas. MATES V predicts that the excess cancer risk in the area of the Project site is 266 in a million (SCAQMD 2021). The MATES V study represents the baseline health risk for a cumulative analysis. The MATES VI update is currently being conducted.

4.2.3 Significance Determination Thresholds

Thresholds used to evaluate impacts to air quality are based on applicable criteria in the CEQA Guidelines (CCR Sections 15000–15387), Appendix G. The proposed Project would have a significant impact on the environment if it would:

1) Conflict with or obstruct implementation of the applicable air quality plan;

2) 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;

3) Expose sensitive receptors to substantial pollutant concentrations; or

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

4.2.3.1 South Coast Air Quality Management District Significance Thresholds

As discussed previously, SCAQMD is the air pollution control agency responsible for protecting the people and the environment of the Basin from the effects of air pollution. Accordingly, air quality emissions would be evaluated based on the quantitative emission thresholds originally established in SCAQMD's CEQA Air Quality Handbook (SCAQMD 1993, 2023).

a. Regional Significance Thresholds

SCAQMD has established significance thresholds to assess the regional and localized impacts of project-related air pollutant emissions in the Basin. These significance thresholds are updated as needed to appropriately represent the most current technical information and attainment status in the Basin. The District uses the current SCAQMD thresholds to determine whether a project would have a significant impact. SCAQMD's significance thresholds for impacts to regional air quality are shown in Table 4.2-2.

Table 4.2-2
SCAQMD Air Quality Significance Thresholds–Mass Daily Thresholds

Pollutant	Emissions (pounds)	
	Construction	Operational
Oxides of Nitrogen (NO_X)	100	55
Volatile Organic Compounds (VOC)	75	55
Coarse Particulate Matter (PM_{10})	150	150
Fine Particulate Matter ($PM_{2.5}$)	55	55
Oxides of Sulfur (SO_X)	150	150
Carbon Monoxide (CO)	550	550
Lead (Pb)	3	3

SCAQMD = South Coast Air Quality Management District
SOURCE: SCAQMD California Environmental Quality Act Air Quality Handbook (SCAQMD 1993); SCAQMD Air Quality Significance Thresholds (SCAQMD 2023)

Projects that exceed the regional significance threshold contribute to the nonattainment designations of the Basin. The attainment designations are based on the AAQS, which are set at levels of exposure that are determined to not result in adverse health effects. Projects that do not exceed the regional significance thresholds in Table 4.2-2 would not violate any air quality standards or contribute substantially to an existing or projected air quality violation.

b. Localized Significance Thresholds

SCAQMD's Final Localized Significance Threshold (LST) Methodology was developed as a tool to assist lead agencies to analyze localized air quality impacts to sensitive receptors in the vicinity of the proposed Project (SCAQMD 2008). The LST Methodology outlines how to analyze localized impacts from common pollutants of concern, including NO_2, CO, PM_{10}, and $PM_{2.5}$. Localized air quality impacts would occur if pollutant concentrations at sensitive receptors exceeded applicable NAAQS or CAAQS.

LSTs represent the maximum emissions from a project that would not cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standard at the nearest residence or sensitive receptor. SCAQMD states that lead agencies can use the LSTs as another indicator of significance in its air quality impact analyses. The significance of localized emissions impacts depends on whether ambient levels in the vicinity of any given project are above or below state standards. In the case of CO and NO_2, if ambient levels are below the standards, a project is considered to have a significant impact if project emissions would result in an exceedance of one or more of these standards. If ambient levels already exceed a state or federal standard, then project emissions are considered significant if they would increase ambient concentrations by a measurable amount. For the proposed Project, this would apply to PM_{10} and $PM_{2.5}$, both of which are non-attainment pollutants.

4.2.4 Methodology

Air quality impacts can result from the construction and operation of a project. Construction impacts are short term and result from fugitive dust, equipment exhaust, and indirect effects associated with construction workers and deliveries. Operational impacts can occur on two levels: regional impacts resulting from development or local effects stemming from sensitive receivers being placed close to roadways or stationary sources. For the proposed Project, construction and operation air emissions were calculated using the California Emissions Estimator Model (CalEEMod) 2022.1.1.30 (California Air Pollution Control Officers Association 2022). The CalEEMod program is a tool used to estimate air emissions resulting from land development projects based on California-specific emission factors. The model estimates mass emissions from two basics sources: construction sources and operational sources (i.e., area and mobile sources).

Inputs to CalEEMod include such items as the air basin containing the proposed Project, land uses, trip generation rates, trip lengths, vehicle fleet mix (percentage of autos, medium truck, etc.), trip destination (i.e., percent of trips from home to work, etc.), duration of construction phases, construction equipment usage, grading areas, season, and ambient temperature, as well as other parameters. The CalEEMod output files presented in Appendix C indicate the specific outputs for

each model run. Emissions of NO_X, CO, SO_X, PM_{10}, $PM_{2.5}$, and reactive organic gases (ROG) are calculated. Emission factors are not available for lead and consequently lead emissions are not calculated. Firstly, the Basin is currently in attainment of the federal and state lead standards, and furthermore, fuel used in construction equipment and most other vehicles is not leaded.

4.2.4.1 Construction Emissions

Construction-related activities are temporary, short-term sources of emissions. Sources of construction-related emissions include the following:

- fugitive dust from grading activities;
- construction equipment exhaust; and
- construction-related trips by workers, delivery trucks, and material-hauling trucks.

Construction-related emissions include emissions from dust raised during grading, exhaust from construction vehicles, and chemicals used during construction. Fugitive dust emissions vary greatly during construction and are dependent on the amount and type of activity, silt content of the soil, and the weather. Vehicles moving over paved and unpaved surfaces, excavation, earth movement, grading, and wind erosion from exposed surfaces are all sources of fugitive dust. Construction operations are subject to the requirements established by SCAQMD, including Rule 403, Fugitive Dust. Rule 403 requires the use of best available control measures for fugitive dust. This analysis assumes that standard dust and emission control during grading operations would be implemented to reduce potential nuisance impacts and to ensure compliance with SCAQMD Rule 403, which is estimated to result in a 61 percent reduction in fugitive dust from watering three times per day.

Construction of the proposed Project is planned to be carried out in eight phases that would be implemented over an approximately 20-year period. **Table 3-1** in Chapter 3 of this PEIR summarizes the anticipated construction associated with each phase. In order to model maximum daily criteria pollutants, construction emissions were calculated for a one-year period beginning as soon as 2027. The simultaneous construction of the regional lift station and 10 miles of sewer pipeline was modeled. As construction continues over a 20-year period, emissions would be less than those modeled for the year 2027 because of regulations that result in cleaner equipment over time. To account for any soil or asphalt hauling that may be required, it was assumed that up to up to 20,000 cubic yards of soil that would be removed from the pipeline alignment would be exported. This is roughly equivalent to the removal of 50 percent of the soil excavated from a 10-mile pipeline that is five feet in width and five feet in depth. Soil export was modeled with a default one-way trip distance of 20 miles The following phases were modeled for both the lift station construction and pipeline construction: clearing/grubbing, grading/excavation, utilities/structure/installation, and paving. The modeled construction equipment, which is based on similar pipeline and lift station projects and input from the District, is summarized in **Table 4.2-3**. Note that this is a very conservative assessment, as all construction equipment summarized in **Table 4.2-3** was modeled as operating eight hours per day over the entire construction period for both the lift station construction and the sewer pipeline construction, with the exception of a crane and paver. A crane was modeled only during the utilities/structure/installation phases, and a paver was modeled only during the paving phases.

Table 4.2-3 Modeled Construction Equipment			
Construction Activity	Equipment	Number	Hours per Day
Lift Station	Tractors/Loaders/Backhoes	1	8
	Excavators	1	8
	Off-Highway Trucks–Water Truck	1	8
	Off-Highway Trucks–Utility Truck	1	8
	Air Compressors	1	8
	Concrete/Industrial Saws	1	8
	Sweepers/Scrubbers	1	8
	Bore/Drill Rigs	1	8
	Dumpers/Tenders	1	8
	Generator Sets	1	8
	Dozer	1	8
	Crane (Installation Phase Only)	1	8
	Paver (Paving Phase Only)	1	8
Pipeline	Tractors/Loaders/Backhoes	1	8
	Excavators	1	8
	Off-Highway Trucks–Water Truck	1	8
	Off-Highway Trucks–Utility Truck	1	8
	Air Compressors	1	8
	Concrete/Industrial Saws	1	8
	Sweepers/Scrubbers	1	8
	Bore/Drill Rigs	1	8
	Dumpers/Tenders	1	8
	Generator Sets	1	8
	Dozer	1	8
	Crane (Installation Phase Only)	1	8
	Paver (Paving Phase Only)	1	8
NOTE: Each phase would also include vehicles associated with work commutes, a water truck, and dump trucks for hauling. SOURCE: Appendix C			

Table 4.2-4 presents the total projected construction maximum daily emission levels for each criteria pollutant and compares emissions to SCAQMD regional significance thresholds. Emissions are summarized by phase as well but maximum daily as lifts station construction and pipeline construction activities were modeled simultaneously. The CalEEMod output files for construction emissions are presented in Appendix C.

Table 4.2-4 Maximum Daily Construction Emissions						
Phase	Emissions (pounds per day)					
	ROG	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Lift Station						
Lift Station–Clearing/Grubbing	3	21	25	<1	4	2
Lift Station–Grading/Excavation	3	21	25	<1	4	2
Lift Station–Utilities/Structure/Installation	3	24	27	<1	1	1
Lift Station–Paving	9	22	27	<1	1	1
Sewer Pipeline						
Pipeline–Clearing/Grubbing	3	21	25	<1	4	2
Pipeline–Grading/Excavation	3	22	25	<1	4	2
Pipeline– Utilities/Structure/Installation	3	24	28	<1	4	2
Pipeline–Paving	3	22	27	<1	1	1
Maximum Daily						
Maximum Daily–Summer	**6**	**48**	**56**	**<1**	**5**	**3**
Maximum Daily–Winter	**12**	**48**	**55**	**<1**	**8**	**4**
SCAQMD Significance Threshold	*75*	*100*	*550*	*150*	*150*	*55*
Exceeds Threshold?	*No*	*No*	*No*	*No*	*No*	*No*

ROG = reactive organic gases; NO_X = oxides of nitrogen; CO = carbon monoxide; SO_2 = sulfur dioxide; PM_{10} = particulate matter less than 10 microns; $PM_{2.5}$ = particulate matter less than 2.5 microns
[1]Emissions were rounded to the nearest whole number. Emissions reported as <1 indicate that emissions were calculated to be less than 0.5 pounds per day.
SOURCE: Appendix C.

As shown in **Table 4.2-4**, maximum daily construction emissions in year 2027 would be less than the daily SCAQMD regional thresholds for all criteria pollutants. As construction activities continue over a 20-year period, maximum daily emissions in subsequent years would be less than those summarized in **Table 4.2-4** as statewide regulations result in construction equipment that is cleaner over time as older equipment is phased out, and newer cleaner equipment is phased in.

4.2.4.2 Operational Emissions

Operational emissions would result from occasional vehicle maintenance trips and possible area sources, including landscaping equipment, consumer products, and architectural coatings. The proposed Project would also include an emergency generator at each lift station location that would generate emissions during routine testing.

a. Mobile Sources

Mobile source emissions would be generated during routine maintenance inspections. Site visits are routinely conducted to inspect the condition and security of the lift stations. The proposed Project is not anticipated to require additional staffing. In order to provide a conservative assessment of mobile-source emissions, a total of one round trip (two one-way trips) with a one-way distance of 20 miles was modeled for each weekday. No weekend trips were modeled. In actuality, the lift stations would not require maintenance five days per week. Default vehicle emission factors are

based on CARB's 2021 EMissions FACtor model (CARB 2021). Emissions were calculated for the soonest operational year of 2029.

b. Area Sources

Area sources are defined as direct sources of operational emissions located at the Project site. For typical development projects, area source emissions include consumer products, architectural coatings, landscaping equipment, fireplaces, and woodstoves. The lift stations were modeled as light industrial land uses and all CalEEMod defaults for area sources were modeled as a conservative assessment.

Consumer products are chemically formulated products used by household and institutional consumers, including, but not limited to, detergents, cleaning compounds, polishes, floor finishes, disinfectants, sanitizers, and aerosol paints but not including other paint products, furniture coatings, or architectural coatings. Emissions due to consumer products are calculated using total building area and product emission factors.

For architectural coatings, emissions result from evaporation of solvents contained in surface coatings, such as in paints and primers. Emissions are based on the building surface area, architectural coating emission factors, and a reapplication rate of 10 percent of area per year.

Landscaping maintenance includes fuel combustion emission from equipment such as lawn mowers, rototillers, shredders/grinders, blowers, trimmers, chain saws, and hedge trimmers as well as air compressors, generators, and pumps. Emission calculations take into account building area, equipment emission factors, and the number of operational days (summer days).

By default, there are no fireplaces or woodstoves associated with light industrial land uses.

c. Energy Sources

For typical development projects, energy source emissions include natural gas used in space and water heating. Emissions are generated from the combustion of natural gas used in space and water heating. Emissions are based on a comprehensive energy use assessment that includes the end use for various climate zones in California. The proposed Project would not require the use of natural gas; however, as a conservative assessment, energy source emissions were calculated using default values for the modeled light industrial use.

d. Stationary Sources

Stationary source emissions associated with the proposed Project would result from routine testing of the emergency generators located at each of the lift stations. These emergency generators would be permitted by SCAQMD as discussed in Section 3.3.1. The following District and SCAQMD requirements would apply to the emergency generators (William Chen, email to author, September 22, 2025):

> Generator set shall be "pre-certified"/"pre-approved" by the South Coast Air Quality Management District (SCAQMD) for emergency standby power service, and shall

meet all current SCAQMD air emission regulations. The Standby Generator Set shall meet the applicable tier standards required by SCAQMD Best Available Control Technology (BACT) requirements and SCAQMD Rule 1470.

A Level 3 diesel particulate filter (DPF) system verified by California Air Resources Board shall be provided at the developer's expense if required to meet the emission requirements of SCAQMD Rule 470. A load bank system shall be supplied with all generator sets. Load back system shall include an automatic load controller capable of auto-loading at multiple load steps and dropping the generator load. Developer's engineer shall determine whether a passive DPF system is required.

All SCAQMD permits, including payment of fees for the first year of operation shall be furnished by the developer. Permits shall have no less than a 200-hour annual operating limit with no less than 50 hours for maintenance and testing. The SCAQMD permit to construct shall be transferred into a permit to operate prior to acceptance by the District.

Emissions were calculated assuming a 400-horsepower emergency generator would be tested a maximum of one hour in a day and a total of 50 hours per year for each lift station for a total of five hours in a day and 250 hours in a year.

e. Total Operational Emissions

Table 4.2-5 presents the total operational emissions that would be generated by the proposed Project. CalEEMod output files are presented in Appendix C. As shown in Table 4.2-5, project-generated emissions are projected to be less than SCAQMD's significance thresholds for all criteria pollutants.

Table 4.2-5
Maximum Daily Operational/Maintenance Emissions
(pounds per day)

Source	Emissions					
	ROG	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Mobile	<1	<1	<1	<1	<1	<1
Area	<1	<1	<1	<1	<1	<1
Energy	<1	<1	<1	<1	<1	<1
Emergency Generators	3	9	8	<1	<1	<1
Total	**4**	**9**	**9**	**<1**	**1**	**1**
SCAQMD Significance Threshold	*55*	*55*	*550*	*150*	*150*	*55*
Exceeds Threshold?	*No*	*No*	*No*	*No*	*No*	*No*

ROG = reactive organic gases; NO_X = oxides of nitrogen; CO = carbon monoxide; SO_2 = sulfur dioxide; PM_{10} = particulate matter less than 10 microns; $PM_{2.5}$ = particulate matter less than 2.5 microns; SCAQMD = South Coast Air Quality Management District
NOTE: Totals may vary due to independent rounding.
SOURCE: Appendix C.

4.2.5 Threshold 1: Air Quality Plans

Would the project conflict with or obstruct implementation of the applicable air quality plan?

4.2.5.1 Impact Analysis

The Basin is designated as being within attainment or unclassifiable attainment (expected to be meeting the standard despite a lack of monitoring data) for all federal air quality standards except for the 8-hour ozone and $PM_{2.5}$ standards. The Basin is also designated as in nonattainment for state air quality standards for 8-hour ozone, PM_{10}, and $PM_{2.5}$. The regional air quality plan, the 2022 AQMP, outlines measures to reduce emissions of ozone and $PM_{2.5}$. Whereas reducing PM concentrations is achieved by reducing emissions of $PM_{2.5}$ to the atmosphere, reducing ozone concentrations is achieved by reducing the precursors of photochemical formation of ozone, VOC, and NO_X.

The growth forecasting for the 2022 AQMP is based in part on the land uses established by local general plans. Thus, if a project is consistent with land use as designated in the local general plan, it can normally be considered consistent with the 2022 AQMP. Projects that propose a different land use than is identified in the local general plan may also be considered consistent with the 2022 AQMP if the proposed land use is less intensive than buildout under the current designation. For projects that propose a land use that is more intensive than the current designation, analysis that is more detailed is required to assess conformance with the 2022 AQMP.

The majority of land within the Project site has a land use designation under the City's General Plan as Residential (2.1-5 R). Several parcels bounded by Quail Place, Palm Drive, Welles Place, and Lodge Drive are designated as Commercial Retail (CR). One parcel located east of Quail Place and north of Anita Drive is designated as Public/Quasi Public Facilities (PF). The proposed Project is limited to construction of sewer infrastructure needed to replace the existing septic systems within Subarea 4 and would not allow for an increase in density or modification to the City's population, housing, or employment projections used to develop the AQMP. As such, the proposed Project would be consistent with growth projections contained in the City's General Plan and AQMP forecasts. Furthermore, as shown in **Tables 4.2-4** and **4.2-5**, the proposed Project would not generate emissions that exceed SCAQMD thresholds.

Based on these considerations and pursuant to SCAQMD guidelines, project-related emissions are accounted for in the AQMP. Therefore, the proposed Project would not conflict with or obstruct implementation of the applicable air quality plan, and impacts would be less than significant.

4.2.5.2 Significance of Impacts

The proposed Project would not conflict with or obstruct implementation of the applicable air quality plan, and impacts would be less than significant.

4.2.5.3 Mitigation

No mitigation is required.

4.2.5.4 Significance of Impacts After Mitigation

No mitigation is required.

4.2.6 Threshold 2: Criteria Pollutants

Would the project 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?

4.2.6.1 Impact Analysis

As discussed in Section 3.0 above, the Basin is classified as in attainment for all criterion pollutants except for ozone, PM_{10}, and $PM_{2.5}$. The Basin is also designated as in nonattainment for state air quality standards for 8-hour ozone, PM_{10}, and $PM_{2.5}$. Ozone is not emitted directly, but is a result of atmospheric activity on precursors. NO_X and ROG are known as the chief "precursors" of ozone. These compounds react in the presence of sunlight to produce ozone.

Based on SCAQMD cumulative significance methodologies, the emissions-based thresholds shown in **Table 4.2-2** above are used to determine if a project's contribution to regional cumulative emissions is cumulatively considerable. These thresholds were used to assess the significance of the project-specific and cumulative air quality impacts. Air quality impacts are basin-wide, and air quality is affected by all pollutant sources in the Basin.

As shown in **Tables 4.2-4** and **4.2-5** above, emissions of ozone precursors (ROG and NO_X), PM_{10}, and $PM_{2.5}$ during construction and operation of the proposed Project would not exceed SCAQMD's thresholds of significance. These thresholds are designed to provide limits below which proposed Project emissions from an individual project would not significantly affect regional air quality or the timely attainment of the NAAQS and CAAQS. Therefore, the proposed Project would not result in a cumulatively considerable net increase in emissions of ozone, PM_{10}, or $PM_{2.5}$, and impacts would be less than significant.

4.2.6.2 Significance of Impacts

The proposed Project would not result in a cumulatively considerable net increase in emissions of ozone, PM_{10}, or $PM_{2.5}$, and impacts would be less than significant.

4.2.6.3 Mitigation

No mitigation is required.

4.2.6.4 Significance of Impacts After Mitigation

No mitigation is required.

4.2.7 Threshold 3: Sensitive Receptors

Would the project expose sensitive receptors to substantial pollutant concentrations?

4.2.7.1 Impact Analysis

A sensitive receptor is a person in the population who is more susceptible to health effects due to exposure to an air contaminant than the population at large. Examples of sensitive receptor locations include residences, schools, playgrounds, childcare centers, churches, athletic facilities, retirement homes, and long-term health care facilities. Sensitive residential receptors are located throughout the Project site adjacent to the proposed lift stations and sewer pipeline alignment. Additionally, a Boys and Girls Club is located east of Quail Place and north of Anita Drive. Quail Valley Elementary School is located 500 feet south of the Project site.

a. Diesel Particulate Matter–Construction

The maximum excess cancer risks were predicted for a receptor located in the northwest portion of the Project site between Lake Drive and Mount Vernon Place. The maximum excess cancer risks due to inhalation of DPM were predicted to be 27.22 in a million at the point of maximum exposure. The excess cancer risk at the Boys and Girls Club would be 1.70 in a million and the excess cancer risk at Quail Valley Elementary School would be 0.24 in a million. A DPM concentration of 0.01465 micrograms per cubic meter (µg/m^3) would result in an excess cancer risk of 10 in a million or less. Residential uses within the Project site that are exposed to DPM concentrations of 0.01465 µg/m^3 or greater would be exposed to a maximum incremental cancer risk greater than 10 in a million (**Impact AQ-1**). **Mitigation measure AQ-1**, as detailed below, would require the proposed Project to implement BACT. This could be achieved with the use of Tier 4 construction equipment with diesel particulate filtration, which would reduce DPM emissions up to 90 percent. With the use of Tier 4 construction equipment with diesel particulate filtration, the proposed Project would not expose sensitive receptors to substantial pollutant concentrations associated with DPM during construction that could result in excess cancer risks, and impacts would be less than significant.

b. Diesel Particulate Matter–Freeway

As discussed in Section 4.2.2.2.b above, the CARB handbook indicates that siting new sensitive land uses within 500 feet of a freeway or urban roads with 100,000 or more vehicles per day should be avoided when possible. The proposed Project is limited to construction of sewer infrastructure needed to replace the existing septic systems within Subarea 4 and would not introduce any sensitive land uses. Additionally, the Project site is located approximately three miles from Interstate 215 and four miles from Interstate 15. Therefore, the proposed Project would not expose sensitive receptors to substantial pollutant concentrations associated with DPM during operation, and impacts would be less than significant.

c. Diesel Particulate Matter–Emergency Generators

Each of the lift stations would be equipped with an emergency backup diesel generator that would be periodically tested. Due to the limited amount of testing time, these emergency generators are

not anticipated to generate substantial amounts of DPM, and emissions would disperse quickly with distance. Additionally, the emergency generators would be required to meet the conditions specified in Section 4.2.4.2.d. The emergency generators would be equipped with Level 3 DPF systems if necessary to meet SCAQMD emission requirements as determined during SCAQMD's permitting process, which would ensure the equipment meets all applicable air quality requirements. The emergency generators would meet SCAQMD's BACT requirements. Thus, emergency generators would not expose sensitive receptors to substantial pollutant concentrations associated with DPM, and impacts would be less than significant.

d. Carbon Monoxide Hot Spots

Localized CO concentration is a direct function of motor vehicle activity at signalized intersections (e.g., idling time and traffic flow conditions), particularly during peak commute hours and meteorological conditions. The Basin is a CO maintenance area under the federal CAA. This means that Basin was previously a non-attainment area and is currently implementing a 10-year plan for continuing to meet and maintain air quality standards. Due to increased requirements for cleaner vehicles, equipment, and fuels, CO levels in the state have dropped substantially. All air basins are attainment or maintenance areas for CO. Therefore, more recent screening procedures based on more current methodologies have been developed. The Bay Area Air Quality Management District developed a screening threshold in their 2022 CEQA Guidelines (Bay Area Air Quality Management District 2022). These screening criteria are considered applicable in the Basin because the San Francisco Bay Air Basin and the Basin have the same CO maintenance designations, and the vehicle classifications in the regions are similar. If the following screening criteria are met, operation of a project would result in less than significant impacts related to CO:

- The project is consistent with an applicable congestion management program established by the County congestion management agency for designated roads or highways, the regional transportation plan, and local congestion management agency plans.

- Project-generated traffic would not increase traffic volumes at affected intersections to more than 44,000 vehicles per hour.

- Project-generated traffic would not increase traffic volumes at affected intersections to more than 24,000 vehicles per hour where vertical and/or horizontal mixing is substantially limited (e.g., tunnel, parking garage, bridge underpass, natural or urban street canyon, below-grade roadway).

Vehicle traffic would be generated during construction activities. Based on the CalEEMod modeling prepared for the proposed Project, up to 30 worker trips and 21 hauling trips would be generated during construction. The nearest signalized intersections are located on Goetz Road south of the Project site. Based on the Traffic Study prepared for the Quail Hill project, which is located just east of the Project site, the year 2025 traffic volume on Goetz Road north of Newport Road is 15,935 average daily traffic (Urban Crossroads 2022). Peak hour traffic volumes are typically 10 percent of the average daily traffic. Based on this, the peak hour volume on Goetz Road would be approximately 1,590 vehicles. Assuming the Goetz Road crossroads carry similar traffic volumes, the peak hour turning volumes at each of these intersections are projected to be well less than 24,000 vehicles per

hour. Consequently, the addition of construction-related traffic to these intersections would not generate a CO hot spot. Once construction is complete, traffic would be generated only by period routine maintenance inspections. Neither construction nor operation of the proposed Project would conflict with a congestion management program. Therefore, the proposed Project would not expose sensitive receptors to substantial pollutant concentrations associated with a CO hot spot, and impacts would be less than significant.

4.2.7.2 Significance of Impacts

a. Diesel Particulate Matter–Construction

Residential uses in the proposed Project area that are exposed to DPM concentrations of 0.01465 µg/m^3 or greater would be exposed to a maximum incremental cancer risk greater than 10 in a million, resulting in a potentially significant impact (**Impact AQ-1**).

b. Diesel Particulate Matter–Freeway

No mitigation is required.

c. Diesel Particulate Matter–Emergency Generators

No mitigation is required.

d. Carbon Monoxide Hot Spots

No mitigation is required.

4.2.7.3 Mitigation

AQ-1: Tier 4 Construction Equipment with Diesel Particulate Filtration

a. The Quail Valley Subarea 4 Project (proposed Project) shall require the construction contractor to provide a construction fleet that uses heavy-duty diesel-powered equipment equipped with Tier 4 Final diesel engines. An exemption from these requirements may be granted by the Eastern Municipal Water District if corresponding reductions in criteria air pollutant emissions are achieved from other construction equipment.

b. The proposed Project shall require the construction contractor to provide a construction fleet that uses heavy-duty diesel-powered equipment equipped with diesel particulate filters.

c. Construction equipment shall be outfitted with best available control technology devices certified by the California Air Resources Board. A copy of each unit's best available control technology documentation shall be provided to the Eastern Municipal Water District at the time of mobilization of each applicable unit of equipment.

4.2.7.4 Significance of Impacts After Mitigation

a. Diesel Particulate Matter–Construction

Implementation of **mitigation measure AQ-1** described above would reduce impacts to sensitive receptors during construction activities (**Impact AQ-1**) to a less than significant level.

b. Diesel Particulate Matter–Freeway

No mitigation is required.

c. Diesel Particulate Matter–Emergency Generators

No mitigation is required.

d. Carbon Monoxide Hot Spots

No mitigation is required.

4.2.8 Threshold 4: Odor

Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

4.2.8.1 Impact Analysis

The potential for an odor impact is dependent on several variables, including the nature of the odor source, distance between the receptor and odor source, and local meteorological conditions. During construction, diesel equipment may generate some nuisance odors from equipment exhaust. Additionally, paving activities have the potential to generate odors while laying asphalt. Sensitive receptors within the Project site include residential uses. However, exposure to odors associated with construction would be short-term and temporary in nature. Although the overall construction activities are anticipated to occur over a 20-year period, equipment would only be located near any given receptor for a much shorter duration limited by each phase of construction. In addition, construction activities would be required to comply with SCAQMD Rule 402, which prohibits the discharge of odorous emissions that would create a public nuisance. Further, per CARB's Airborne Toxic Control Measure 13 (CCR Chapter 10 Section 2485), the applicant shall not allow idling time to exceed five minutes unless more time is required per engine manufacturers' specifications or for safety reasons. Compliance with this regulation would reduce odors from equipment exhaust. Given the short-term nature of construction, compliance with SCAQMD Rule 402, and the distance to the nearest sensitive receptors, construction would not generate odors that would affect a substantial number of people, and impacts would be less than significant.

The following list provides some common types of facilities that are known producers of objectionable odors (Bay Area Air Quality Management District 2022). This list of facilities is not meant to be all-inclusive.

- Wastewater Treatment Plant
- Wastewater Pumping Facilities
- Sanitary Landfill
- Transfer Station
- Composting Facility
- Petroleum Refinery
- Asphalt Batch Plant
- Chemical Manufacturing
- Fiberglass Manufacturing
- Painting/Coating Operations
- Rendering Plant
- Coffee Roaster
- Food Processing Facility
- Confined Animal Facility/Feed Lot/Dairy
- Green Waste and Recycling Operations
- Metal Smelting Plants

The proposed Project would include the construction of five sewer lift stations. Pumps and other equipment would be located within underground wet wells. The lift stations would be primarily subterranean, with visible above-ground features including access hatches, electrical control panels, an emergency generator within an enclosure, and other associated equipment. The lift stations would be designed to reduce force main residence time which refers to the time duration that wastewater remains within these force main pipelines. Keeping this residence time short helps prevent the buildup of odorous gases, such as hydrogen sulfide, and reduces the chances of foul odors escaping into the environment. The lift stations would also include air release valves that could be equipped with a fiberglass enclosure to contain the odor, gas, and fluid, and by directing the air, gas, and accompanying fluids back into the nearest gravity sewer manhole. Regular inspection and maintenance would be performed by the District to ensure that the lift stations would not be significant source of odors. Therefore, operation of the proposed Project would not generate odors adversely affecting a substantial number of people, and impacts would be less than significant.

4.2.8.2 Significance of Impacts

The proposed Project would not generate odors adversely affecting a substantial number of people, and impacts would be less than significant.

4.2.8.3 Mitigation

No mitigation is required.

4.2.8.4 Significance of Impacts After Mitigation

No mitigation is required.

4.3 Biological Resources

This section analyzes potentially significant impacts related to biological resources that could result from implementation of the proposed Project. Construction of the proposed Project is planned to be carried out in eight phases implemented over a 20-year period. This evaluation is programmatic, focusing on the environmental impacts that could occur from implementation of all phases of construction (see Chapter 3). As each phase is constructed, an assessment will be made whether this PEIR adequately covers the phase to be implemented, or if additional project-level analyses would be required to further assess impacts.

This section includes a setting discussion that describes existing biological resources conditions in and around the Project site and summarizes applicable regulations related to biological resources. This section also includes an evaluation of the potential impacts of the proposed Project related to biological resources. The biological resources described in this section are based on the findings provided in the Biological Resources Report prepared for the proposed Project (Appendix D). The "survey area" referenced in this section consists of the proposed Project site with a 500-foot buffer.

4.3.1 Existing Conditions

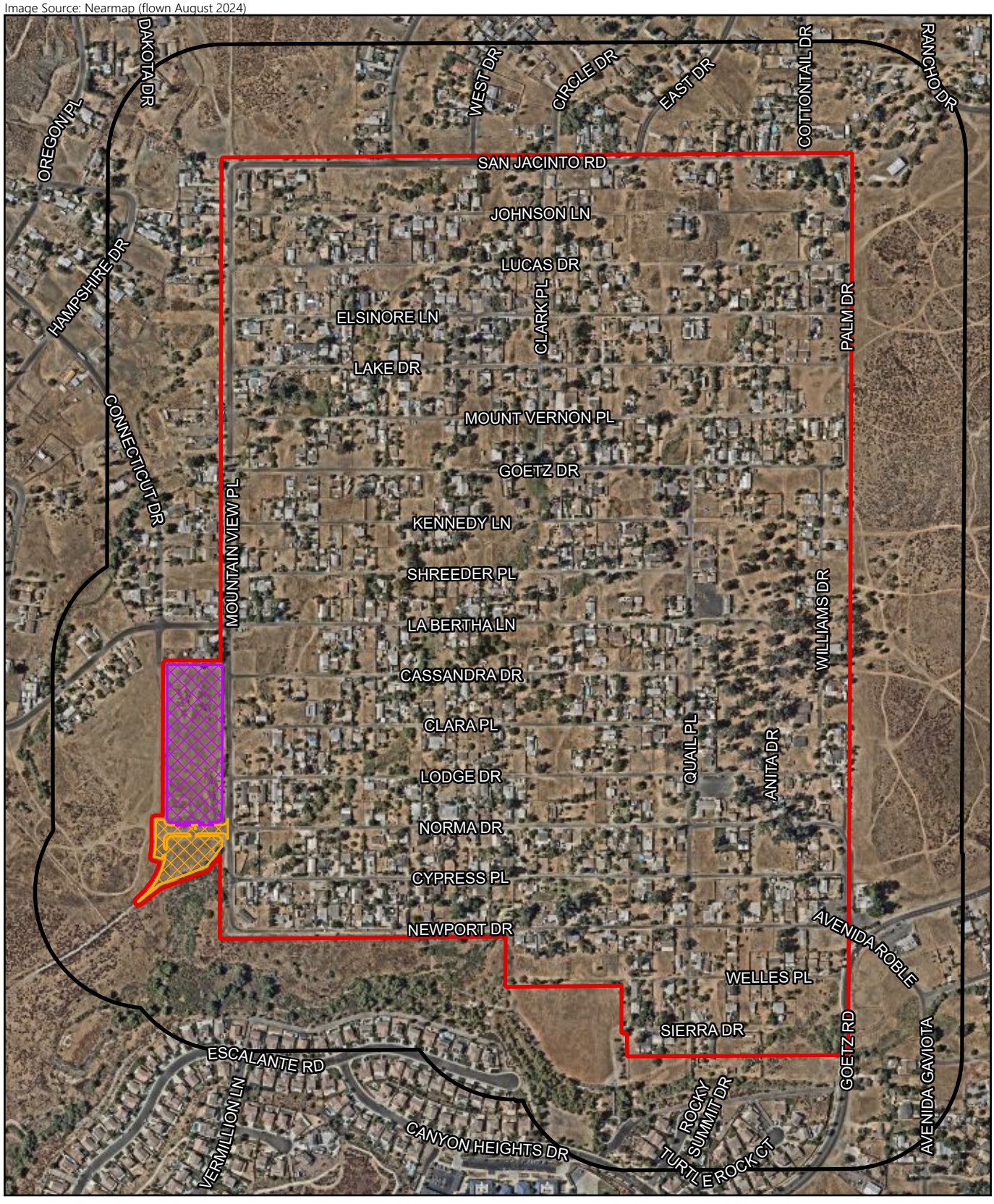
4.3.1.1 Physical Characteristics/Setting

The Project site consists of Quail Valley Subarea 4, which is one of nine subareas within the Quail Valley community, and the potential site options for LS-1 (Options 1 and 2). The survey area consists of the proposed Project site with a 500-foot buffer, which includes open spaces on the western, southern, and eastern sides (**Figure 4.3-1**). The survey area consists of a mix of undeveloped and developed land with single-family residences found on a grid of small neighborhood roads, with elevations ranging from approximately 1,400 feet above mean sea level in a stream located in the southwest corner of the survey area, to 1,700 feet above mean sea level within the eastern portion of the survey area. There are several small drainages generally flowing northeast to southwest in low areas through the survey area. A larger unnamed stream flows east to west along the southern edge of the survey area. This larger stream drains into Canyon Lake, approximately 0.8 miles to the southwest.

4.3.1.2 Vegetation Communities

As shown in **Figure 4.3-2**, 21 vegetation communities/land cover types were identified within the survey area. The acreage of each of these vegetation communities/land cover types is summarized in **Table 4.3-1**. A complete list of the plant species identified within the survey area is provided in Attachment 3 to Appendix D and representative photographs of the survey area are provided in Attachment 4 to Appendix D.

Image Source: Nearmap (flown August 2024)



Project Boundary

Survey Area

LS-1 Option 1

LS-1 Option 2

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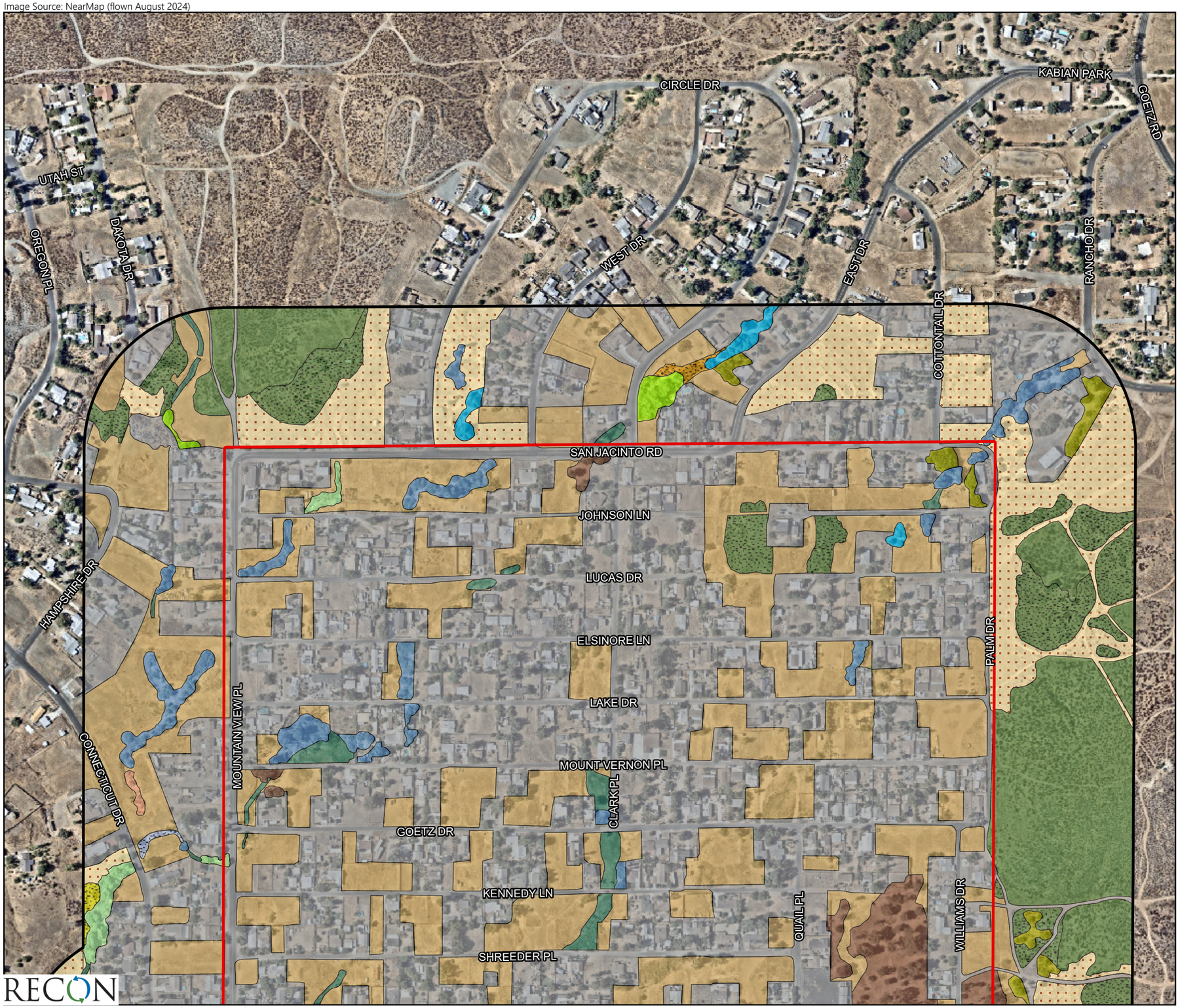
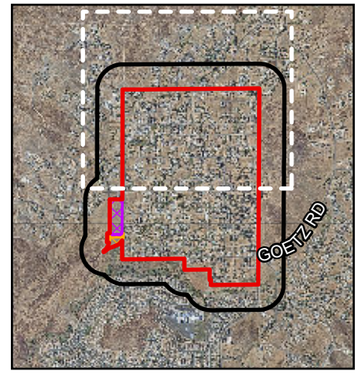
FIGURE 4.3-1
Biological Resources Survey Area

Image Source: NearMap (flown August 2024)





Project Boundary

Survey Area

Vegetation Communities

- Buckwheat Scrub - Disturbed
- Disturbed Habitat
- Disturbed Wetland
- Eucalyptus Woodland
- Freshwater Marsh - Disturbed
- Mule Fat Scrub - Disturbed
- Non-Native Grassland: Broadleaf-Dominated
- Non-Native Riparian
- Non-Native Woodland
- Riversidian Sage Scrub
- Riversidian Sage Scrub - Disturbed
- Southern Cottonwood Willow Riparian Forest
- Southern Willow Scrub
- Southern Willow Scrub - Disturbed
- Tamarisk Scrub
- Urban/Developed

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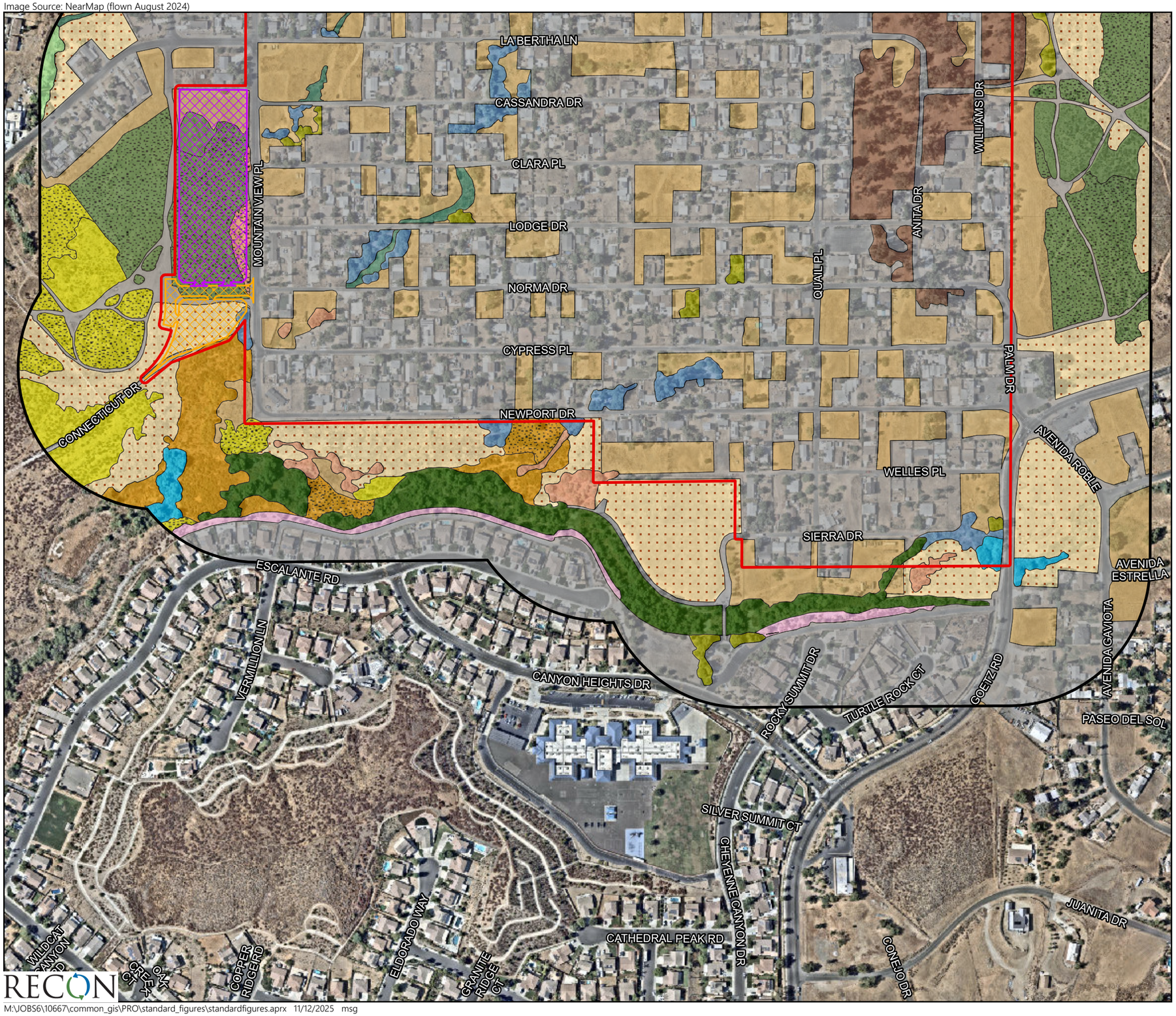
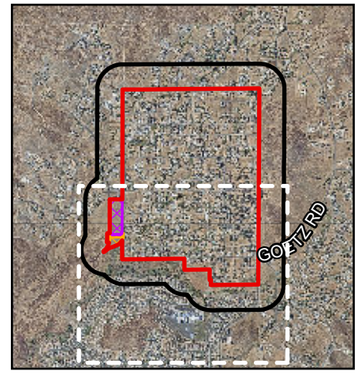
FIGURE 4.3-2a
Vegetation Communities and Land Covers

Image Source: NearMap (flown August 2024)





- Project Boundary
- Survey Area
- LS-1 Option 1
- LS-1 Option 2

Vegetation Communities

- Buckwheat Scrub
- Buckwheat Scrub - Disturbed
- Disturbed Habitat
- Disturbed Wetland
- Eucalyptus Woodland
- Mule Fat Scrub
- Mule Fat Scrub - Disturbed
- Non-Native Grassland: Broadleaf-Dominated
- Non-Native Riparian
- Non-Native Woodland
- Riversidian Sage Scrub
- Riversidian Sage Scrub - Disturbed
- Southern Arroyo Willow Riparian Forest
- Southern Willow Scrub
- Southern Willow Scrub - Disturbed
- Tamarisk Scrub
- Tamarisk Scrub - Disturbed
- Urban/Developed
- Urban/Developed - Native Revegetated

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FIGURE 4.3-2b
Vegetation Communities and Land Covers

Table 4.3-1 Vegetation Communities and Land Cover Types within the Survey Area		
Vegetation Community/Land Cover Type	Area (acres)[1]	Sensitive Natural Community?[2]
Buckwheat Scrub	3.6	No
Buckwheat Scrub–Disturbed	3.3	No
Disturbed Habitat	82.1	No
Disturbed Wetland	2.3	Yes (potentially jurisdictional aquatic resource)
Eucalyptus Woodland	8.7	No
Freshwater Marsh–Disturbed	0.1	Yes (potentially jurisdictional aquatic resource)
Mule Fat Scrub	3.8	
Mule Fat Scrub–Disturbed	1.2	
Non-Native Grassland: Broadleaf-Dominated	34.1	No
Non-Native Riparian	6.4	Yes (potentially jurisdictional aquatic resource)
Non-Native Woodland	2.2	No
Riversidian Sage Scrub	16.6	No
Riversidian Sage Scrub–Disturbed	18.2	No
Southern Arroyo Willow Riparian Forest	6.2	Yes (potentially jurisdictional aquatic resources)
Southern Cottonwood Willow Riparian Forest	0.5	
Southern Willow Scrub	1.5	
Southern Willow Scrub–Disturbed	1.1	
Tamarisk Scrub	1.4	
Tamarisk Scrub–Disturbed	0.4	
Urban/Developed	202.8	No
Urban/Developed–Native Revegetated	1.3	No
TOTAL[3]	**397.8**	

[1]The survey area is defined as the Project site with a 500-foot buffer.
[2]SOURCE: California Department of Fish and Wildlife 2025a.
[3]Areas are presented in acres, rounded to the nearest 0.1; discrepancies are due to rounding.

a. Vegetation Community/Land Cover Types

Vegetation community and land cover descriptions are provided below. These descriptions include site-specific details applicable to the survey area.

Buckwheat Scrub

Buckwheat scrub is a monotypic community containing almost exclusively California buckwheat (*Eriogonum fasciculatum*) in the shrub stratum with non-native grasses (*Bromus* spp.) and forbs such as dove weed (*Croton setiger*) in the herbaceous layer. Buckwheat scrub, which include roughly 25 to 75 percent absolute cover of California buckwheat, were observed primarily in the southwestern portion of the survey area.

Buckwheat Scrub–Disturbed

Buckwheat scrub–disturbed is very similar to buckwheat scrub (described above) but includes a lower absolute cover of California buckwheat, between 10 and 15 percent total cover or less, with a high density of non-native grasses and weeds, including short-pod mustard (*Hirschfeldia incana*) and cheeseweed (*Malva parviflora*). The lower cover of California buckwheat and higher cover of invasive species indicates these stands were or are currently experiencing higher level of human-caused disturbance, such as repeated removal of vegetation for fire management purposes.

Disturbed Habitat

Disturbed habitat consists of areas that have been previously disturbed by human activities and no longer function as a native or naturalized vegetation community. The disturbed habitat within the survey area consists predominantly of cleared, unvegetated areas, with low cover (usually less than 25 percent) of non-native grasses and forbs. These areas are primarily mapped within vacant lots. The majority of the plants found in the disturbed habitat are non-native species such as Mediterranean schismus *(Schismus barbatus*), red brome *(Bromus rubens*), long-beak filaree *(Erodium botrys*), and short-pod mustard. Native species are uncommon in the disturbed habitat but include herbaceous species, such as dove weed, are found at very low cover.

Disturbed Wetland

Disturbed wetland is a wetland vegetation community dominated by low-growing, wetland or hydrophytic species that occur in areas that have been significantly modified by human-caused activity. It often occurs in drainages and is generally characterized by non-native wetland species intermixed with occasional native species. Disturbed wetland occurs in numerous patches along the smaller drainages throughout the survey area (see Figure 4.3-2). Characteristic plants occurring in the disturbed wetland include salt grass (*Distichlis spicata*), annual beard grass (*Polypogon monspeliensis*), African umbrella plant (*Cyperus involucratus*), spike rush (*Eleocharis* sp.), Bermuda grass (*Cynodon dactylon*), and western sunflower (*Helianthus annuus*).

Eucalyptus Woodland

Eucalyptus woodland occurs in one large patch in an undeveloped area in the eastern portion of the survey area, as well as in other smaller patches adjacent to existing residences. Eucalyptus woodland is dominated by exotic gum trees (*Eucalyptus* sp.). Gum trees are a non-native species that were historically planted in southern California.

Freshwater Marsh–Disturbed

Freshwater marsh–disturbed is a wetland habitat that is permanently flooded by fresh water and lacks significant current (Oberbauer et al. 2008). Within the survey area, it occurs along the western edge within a drainage feature and is only found in the 500-foot buffer and not within the Project site. This stand is dominated by cattail (*Typha* sp.), with water speedwell (*Veronica anagallis-aquatica*) also occurring.

Mule Fat Scrub

Mule fat scrub is typically a tall, herbaceous riparian scrub strongly dominated by mule fat (*Baccharis salicifolia*). This early seral community is maintained by frequent flooding. Absent this, most stands would eventually mature into cottonwood- or sycamore-dominated riparian forests or woodlands. Mule fat scrub was mapped along the southwestern and southcentral portions of the survey area. These stands contain mule fat and Emory's baccharis (*Baccharis salicina* [=*Baccharis emoryi*]), with Emory's baccharis at a higher absolute cover, usually more than 50 to 60 percent, while mule fat is present at roughly 20 to 30 percent absolute cover.

Mule Fat Scrub–Disturbed

Mule fat scrub–disturbed is like mule fat scrub (described above) but includes a lower absolute cover of mule fat and Emory's baccharis, with a high density of non-native grasses and weeds, including short-pod mustard and brome grasses. Mule fat scrub–disturbed was mapped within parts of the southern and northern portions of the 500-foot buffer. The lower cover of native shrubs and higher cover of invasive species indicates these stands were or are currently experiencing a higher level of human-caused disturbance, such as edge effects from adjacent roads or other infrastructure.

Non-Native Grassland: Broadleaf-Dominated

Broadleaf dominated non-native grassland is present in areas dominated by non-native grasses and invasive annuals such as short-pod mustard and is located primarily within the 500-foot buffer. These areas are distinct from disturbed habitat in that these habitats are not located directly within residential areas, and as such, may provide foraging habitat for raptor species due to their location adjacent natural areas, such as the Bureau of Land Management administered lands around Canyon Lake to the west.

Non-Native Riparian

Non-native riparian consists of moderately dense to dense thickets of non-native invasive riparian species. It occurs in several stands in and adjacent to the drainages throughout the survey area. Within the survey area, these patches are dominated by exotic species including giant reed (*Arundo donax*), tamarisk (*Tamarix* sp.), Mexican fan palm (*Washingtonia robusta*), and Mexican palo verde (*Parkinsonia aculeata*).

Non-Native Woodland

Non-native woodland is mapped in areas dominated by non-native or ornamental shrubs or trees that occur outside the limits of existing developed properties. Areas of ornamental landscaping on developed parcels are not included in this category. The most common species in the non-native woodlands within the survey area include Mexican palo verde, Brazilian pepper tree (*Schinus terebinthifolius*), Peruvian pepper tree (*Schinus molle*), tree of heaven (*Ailanthus altissima*), Chinese elm (*Ulmus parvifolia*), and Mexican fan palm. Understory elements include bull thistle (*Cirsium vulgare*), Bermuda grass, and other non-native grasses.

Riversidian Sage Scrub

Riversidian sage scrub is a relatively open shrub community of soft-woody shrubs that generally reach up to three feet in height. It is found in dry areas in Riverside County. Within the survey area, this vegetation community is located primarily to the east and north, within the 500-foot buffer. Riversidian sage scrub is dominated by California buckwheat and brittlebush (*Encelia farinosa*), abundant non-native species, including red brome, Mediterranean schismus, Russian thistle (*Salsola tragus*), tocalote (*Centaurea melitensis*), and long-beak filaree.

Riversidian Sage Scrub–Disturbed

Riversidian sage scrub–disturbed is very similar to Riversidian sage scrub (described above) but includes a lower absolute cover in the shrub stratum, usually between 10 and 15 percent total cover or less, with a high density of non-native grasses and weeds, including short-pod mustard. There are patches of Riversidian sage scrub–disturbed within undeveloped areas in the northeast portion of the Project site between Johnson Lane and Lucas Drive, to the east and west of a single-family residence. These patches appear to be cleared or trimmed regularly, likely for brush management purposes, and have a total shrub cover of approximately 15 percent.

Southern Arroyo Willow Riparian Forest

Southern arroyo willow riparian forest is a winter-deciduous riparian forest dominated by moderately tall broad-leafed trees such as arroyo willow (*Salix lasiolepis*) with closed, or nearly closed canopies. They are usually located within sub-irrigated and frequently overflowed lands along rivers and streams.

Southern arroyo willow riparian forest is primarily located along the larger stream, flowing east-west within the southern portion of the 500-foot buffer. These stands are dominated by Goodding's black willow (*Salix gooddingii*) with some red willow (*Salix laevigata*) and arroyo willow. These stands are tall and dense, indicating a forested community and not a scrub community. The understory is typically mule fat, with occasional Mexican fan palm, Mexican palo verde, and dwarf nettle (*Urtica urens*).

Southern Cottonwood Willow Riparian Forest

Southern cottonwood willow riparian forest is similar to southern arroyo willow forest, and is a tall, open, broad-leafed winter-deciduous riparian forests dominated by willows (*Salix* spp.), but it also contains Fremont cottonwood (*Populus fremontii* ssp. *fremontii*) as a co-dominant. The understory is also similar and contains shrubby willows and mule fat. Southern cottonwood willow riparian forest is mapped within the northern portion of the 500-foot buffer.

Southern Willow Scrub

Southern willow scrub is typically a broad-leafed, winter-deciduous riparian thicket dominated by several willow species. Most stands are too dense to allow much understory development, and this early seral type requires repeated flooding to prevent succession to riparian forest communities. Within the survey area, southern willow scrub occurs along smaller drainages that serve as tributaries

to the larger unnamed drainage located south of the Project site. These stands were less than 15 to 20 feet in height and were dominated primarily by immature willow trees.

Southern Willow Scrub–Disturbed

Southern willow scrub–disturbed occurs in areas that meet the criteria for southern willow scrub (described above) but also contain a higher percent cover of non-native riparian species, such as Mexican fan palm and saltcedar (*Tamarix ramosissima*). This classification is found mostly within the western portion of the 500-foot buffer, with a small patch occurring within the northwest portion of the Project site.

Tamarisk Scrub

Tamarisk scrub is a weedy, virtual monoculture of any of several tamarisk species (*Tamarix* spp.), usually supplanting native vegetation following major disturbance. Areas dominated by saltcedar were mapped as tamarisk scrub within the survey area.

Tamarisk Scrub–Disturbed

A few stands of tamarisk scrub were identified as having a higher cover of invasive species and lower overall cover of tamarisk. These areas were mapped as tamarisk scrub–disturbed and are located along a swale feature west of and parallel to Mountain View Place. This area appears to experience regular mowing of vegetation between the tamarisks, and the tamarisk shrubs are widely spaced apart.

Urban/Developed Land

Urban/developed land within the survey area includes existing roads, sidewalks, residences, ornamental landscaping, and commercial developments. Generally, vegetation in these areas is characterized by ornamental trees and shrubs, with occasional native or non-native species spreading into more open areas.

Urban/Developed–Native Revegetated

This land cover type was observed at the far southern edge of the survey area, south of the large tributary flowing into Canyon Lake, in a narrow strip of vegetation that is planted as part of the landscaping associated with the Canyon Heights Subdivision. This area is predominantly developed and maintained as part of the common areas of the subdivision, but the vegetation consists of native sage scrub species (such as California buckwheat) widely spaced and clearly planted after construction of the subdivision. The vegetation here is low density, with very low species diversity and does not currently provide quality habitat for sensitive species.

4.3.1.3 Common Wildlife

The following eight common wildlife species were detected during the biological constraints survey conducted by RECON Environmental, Inc. in 2020[1]: common buckeye (*Junonia coenia grisea*), cabbage white (*Pieris rapae*), American crow (*Corvus brachyrhynchos*), black phoebe (*Sayornis nigricans*), bushtit (*Psaltriparus minimus melanurus*), house finch (*Haemorhous mexicanus*), northern mockingbird (*Mimus polyglottos polyglottos*), and Botta's pocket gopher (*Thomomys bottae*). These species are characteristic of an exurban environment. The 2025 general biological survey was consistent with these findings of common animal species. A complete list of these species is provided in Attachment 1 to Appendix D.

4.3.1.4 Special-Status Species

For purposes of this PEIR, species are considered sensitive if they are:

- covered species under the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP);
- listed by state or federal agencies as threatened or endangered or are proposed for listing CDFW 2025b, 2025c);
- designated as fully protected or species of special concern by the CDFW (2025c); or
- identified as California Rare Plant Rank (CRPR) 1B (considered endangered throughout its range), CRPR 2 (considered endangered in California but more common elsewhere), CRPR 3 (more information about the plant's distribution and rarity needed), or CRPR 4 (plants of limited distribution) on the California Native Plant Society (CNPS) Inventory of Rare and Endangered Vascular Plants of California (CNPS 2025).

a. Sensitive Plants

Seventeen special-status plant species documented as occurring within one mile of the Project site (CDFW 2025c) were evaluated for their potential to occur (see Attachment 5 to Appendix D).

Paniculate tarplant (*Deinandra paniculata*), a CRPR 4.2 species, was observed in two locations on the western portion of the survey area, within the 500-foot buffer outside the Project site. Twelve additional special-status plants have a moderate or high potential to occur within the survey area, particularly within the proposed areas for LS-1 (Options 1 and 2):

- Coulter's goldfields (*Lasthenia glabrata* ssp. *coulteri*)
- long-spined spineflower (*Chorizanthe polygonoide*s var. *longispina*)
- Munz's onion (*Allium munzii*)
- Palmer's grapplinghook (*Harpagonella palmeri*)

[1] Note that Latin and common names listed here conform to the most recent nomenclature changes and may not reflect the nomenclature used in the 2020 Biological Constraints Report provided in Appendix D.

- Parry's spineflower (*Chorizanthe parryi var. parryi*)
- Payson's jewelflower (*Caulanthus simulans*)
- peninsular spineflower (*Chorizanthe leptotheca*)
- Robinson's peppergrass (*Lepidium virginicum* var. *robinsonii*)
- small-flowered microseris (*Microseris douglasii* ssp. *platycarpha*)
- small-flowered morning-glory (*Convolvulus simulans*)
- smooth tarplant (*Centromadia pungens* ssp. *laevis* [=*Hemizonia pungens* ssp. *laevis*])
- southern California black walnut (*Juglans californica* [=*Juglans californica* var. *californica*])

As shown in Figure 4.6-1, no mapped clay soils are identified within the survey area; however, two soil types (Arbuckle loam and Lodo rocky loam) contain sufficient clay soil content that could support clay soil endemics (e.g., Coulter's goldfields, Munz's onion, long-spined spineflower, Palmer's grapplinghook, small-flowered microseris, and small-flowered morning-glory). Undeveloped land in the southwest portion of the survey area, including within areas proposed for LS-1 (Options 1 and 2, as well as undeveloped land along the western edge of the survey area have the highest potential to support these sensitive plant species.

b. Sensitive Wildlife

Twenty-one sensitive wildlife species were evaluated for their potential to occur in the survey area because they were either noted within one mile of the survey area in the California Natural Diversity Database (CDFW 2025c) or are resources noted in the Information for Planning and Consultation Database list (see Attachment 2 to Appendix D). Attachment 6 to Appendix D evaluates the potential for sensitive wildlife species to occur. No sensitive wildlife species were detected within the survey area during the general biological survey; however, the following 14 species were determined to have a moderate or high potential to occur in the survey area:

- Invertebrates:
  - Crotch's bumble bee (*Bombus crotchii*)

- Reptiles
  - Belding's orange-throated whiptail (*Aspidoscelis hyperythra beldingi* [=*Cnemidophorus hyperythrus*])
  - California glossy snake (*Arizona elegans occidentalis*)
  - red diamond rattlesnake (*Crotalus ruber*)
  - San Diegan tiger whiptail (coastal whiptail) (*Aspidoscelis tigris stejnegeri*)

- Birds
  - Bell's sage sparrow (*Artemisiospiza* [=*Amphispiza*] *belli belli*)
  - burrowing owl (*Athene cunicularia*)
  - California horned lark (*Eremophila alpestris actia*)
  - coastal California gnatcatcher (*Polioptila californica californica*)
  - least Bell's vireo (*Vireo bellii pusillus*)
  - southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*)

- Mammals
  - San Diego black-tailed jackrabbit (*Lepus californicus bennettii*)
  - Stephens' kangaroo rat (*Dipodomys stephensi*)
  - western bonneted [=mastiff] bat (*Eumops perotis*)

Crotch's Bumble Bee

Crotch's bumble bee is a state candidate for listing as endangered. This species has a moderate potential to forage within and adjacent to the Project site due to the presence of scattered floral resources within non-native grasslands: broadleaf-dominated, buckwheat scrub, Riversidian sage scrub, and disturbed habitat. This species also has a moderate potential to nest within the Project site due to the presence of bare ground and several rodent burrows, particularly within LS-1 (Options 1 and 2).

Orange Throated-Whiptail, San Diegan Tiger Whiptail, and Red-Diamond Rattlesnake

These species are CDFW species of special concern and MSHCP covered species. Orange throated-whiptail and San Diegan tiger whiptail have a moderate potential to occur, and red-diamond rattlesnake has a high potential to occur. All three species may occur in the disturbed stands of Riversidian sage scrub, specifically within LS-1 (Option 2), and in the northeast portion of the Project site.

California Glossy Snake

The California glossy snake is a CDFW species of special concern (CDFW 2025c). This species was not observed during the general biological survey and is not expected to occur within the developed roadways associated with the proposed Project; however, it has a moderate potential to occur within LS-1 (Options 1 and 2).

Bell's Sage Sparrow and Southern California Rufous-Crowned Sparrow

Bells's sage sparrow and southern California rufous-crowned sparrow are CDFW watch list species and MSHCP covered species. Within the Project site, these two species have a high potential to occur in the disturbed stands of Riversidian sage scrub, specifically within the northeast portion and LS-1 (Option 2).

Burrowing Owl

Burrowing owl is a state candidate for listing as endangered and a MSHCP covered species that occurs in a variety of open habitats such as grasslands where there are sufficient rodent burrows to utilize. No burrowing owl individuals, burrows or burrowing owl sign were present within the survey area during the 2025 or 2020 surveys. The Project site consists primarily of open grassland and scrub habitats, including numerous burrow surrogates (e.g., culverts) that could be used by this species. Potential prey items, including insects, lizards, and small mammals are anticipated to occur. Based on the presence of suitable habitat within survey area, particularly within undeveloped lands to the southwest and along the eastern edge of the survey area, this species has a moderate potential to occur.

California Horned Lark

California horned lark is a CDFW watch list species and a MSHCP covered species. It occurs in arid grasslands, agricultural lands, and other disturbed, sparsely vegetated areas, but is not common in a chaparral biome (Unitt 2004). The disturbed habitat, non-native grassland: broadleaf-dominated and Riversidian sage scrub on the Project site and within the survey area provide suitable habitat for California horned lark. As such, this species has a high potential to occur.

Coastal California Gnatcatcher

Coastal California gnatcatcher is federally listed as threatened, a CDFW species of special concern, and a MSHCP covered species. As shown in **Figure 4.3-3**, the survey area supports potentially suitable habitat for coastal California gnatcatcher within buckwheat scrub and Riversidian sage scrub vegetation. The Project site supports a small patch of disturbed Riversidian sage scrub (see **Figure 4.3-2**) potentially capable of supporting this species within the area proposed for LS-1 (Option 2).

Suitable coastal California gnatcatcher habitat within the survey area is also present and includes California buckwheat and Riversidian sage scrub; however, most of these stands also contain high density of non-native grasses and weeds. Habitat within the survey area is further surrounded by open space, much of it scrub habitat, indicating that the suitable habitat within the survey area may be connected to larger stands of suitable habitat in the region. Due to the presence of suitable vegetation, albeit somewhat disturbed, and the fact that this habitat is contiguous with larger blocks of habitat, coastal California gnatcatcher has a moderate potential to occur within the survey area.

Least Bell's Vireo

The least Bell's vireo is federally and state listed as endangered, and a MSHCP covered species (Western Riverside County Regional Conservation Authority [WRCRCA] 2003). The survey area supports potentially suitable habitat for least Bell's vireo (see **Figure 4.3-3**). The unnamed tributary along the southern edge of the survey area, within the 500-foot buffer, supports mature willows that are over 30 feet in height. The vegetation along this tributary also contains open areas between mature trees where foraging may occur. Within the Project site, there are a few small stands of willows within the smaller tributaries; however, there are non-native riparian woodlands and tamarisk scrub that may be used on occasion by this species. As such, there is a moderate potential for least Bell's vireo to occur within the Project site, and a high potential for it to occur within the unnamed tributary along the southern edge of the survey area, within the 500-foot buffer.

San Diego Black-Tailed Jackrabbit

The San Diego black-tailed jackrabbit is an MSHCP covered species (WRCRCA 2003). This species was not observed during the general biological survey; however, it has a high potential to occur in the disturbed habitat, non-native grassland: broadleaf-dominated, buckwheat scrub, and Riversidian sage scrub (including disturbed components of these communities) within the survey area, as well as within LS-1 (Option 1 and 2).

Image Source: Nearmap (flown August 2024)

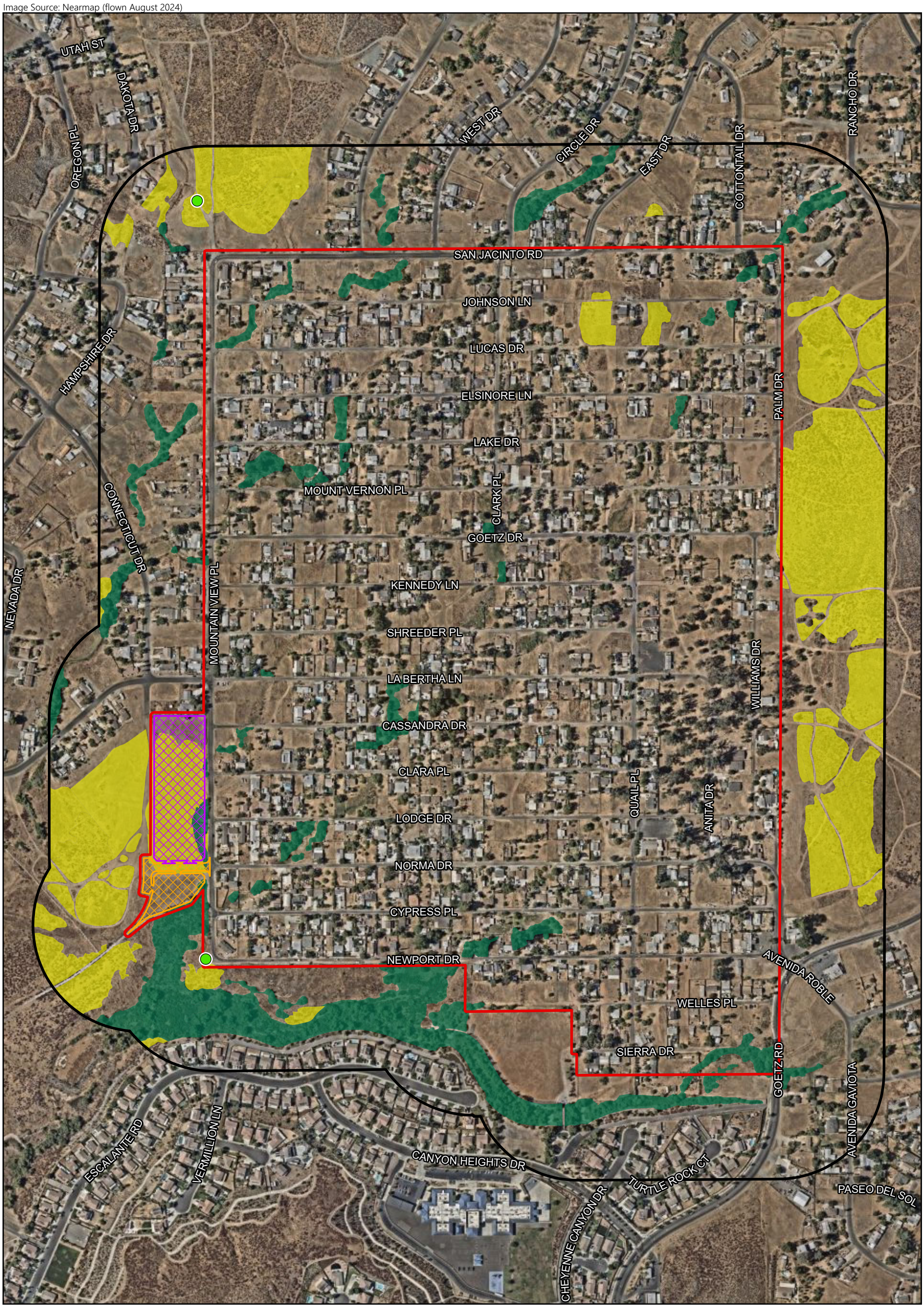

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FIGURE 4.3-3
Special-Status Plants and Wildlife

Stephen's Kangaroo Rat

The Stephen's kangaroo rat is a federally listed endangered, a state-listed threatened species, and a MSHCP and Stephen's Kangaroo Rat Habitat Conservation Program covered species (WRCRCA 2003). No Stephen's kangaroo rat or sign of the species were observed during the general biological surveys in 2020 or in 2025. As shown in Figure 4.3-4, rodent burrows that could potentially be made by kangaroo rats were noted in the southwest corner of the survey area, within the 500-foot buffer. Figure 4.3-4 provides the results of the Conservation Biology Institute's (CBI) species modeling (CBI 2019) as well as a project-specific habitat analysis showing potential habitat. Potential habitat for this species includes much of the survey area within the 500-foot buffer, and only a small area within the Project site, specifically in the southwestern portion within LS-1 (Option 1 and 2). Three occurrences of this species were also reported in the California Natural Diversity Database within one mile of the proposed Project (CDFW 2025c). As such, this species has a high potential to occur within areas shown on Figure 4.3-4 as either the CBI modeled habitat or the project-specific species analysis.

Western Bonneted [=Mastiff] Bat]

This species is a CDFW species of special concern that roosts mainly in cliff crevices, high buildings, trees, and tunnels. When roosting in rock crevices, this species needs vertical faces to drop off to take flight. It roosts alone, or in small colonies, usually of fewer than 100 bats. No cliff faces, tunnels, or high buildings were observed within the survey area; however, tall trees are present within a few areas of the Project site, such as the eucalyptus woodland in the eastern portion, and within areas mapped as non-native woodland throughout the survey area. There are also large trees within the unnamed tributary to Canyon Lake located along the southern edge of the survey area, within the 500-foot buffer. The survey area also supports the presence of potential prey species (e.g., night-flying hymenopterous insects and moths), which indicates this species could forage over the Project site. As such, this species has a high potential to occur.

Migratory and Nesting Birds

The entire survey area supports habitat for migratory and nesting bird species. Urban-adapted species are known to nest within native and non-native vegetation, including non-native woodlands within the residential area of the Project site, as well as potentially on the eves of houses or openings in structures. In addition, several ground-nesting species have the potential to nest within the open areas found within and adjacent to the Project site, such as killdeer (*Charadrius vociferus*) within the disturbed habitat and broadleaf-dominated non-native grasslands.

Image Source: Nearmap (flown August 2024)

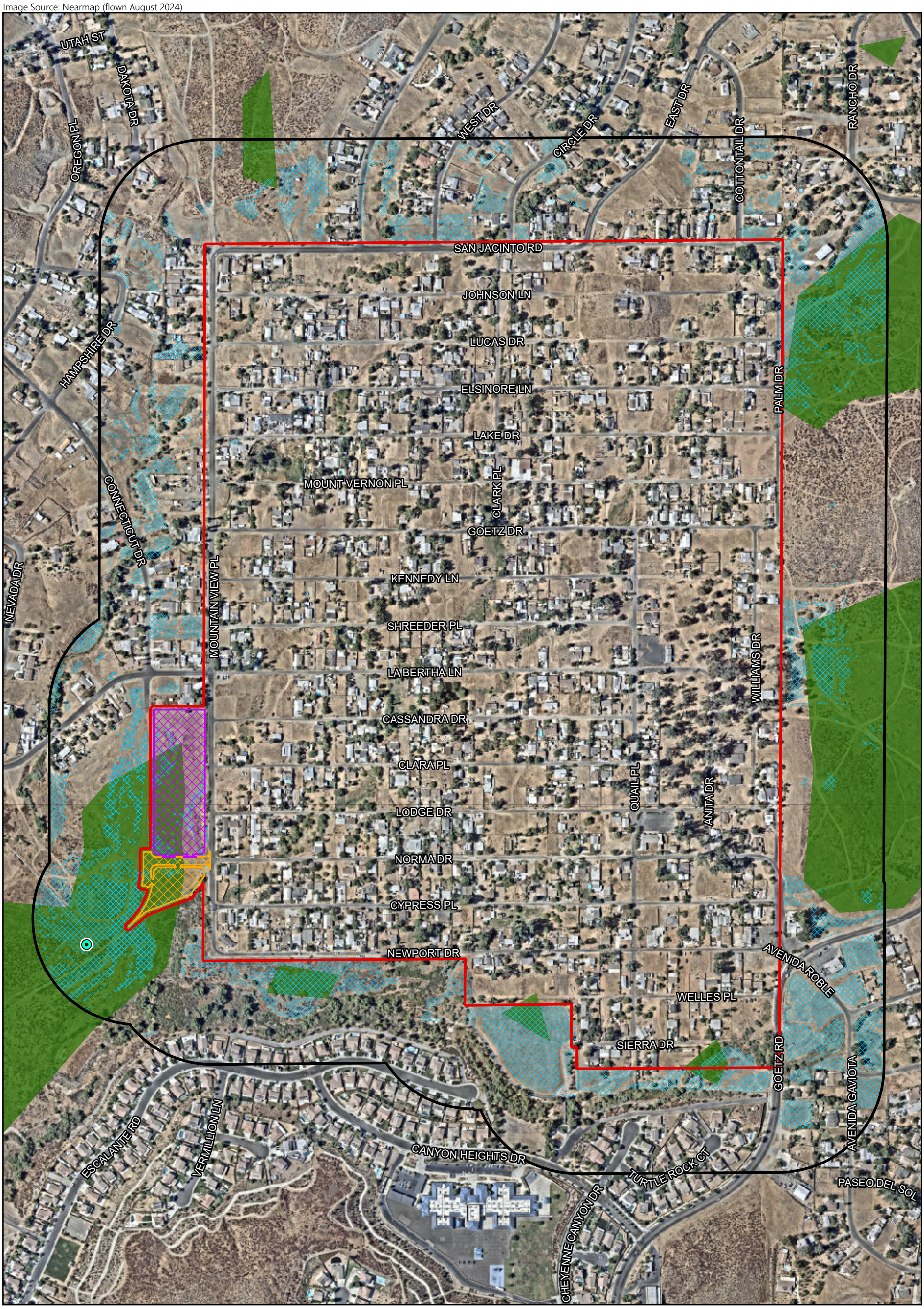

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FIGURE 4.3-4
Stephens' Kangaroo Rat Habitat

4.3.1.5 Federally Listed Species

The Information for Planning and Consultation Database resource list (U.S. Fish and Wildlife Service [USFWS] 2025; Attachment 2 to **Appendix D**) identified the following federally listed species that should be analyzed as part of the planning process based on the Project location:

- monarch butterfly (*Danaus plexippus*)
- Quino checkerspot butterfly (*Euphydryas editha quino*)
- Riverside fairy shrimp (*Streptocephalus woottoni*)
- vernal pool fairy shrimp (*Branchinecta lynchi*)
- coastal California gnatcatcher
- least Bell's vireo
- southwestern pond turtle (*Actinemys pallida*)
- western spadefoot (*Spea hammondii*)
- San Bernardino Merriam's kangaroo rat (*Dipodomys merriami parvus*)
- Stephens' kangaroo rat

Each of these species are discussed in more detail in Chapter 5 of this PEIR. With the exception of coastal California gnatcatcher, least Bell's vireo, and Stephen's kangaroo rat, discussed above, these species are not expected to occur based on lack of suitable habitat within the survey area.

4.3.1.6 Critical Habitat

The USFWS designates critical habitat for endangered and threatened species under the Federal ESA (FESA; 16 U.S.C. Section 1533 [a][3]) for the survival and recovery of federally listed endangered and/or threatened species. Protected habitat includes areas for foraging, breeding, roosting, shelter, and movement or migration.

No critical habitat is present within the survey area for any federally listed species. Designated critical habitat for coastal California gnatcatcher is mapped approximately 0.5 miles east and approximately 0.5 miles west of the Project site (USFWS 2025).

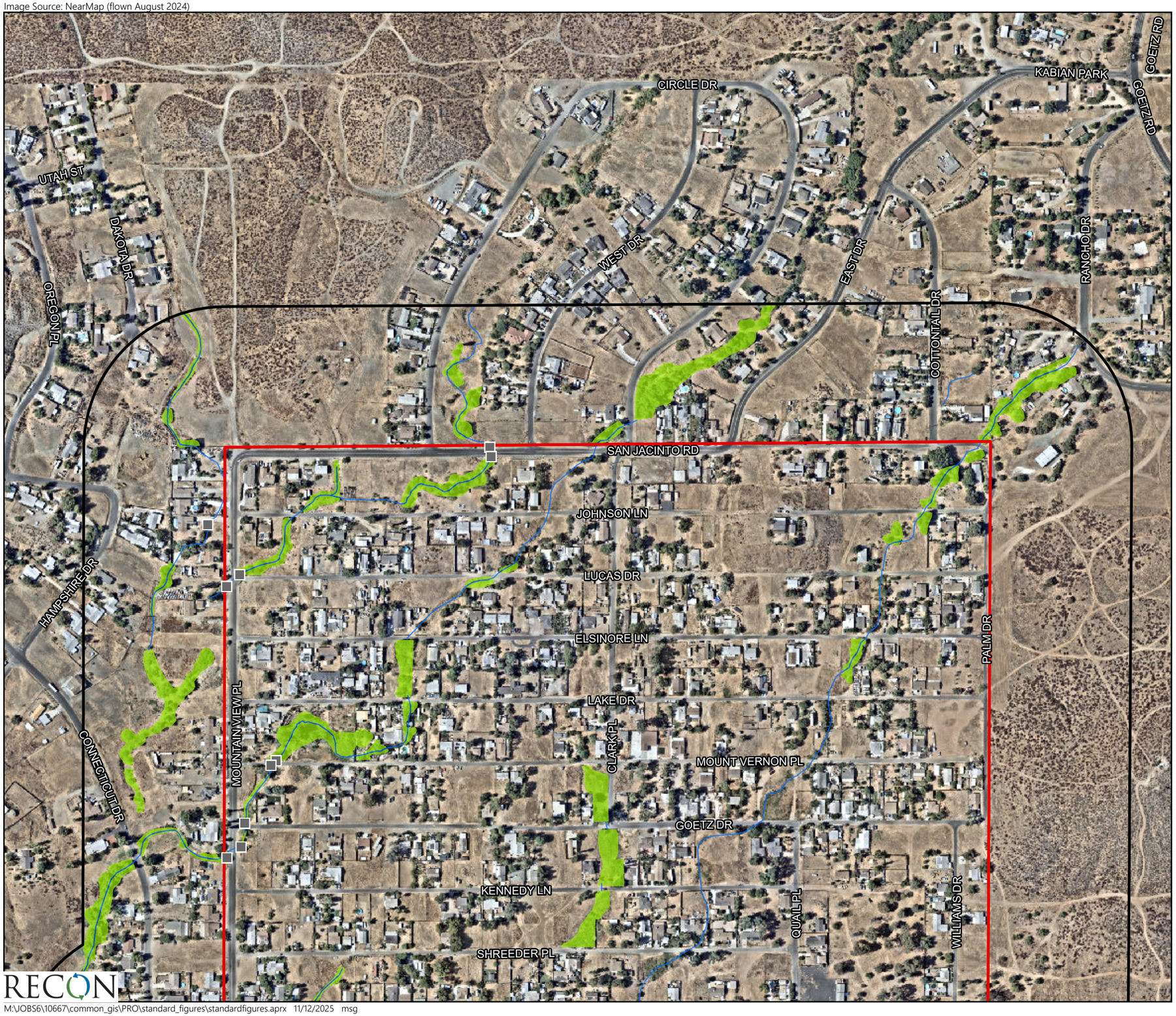
4.3.1.7 Aquatic Resources

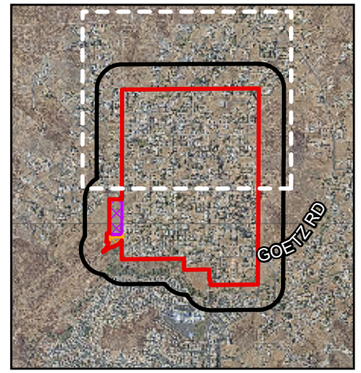
Potential jurisdictional aquatic resources identified within the survey area total 24.64 acres[1]

(**Table 4.3-2**). This includes aquatic resources that are potentially under the jurisdiction of the U.S. Army Corps of Engineers (USACE) and RWQCB totaling 0.70 acres (15,158 linear feet) of potential non-wetland waters of the U.S/state and 23.95 acres of potential wetland waters of the U.S./state (**Figures 4.3-5a and 4.3-5b**).

[1]Acreage includes aquatic features within 500 feet of the Project site, including a large aquatic feature south of the Project site along the unnamed tributary to Canyon Lake which is entirely outside of the Project.

Image Source: NearMap (flown August 2024)





Project Boundary

Survey Area

Culvert

Potential Jurisdictional Resources

Non-wetland Waters of the U.S./State (0.70 acres, 15,158 linear Feet)*

Wetland Waters of the U.S./State (23.95 acres)*^

*Values represent approximate acreages
^Wetlands were delineated using one parameter only and are not confirmed jurisdictional wetlands

0 Feet 350

RECON

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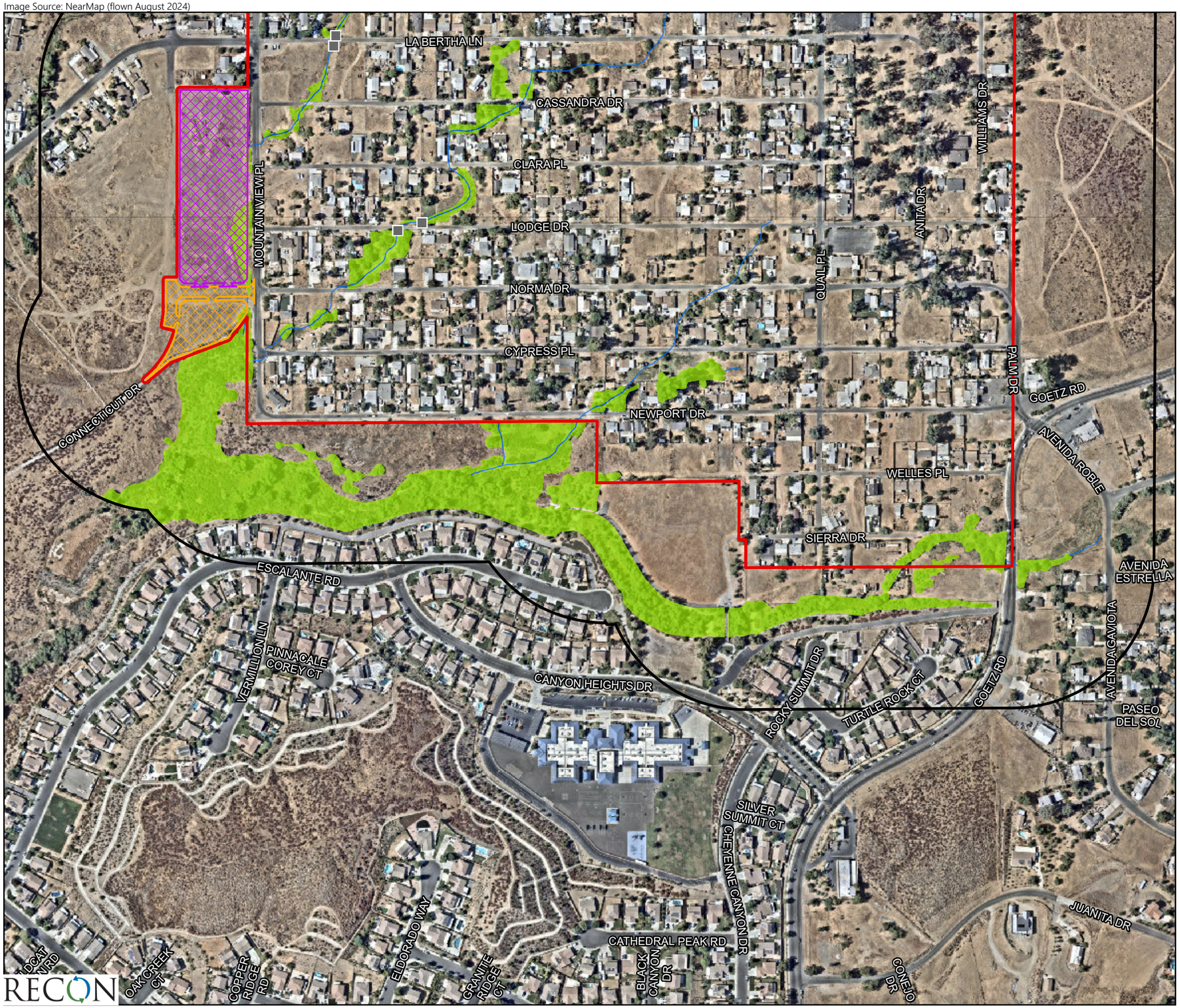
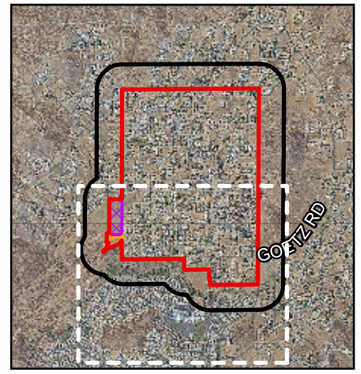
FIGURE 4.3-5a
Potential USACE/RWQCB Aquatic Resources

Image Source: NearMap (flown August 2024)





- Project Boundary
- Survey Area
- LS-1 Option 1
- LS-1 Option 2
- Culvert

Potential Jurisdictional Resources

- Non-wetland Waters of the U.S./State (0.70 acres, 15,158 linear Feet)*
- Wetland Waters of the U.S./State (23.95 acres)*^

*Values represent approximate acreages
^Wetlands were delineated using one parameter only and are not confirmed jurisdictional wetlands

0 Feet 350

RECON

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FIGURE 4.3-5b
Potential USACE/RWQCB Aquatic Resources

Aquatic resources that are potentially jurisdictional to the CDFW consist of 0.70 acres (15,158 linear feet) of streambeds and 23.95 acres of wetland and/or riparian habitat within and/or extending beyond the top of bank of the streambeds (**Figures 4.3-6a and 4.3-6b**).

Aquatic resources that are potentially jurisdictional in accordance with the MSHCP consist of 24.64 acres of riparian/riverine areas (**Figures 4.3-7a and 4.3-7b**).

Table 4.3-2
Potential Jurisdictional Resources within the Survey Area

Agency	Aquatic Resource Type	Acre(s)[1]	Linear Feet[1]
USACE	Non-Wetland Waters of the U.S.	0.70	15,158
	Wetland Waters of the U.S.	23.95	Not Applicable
	Total USACE Aquatic Resources	**24.64**	**15,158**
RWQCB	Non-Wetland Waters of the State	0.70	15,158
	Wetland Waters of the State	23.95	Not Applicable
	Total RWQCB Aquatic Resources	**24.64**	**15,158**
CDFW	Streambeds	0.70	15,158
	Wetland and/or Riparian Habitat	23.95	Not Applicable
	Total CDFW Aquatic Resources	**24.64**	**15,158**
Riverside County	Riparian/Riverine Areas	24.64	Not Applicable
	Total Aquatic Resources	**24.64**	Not Applicable

USACE = U.S. Army Corps of Engineers; RWQCB = Regional Water Quality Control Board; CDFW = California Department of Fish and Wildlife
[1]The reported acreage and linear footage are approximate, as they are based on a constraints-level delineation. A formal aquatic resources delineation would be required to determine precise values. Totals may not sum due to rounding.
SOURCE: Appendix D.

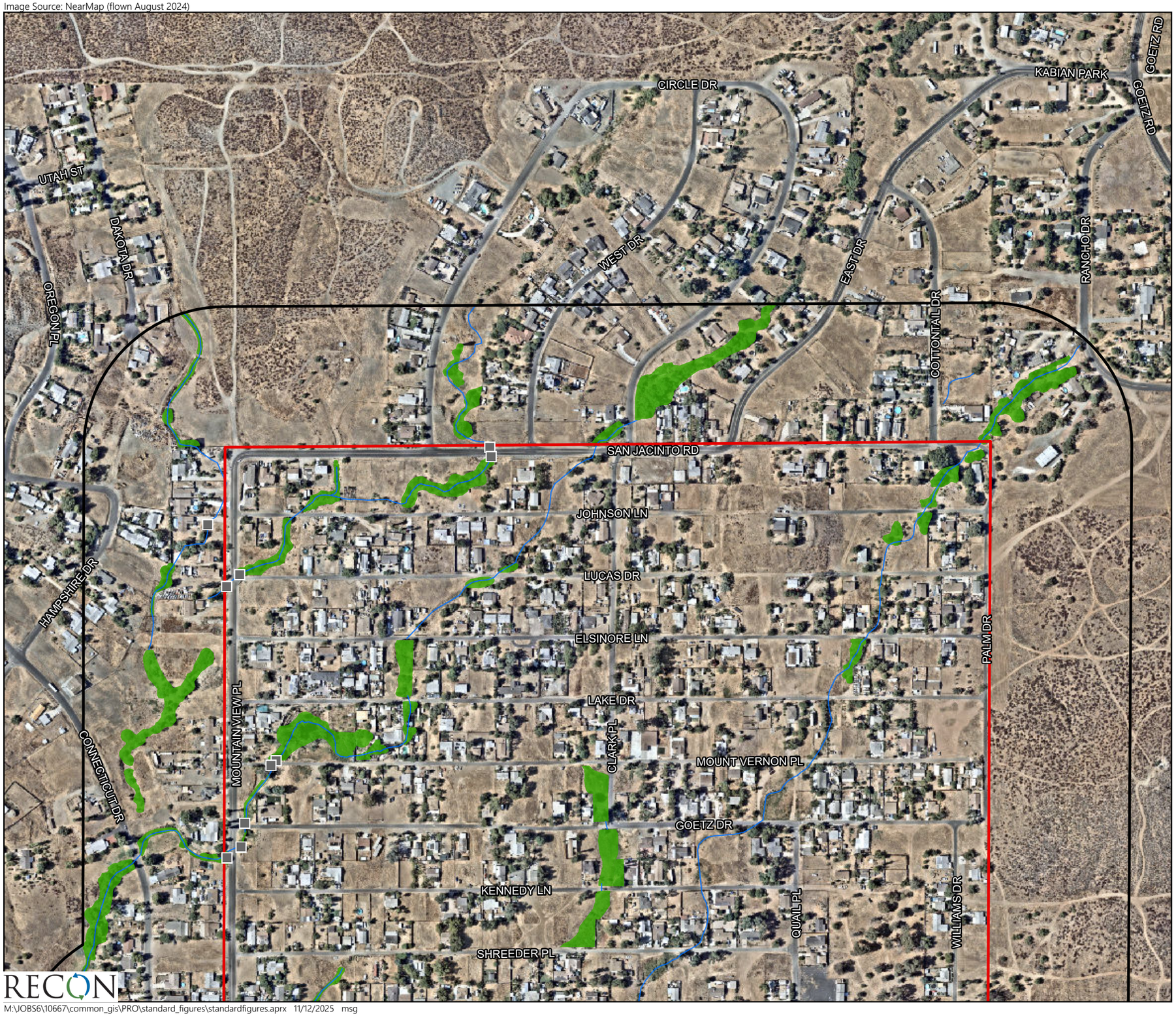
4.3.1.8 Wildlife Corridors and Wildlife Nursery Sites

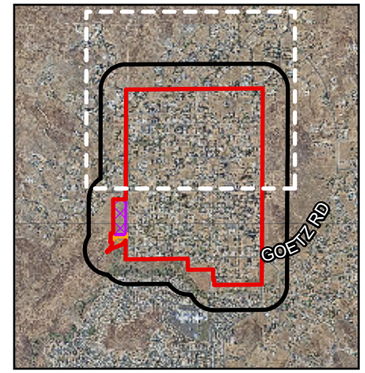
Wildlife corridors are areas that link fragmented habitats. These linkages may be drainages, canyons, or ridgelines that provide access to foraging areas, water, breeding sites, and dispersal areas and provide cover and shelter during travel. Disturbance to wildlife corridors, such as human disturbance and development, can cause harm to migrating species, cause species to exceed the population thresholds, and/or prevent healthy gene flow between populations.

The Project site, like much of southern California, is located within the Pacific Flyway, a major north–south avian migratory corridor that extends along the West Coast from Alaska to Patagonia. The Pacific Flyway links breeding grounds in the north to more southerly wintering areas and, therefore, is used by an abundance of bird species during migration. As such, the Project site provides suitable foraging and breeding habitat for many resident and migratory avian species.

The Project site also contains limited connectivity for terrestrial animals, particularly within the vacant lots. However, the Project site currently does not function as a high-quality regional wildlife corridor due to the presence of homes and roads in an exurban environment. Open space surrounds the Project site to the west and north, and to a lesser extent on the east, and as such, likely constrains wildlife movement within the larger patchwork of open space, conservation lands, and urbanization.

Image Source: NearMap (flown August 2024)





Project Boundary

Survey Area

Culvert

Potential Jurisdictional Resources

Streambed
(0.70 acres, 15,158 linear Feet)*

Wetland and/or Riparian Habitat
(23.95 acres)*

*Values represent approximate acreages

0 Feet 350

FIGURE 4.3-6a
Potential CDFW Aquatic Resources

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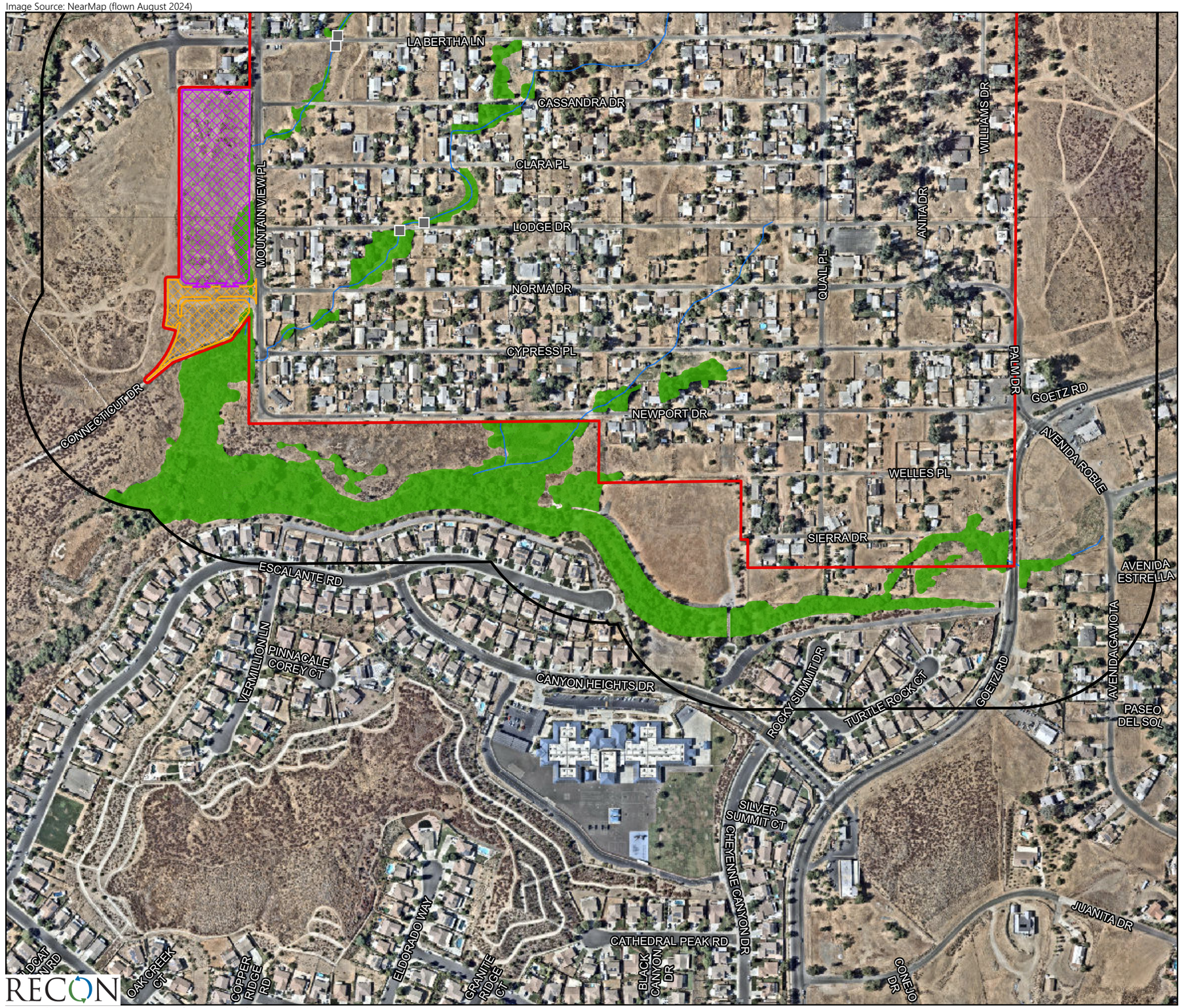
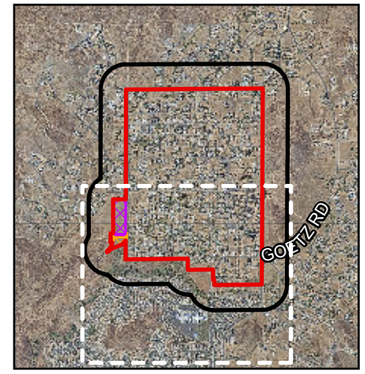
Image Source: NearMap (flown August 2024)





- Project Boundary
- Survey Area
- LS-1 Option 1
- LS-1 Option 2
- Culvert

Potential Jurisdictional Resources

- Streambed (0.70 acres, 15,158 linear Feet)*
- Wetland and/or Riparian Habitat (23.95 acres)*

*Values represent approximate acreages

0 Feet 350

RECON

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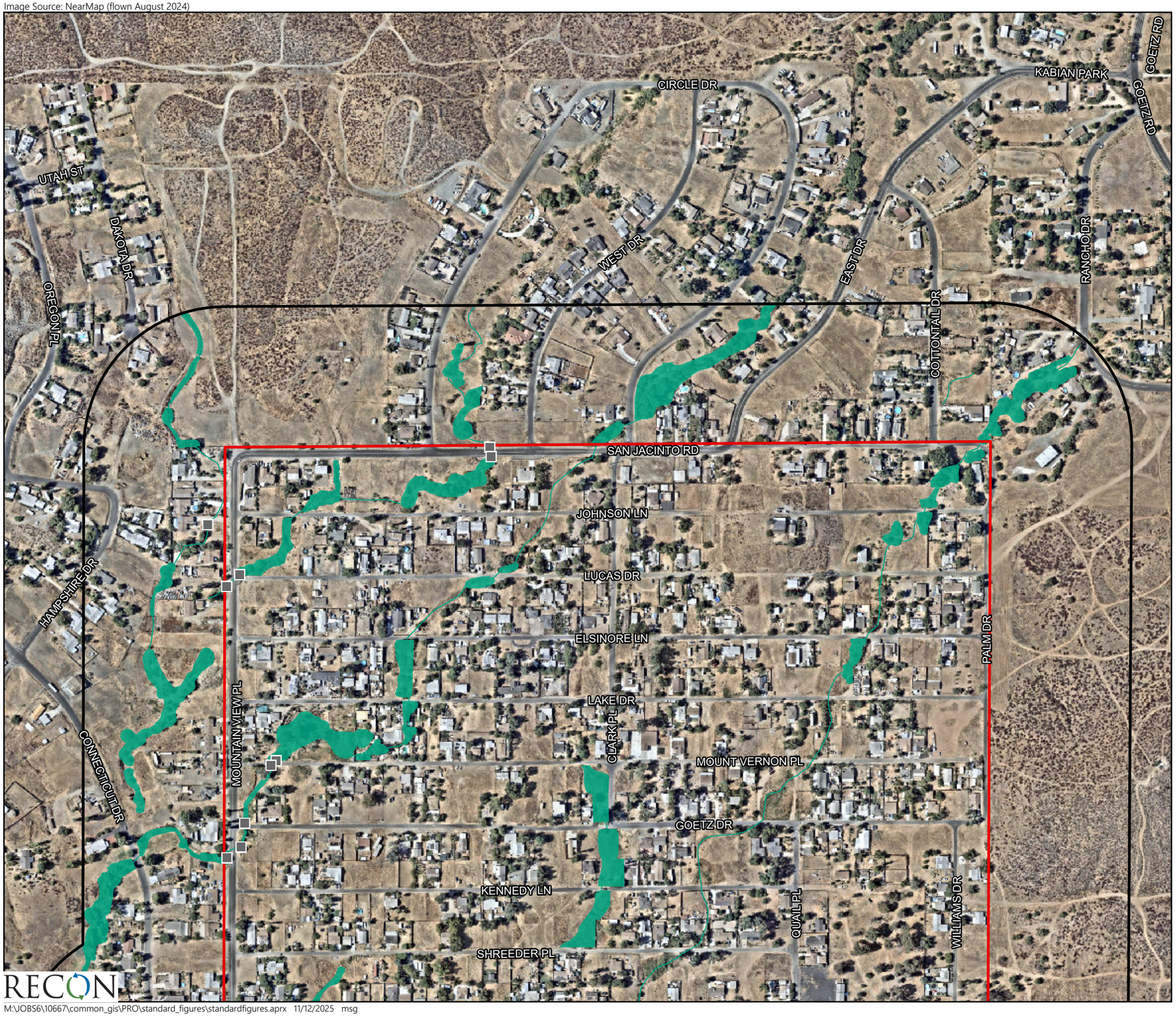
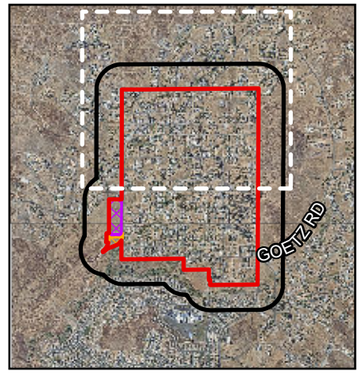
FIGURE 4.3-6b
Potential CDFW Aquatic Resources

Image Source: NearMap (flown August 2024)





Project Boundary

Survey Area

Culvert

Potential Jurisdictional Resources

Riparian/Riverine Areas (24.64 acres)*

*Values represent approximate acreages

0 Feet 350

FIGURE 4.3-7a

Potential Western Riverside MSHCP Riparian/Riverine Areas

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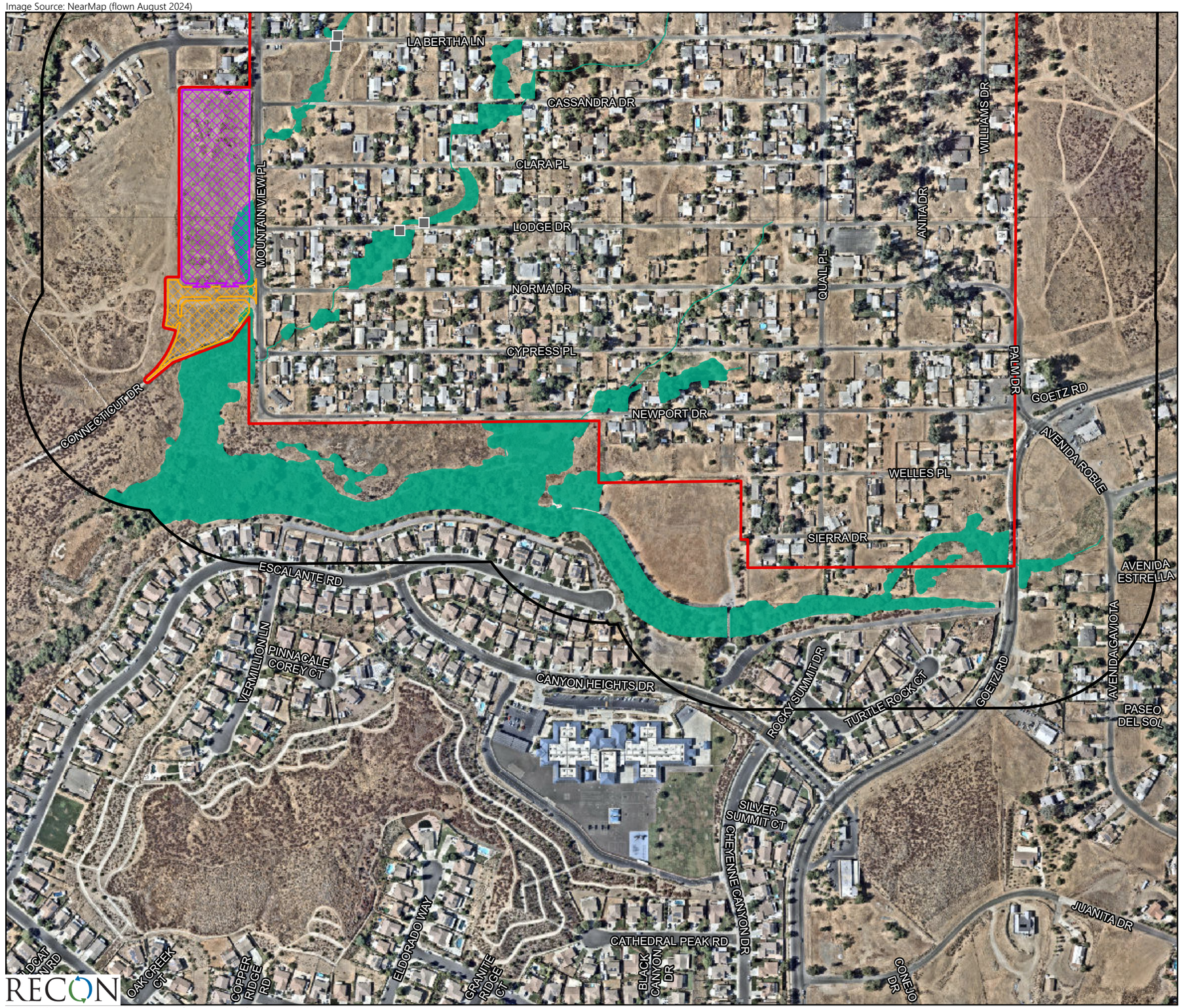
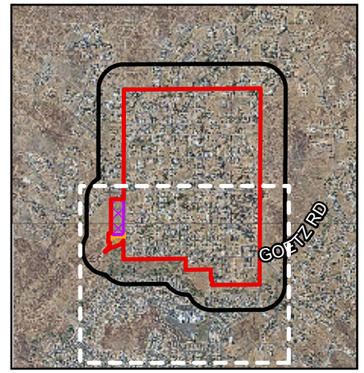
Image Source: NearMap (flown August 2024)





- Project Boundary
- Survey Area
- LS-1 Option 1
- LS-1 Option 2
- Culvert

Potential Jurisdictional Resources

- Riparian/Riverine Areas (24.64 acres)*

*Values represent approximate acreages

0 Feet 350

FIGURE 4.3-7b
Potential Western Riverside
MSHCP Riparian/Riverine Areas

RECON

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The Project site also contains habitat suitable to common and special-status bats, including sites that could be used as nursery sites (i.e., maternal bat roost sites). Suitable habitat includes numerous large palm trees, many of which have not been trimmed to remove the dead fronds. These thick, overlapping palm fronds support microhabitat for bat roost sites. Additionally, abandoned buildings or other lightly used infrastructures (e.g., sheds, outbuildings, bridges, etc.) could also support bat maternal roost sites for certain species of bats.

4.3.2 Applicable Regulatory Requirements

4.3.2.1 Federal Regulations

a. Federal Endangered Species Act

The FESA, as amended, provides for the listing of endangered and threatened species of plants and animals and the designation of critical habitat for listed animal species. The FESA also prohibits all persons subject to U.S. jurisdiction from "taking" endangered species, which includes any harm or harassment.

An authorization or permit to incidentally take listed species can be obtained either through the Section 7 consultation process or through the Section 10 incidental take permit process, as described in the sections below. In the context of Section 7, incidental take is authorized through an Incidental Take Statement (ITS) that is issued consistent with a Biological Opinion. In the context of Section 10, incidental take is authorized through an incidental take permit issued pursuant to Section 10(a)(1)(B). Measures contained in the incidental take permit reflect the measures set out in the Habitat Conservation Plan (HCP) developed by the applicant in conjunction with the USFWS.

Section 7 of the Federal Endangered Species Act

Section 7 of the FESA requires that federal agencies, prior to project approval, consult the USFWS and/or the National Marine Fisheries Service to ensure adequate protection of listed species that may be affected by the project. Specifically, Section 7 of the FESA provides that each federal agency undertaking a federal action that could significantly affect FESA species shall consult with the Secretary of Interior or Commerce, that any actions authorized, funded, or carried out by the agency are "not likely to jeopardize the continued existence of any endangered or threatened species or result in the destruction or adverse modification of lands determined to be critical habitat" (16 U.S.C. Section 1536[a][2]). The term "agency action" is broadly defined in a manner that includes nearly all actions taken by federal agencies such as permitting or carrying out a project, as well as actions by private parties that require federal agency permits or approval (50 CFR 402.02). The consultation requirement of Section 7 is triggered upon a determination that a proposed action "may affect" a listed species or designated Critical Habitat (50 CFR 402.14[a]). If the proposed action is a "major construction" activity, the federal agency proposing the action must prepare a biological assessment to include with its request for the initiation of Section 7 consultation.

Included in the USFWS Biological Opinion is an ITS that authorizes a specified level of take anticipated to result from the proposed action. The ITS contains "reasonable and prudent measures" that are designed to minimize the level of incidental take, adverse modification, or destruction to critical

habitat, and that must be implemented as a condition of the take authorization (50 CFR Section 402.14[i][5]).

The issuance of a Biological Opinion concludes formal consultation, but consultation can be reinitiated if the amount or extent of incidental take authorized is exceeded, the action changes, new information reveals effects of the action not previously considered, a new species is listed, or Critical Habitat is designated (50 CFR Section 402.16). Once the Biological Opinion is issued, the project applicant must implement the terms, conditions, and conservation measures mandated by the USFWS. Monitoring and reporting are required to be coordinated with the USFWS during the implementation of conservation measures.

Section 9 of the Federal Endangered Species Act

Section 9 of the FESA prohibits any person from "taking" an endangered animal species. Regulations promulgated by USFWS and the National Oceanic and Atmospheric Administration make the "take" prohibition generally applicable to threatened animal species as well (50 CFR 17.71). Section 9 thus prohibits the clearing of habitat that results in death or injury to members of a protected (e.g., threatened or endangered) species.

Section 10 of the Federal Endangered Species Act

Under Section 10(a)(1)(B) of the FESA, the USFWS may permit the incidental take of listed species that may occur because of a lawful activity, such as construction of a sewer system. To obtain a Section 10(a)(1)(B) permit, an applicant must prepare an HCP that meets the following five criteria: (1) the taking will be incidental to an otherwise lawful activity; (2) the applicant will, to the maximum extent practicable, minimize and mitigate the impacts of such taking; (3) the applicant will ensure that adequate funding for the plan will be provided; (4) the taking will not appreciably reduce the likelihood of the survival and recovery of the species in the wild; and (5) other measures, if any, that the USFWS requires as being necessary or appropriate for purposes of the plan will be met (16 U.S.C. Section 1539[a][2][A]).

b. Clean Water Act of 1972 (33 U.S.C. 1251 et seq.) and The Rivers and Harbors Act

The Rivers and Harbors Act of 1899 and the CWA regulate project activities within non-marine navigable waters and/or waters of the U.S. The discharge of any pollutant from a point source into navigable waters is illegal unless a permit under the CWA's provisions is acquired.

Sections 404 and 401 of the CWA of 1972 apply to potential impacts to wetlands, waters of the U.S., and waters of the State, respectively. The U.S. Environmental Protection Agency administers the CWA; however, some sections of the CWA are administered by other agencies. Section 404 of the CWA regulates the discharge of dredged or fill material into navigable waters, including both wetlands and other waters of the U.S. The discharge of dredged or fill material is typically associated with a variety of development projects, agricultural activities, and water resource projects. The USACE administers Section 404 of the CWA and is responsible for issuing general and individual permits and for making jurisdictional determinations. Projects can be permitted on an individual basis or be covered by one of several approved nationwide or regional general permits.

Section 401 of the CWA requires a State Water Quality Certification or waiver for any activity requiring a Section 404 permit. The State Water Quality Certification ensures the activity will not violate any established state water quality standards. The SWRCB, in conjunction with the nine California RWQCBs, administers Section 401 of the CWA and is responsible for issuing permits pursuant to the Section 401 Water Quality Certification Program. The proposed Project is within the jurisdiction of the Santa Ana RWQCB (Region 8).

Prior to installation of any new storm drain connections to and/or discharges into the Santa Ana River watershed, the District or other project applicants shall (1) obtain a permit or other authorization from the USACE pursuant to Section 404 of the federal CWA; (2) obtain a Section 401 Water Quality Certification from the California RWQCB, Santa Ana region, pursuant to Section 401 of the CWA, which requires any applicant for a federal permit, such as a CWA Section 404 permit, to provide the licensing agency a certification from RWQCB that the project will comply with adopted water quality standards; and (3) provide notification to the CDFW of the project pursuant to Section 16-2 of the CFGC and comply with any further actions required by the CDFW.

c. Migratory Bird Treaty Act (16 U.S.C. 703 through 711)

The MBTA is a federal statute that implements treaties with several countries on the conservation and protection of migratory birds. The number of bird species covered by the MBTA is extensive and is listed at 50 CFR 10.13. The regulatory definition of "migratory bird" is broad and includes any mutation or hybrid of a listed species and any part, egg, or nest of such birds. The MBTA, which is enforced by USFWS, makes it unlawful "by any means or in any manner, to pursue, hunt, take, capture, [or] kill" any migratory bird, or attempt such actions, except as permitted by regulation. The take, possession, import, export, transport, sale, purchase, barter, or offering of these activities is prohibited, except under a valid permit or as permitted in the implementing regulations.

d. Bald and Golden Eagle Protection Act (16 U.S.C. 668)

The Bald and Golden Eagle Protection Act provides protection for both the bald eagle (*Haliaeetus leucocephalus*) and the golden eagle (*Aquila chrysaetos*) by prohibiting the "take" of either of these species, including their parts, nests, or eggs. The MBTA defines "take" as to "pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest or disturb" any bald or golden eagle. The Bald and Golden Eagle Protection Act is administered by the USFWS, and limited take authorizations are granted for qualifying activities. Persons who "take, possess, sell, purchase, barter, offer to sell, purchase or barter, transport, export or import, at any time or any manner, any bald eagle [or any golden eagle], alive or dead, or any part, nest, or egg thereof" without prior approval are subject to criminal penalties.

4.3.2.2 State Regulations

a. California Endangered Species Act (California Fish and Game Code 2050 et seq.)

The California ESA (CESA) parallels FESA and protects and/or preserves native plant and wildlife species and their habitats, especially those that are threatened with extinction and those that are experiencing significant decline that may lead to a threatened or endangered designation, within the

state of California. CESA designates special-status species that are protected from unauthorized "take," which is defined as to "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill."

The CESA is administered by the CDFW. A state lead agency is required to consult with the CDFW to ensure that a project is not likely to jeopardize the continued existence of a special-status species or result in the destruction or adverse modification of essential habitat for a species. The CESA allows for the issuance of incidental take permits for lawful development projects and emphasizes the benefits of early consultation between the lead agency and the CDFW to avoid potential impacts to special-status species and to develop appropriate mitigation measures to reduce impacts to and avoid loss of a special-status species.

b. California Environmental Quality Act

The CEQA requires that biological resources be considered when assessing the environmental impacts that are the result of proposed actions. The lead agencies determine the scope of what is considered an impact and what constitutes an "adverse effect" on a biological resource.

FESA and CESA protect only those species formally listed as threatened or endangered (or rare in the case of the state list). CEQA Guidelines Section 15380 independently defines "endangered" species of plants or animals as those whose survival and reproduction in the wild are in immediate jeopardy and "rare" species as those who are in such low numbers that they could become endangered if their environment worsens. Therefore, a project normally would have a significant effect on the environment if it would substantially affect a rare or endangered species of animal or plant or the habitat of the species. The significance of impacts to a species under CEQA must be based on analyzing actual rarity and threat of extinction despite legal status or lack thereof.

c. California Fish and Game Code

Section 3503 from the CFGC applies to projects in the state. This section states that it is "unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto," and Section 3503.5 prohibits take, possession, or destruction of any birds in the orders Falconiformes (raptors) or Strigiformes (owls), or of their nests and eggs. Compliance with Sections 3503 and 3503.5 of the CFGC and all applicable federal and state laws pertaining to migratory and nesting birds is anticipated. Compliance measures would be determined by the Project biologist prior to the start of construction and may include pre-activity surveys, nest avoidance, and construction monitoring.

The CFGC (Sections 1600 through 1603) regulates project activities within wetlands and riparian habitats. The CDFW can issue a Streambed Alteration Agreement for projects affecting riparian and wetland habitats. Project activities that fill or dredge within wetland waters of the U.S. and waters of the U.S. as well as wetland waters of the state and waters of the state, including isolated waters such as vernal pools and other waters showing lack of connectivity to a Traditional Navigable Waters, require a Water Quality Certification by the California RWQCB under Section 401 of the CWA and Section 13000 et seq. of the California Water Code under the Porter-Cologne Water Quality Control Act.

d. State Fully Protected Species

The State of California designated species as fully protected prior to the creation of CESA and FESA. Lists of fully protected species were initially developed to provide protection to species that were rare or faced with possible extinction/extirpation. Most fully protected species have since been state listed as threatened or endangered species. Under CFGC Section 4700, fully protected mammals may not be taken or possessed at any time.

In September 2011, the Natural Community Conservation Planning Act was amended to permit the incidental take of 36 fully protected species pursuant to a Natural Community Conservation Plan approved by CDFW (CFGC Section 2835). The amendment gives fully protected species the same level of protection as endangered and threatened species under the Natural Community Conservation Planning Act (CFGC Section 2835). The Natural Community Conservation Planning Act, enacted in the 1990s, authorizes the incidental take of species "whose conservation and management" is provided for in a conservation plan approved by the CDFW.

e. California Species of Special Concern

In addition to formal listing under FESA and CESA, certain species receive additional consideration by the CDFW and lead agencies during the CEQA process. Species that may be considered for review are identified as California Species of Special Concern by CDFW. These species' numbers, reproductive success, or habitat may be in decline.

4.3.2.3 Local Regulations

a. Western Riverside County Multiple Species Habitat Conservation Plan

The Western Riverside County MSHCP is a comprehensive multi-jurisdictional HCP focusing on the conservation of species and their associated habitats in western Riverside County. The MSHCP plan area encompasses 1.26 million acres (1,966 square miles), including all unincorporated Riverside County land west of the crest of the San Jacinto Mountains to the Orange County line, as well as the cities of Temecula, Murrieta, Lake Elsinore, Canyon Lake, Norco, Corona, Riverside, Moreno Valley, Banning, Beaumont, Calimesa, Perris, Hemet, Menifee, and San Jacinto. The MSHCP serves as a HCP pursuant to Section 10(a)(1)(B) of the FESA of 1973, as amended, as well as a natural community conservation plan under the Natural Community Conservation Planning Act of 2001. The MSHCP allocates responsibility for assembly and management of its Conservation Areas to local, state, and federal governments, as well as private and public entities engaged in construction that may impact MSHCP covered species.

The Project site is located within the WRCRCA MSHCP plan area (WRCRCA 2003). As lead agency, the District is not a participant in the MSHCP; however, the proposed Project demonstrates it would not prevent implementation of the conservation goals and objectives of the MSHCP. The Project site is not located within a designated criteria cell, so no mitigation for impacts to sensitive vegetation communities would be required by the MSHCP. No vernal pools, or narrow endemic plant species are present; however, riverine/riparian resources are present within the Project site. The Project site is also located within the MSHCP survey area for burrowing owl (*Athene cunicularia*). Consistency

with the MSHCP's provisions related to burrowing owl are discussed under Sections 4.3.5 and 4.3.9, below. The Project site is not located within any other plant or wildlife survey areas.

b. Stephens' Kangaroo Rat Habitat Conservation Plan

In 1996, the USFWS approved a long-term HCP for Stephens' kangaroo rat and granted an incidental take permit for Riverside County covering an estimated 30,000 acres of occupied habitat within portions of unincorporated Riverside County and 10 member cities: Perris, Temecula, Murrieta, Lake Elsinore, Corona, Riverside, Moreno Valley, Perris, Hemet, and Wildomar (Riverside County Habitat Conservation Agency [RCHCA] 1996). The Stephens' Kangaroo Rat HCP authorizes the incidental take of half of the occupied habitat remaining in the HCP plan area while using development fees to implement the plan, purchase private property, and create a reserve system. The Stephens' Kangaroo Rat HCP and corresponding permits are in effect for areas covered by the MSHCP; however, the Stephens' Kangaroo Rat HCP and the MSHCP remain separate. The Stephens' Kangaroo Rat Fee Areas are subject to mandatory conservation measures as outlined in the Stephens' Kangaroo Rat HCP (RCHCA 1996) and as subsequently modified.

The proposed Project is located within the Stephens' Kangaroo Rat HCP plan area. As lead agency, the District is not a participant in the Stephens' Kangaroo Rat HCP; however, the proposed Project would not prevent implementation of the conservation goals and objectives of the HCP as the Project site is not part of a Stephens' kangaroo rat core reserve (RCHCA 1996). As individual projects are proposed and approved in the Stephens' Kangaroo Rat HCP plan area, public and private land developers are required to pay a mitigation fee for land that is developed and removes habitat for this species (RCHCA 2025).

4.3.3 Significance Determination Thresholds

Thresholds used to evaluate impacts to biological resources are based on applicable criteria in the CEQA Guidelines (CCR Sections 15000–15387), Appendix G. The proposed Project would have a significant impact on the environment if it would:

1) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies or regulations, or by the CDFW or USFWS;

2) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the CDFW or USFWS;

3) 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;

4) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;

5) Conflict with any local policies or ordinances protecting biological resources, such as tree preservation policy or ordinance; or

6) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

4.3.4 Methodology

4.3.4.1 Direct Impacts

Any alteration, disturbance, or destruction of biological resources that would result from project-related activities would be considered a direct impact. Direct impacts would include direct losses to native habitats, potential jurisdictional waters, wetlands, and special-status species; and diverting natural surface water flows. Direct impacts could include injury, death, and/or harassment of listed and/or special-status species. Direct impacts could also include the destruction of habitats necessary for species breeding, feeding, or sheltering. Direct impacts on plants could include crushing of adult plants, bulbs, or seeds.

Direct impacts were categorized into permanent and temporary impacts, as described below.

Permanent Impacts. Permanent impacts associated with the proposed Project include the permanent installation of aboveground components, specifically the construction of the lift stations and manhole covers. The entire area proposed for the lift station is presumed to have a permanent direct impact. Manhole covers are assumed to have a 4-foot diameter (12.6 square feet) permanent direct impact. Most of these manhole covers would be constructed within already developed areas (i.e., streets).

Temporary Impacts. Temporary impacts associated with the proposed Project include the construction of belowground components, specifically the new sewer mains, the force mains, and connecting pipes installed through vacant lots, as well as any temporary construction work areas required to build the proposed Project. The pipes would be installed via open-cut trenching and assume a construction zone impact area (i.e., that work area extending beyond the immediate trenching area) equal to the width of the residential streets within which they would be placed, approximately 20 feet. As such, a 20-foot buffer around each linear component (10 feet on either side) is assumed to constitute the maximum extent of the workspace required to install these components. The construction zone includes trenching, access, staging, and other project-related activities.

Construction is planned to be carried out in eight phases, to be implemented over an approximately 20-year period. As such, impacts on biological resources would occur over a 20-year period. Table 4.3-3 summarizes impacts on vegetation communities and land cover types from the proposed Project.

Table 4.3-3 Impacts on Vegetation Communities / Land Covers by Phase					
		Permanent Impact Area (acres)		Temporary Impact Area (acres)	
Phase	Vegetation Community	Regional Lift Station 1 (Option 1), Lift Stations 2-5, Manholes	Regional Lift Station 1 (Option 2), Lift Stations 2-5, Manholes	Gravity Sewer with Connector Pipe Option 1, Force Mains, Manhole Work Areas, Regional Lift Station 1 (Option 1)	Gravity Sewer with Connector Pipe Option 1, Force Mains, Manhole Work Areas, Regional Lift Station 1 (Option 2)
1	Disturbed Habitat	--	0.62	0.33	0.36
	Mule Fat Scrub	0.00	<0.01	0.02	<0.01
	Non-Native Grassland: Broadleaf-Dominated	0.81	<0.01	0.24	0.12
	Non-Native Riparian	0.02	<0.01	0.10	0.09
	Non-Native Woodland	--	--	0.01	0.01
	Riversidian Sage Scrub	--	0.33	<0.01	0.01
	Riversidian Sage Scrub – Disturbed	0.21	2.54	0.11	0.19
	Tamarisk Scrub	<0.01	<0.01	0.04	0.04
	Tamarisk Scrub – Disturbed	<0.01	0.25	<0.01	<0.01
	Urban/Developed	0.18	0.01	3.15	3.12
Total Phase 1		**1.23**	**3.75**	**3.99**	**3.93**
2	Disturbed Habitat	<0.01	<0.01	0.40	0.40
	Disturbed Wetland	<0.01	<0.01	0.02	0.02
	Eucalyptus Woodland	--	--	<0.01	<0.01
	Non-Native Grassland: Broadleaf-Dominated	--	--	<0.01	<0.01
	Non-Native Riparian	--	--	0.04	0.04
	Non-Native Woodland	--	--	0.05	0.05
	Riversidian Sage Scrub – Disturbed	<0.01	<0.01	<0.01	0.02
	Tamarisk Scrub – Disturbed	0.01	<0.01	<0.01	0.05
	Urban/Developed	0.02	0.01	2.95	2.92
Total Phase 2		**0.04**	**0.01**	**3.47**	**3.51**
3	Disturbed Habitat	<0.01	<0.01	0.49	0.52
	Disturbed Wetland	--	--	<0.01	<0.01
	Eucalyptus Woodland	<0.01	<0.01	0.17	0.17
	Non-Native Riparian	--	--	0.06	0.06
	Non-Native Woodland	--	--	<0.01	<0.01
	Riversidian Sage Scrub - Disturbed	--	--	<0.01	0.02
	Tamarisk Scrub - Disturbed	--	--	<0.01	0.02
	Urban/Developed	0.01	0.01	3.14	3.16

Table 4.3-3 (cont.) Impacts on Vegetation Communities / Land Covers by Phase					
		Permanent Impact Area (acres)		Temporary Impact Area (acres)	
Phase	Vegetation Community	Regional Lift Station 1 (Option 1), Lift Stations 2-5, Manholes	Regional Lift Station 1 (Option 2), Lift Stations 2-5, Manholes	Gravity Sewer with Connector Pipe Option 1, Force Mains, Manhole Work Areas, Regional Lift Station 1 (Option 1)	Gravity Sewer with Connector Pipe Option 1, Force Mains, Manhole Work Areas, Regional Lift Station 1 (Option 2)
Total Phase 3		**0.01**	**0.01**	**3.86**	**3.95**
4	Disturbed Habitat	<0.01	<0.01	0.94	0.94
	Disturbed Wetland	<0.01	<0.01	0.15	0.15
	Eucalyptus Woodland	<0.01	<0.01	0.02	0.02
	Non-Native Riparian	<0.01	<0.01	0.04	0.04
	Urban/Developed	0.01	0.01	2.98	2.98
Total Phase 4		**0.01**	**0.01**	**4.12**	**4.12**
5	Disturbed Habitat	0.01	0.01	0.85	0.85
	Disturbed Wetland	<0.01	<0.01	<0.01	<0.01
	Non-Native Riparian	--	--	0.12	0.12
	Non-Native Woodland	<0.01	<0.01	0.06	0.06
	Riversidian Sage Scrub - Disturbed	<0.01	<0.01	0.01	0.01
	Urban/Developed	--	--	2.89	2.89
Total Phase 5		**0.01**	**0.01**	**3.94**	**3.94**
6	Disturbed Habitat	0.01	0.01	0.38	0.38
	Disturbed Wetland	0.11	0.11	0.02	0.02
	Eucalyptus Woodland	--	--	<0.01	<0.01
	Non-Native Riparian	--	--	0.01	0.01
	Urban/Developed	--	--	1.50	1.50
Total Phase 6		**0.12**	**0.12**	**1.91**	**1.91**
7	Disturbed Habitat	0.12	0.12	0.32	0.32
	Disturbed Wetland	0.12	0.12	0.02	0.02
	Non-Native Riparian	--	--	0.12	0.12
	Urban/Developed	<0.01	<0.01	2.05	2.05
Total Phase 7		**0.25**	**0.25**	**2.51**	**2.51**
8	Disturbed Habitat	0.25	0.25	0.30	0.30
	Eucalyptus Woodland	0.10	0.10	0.01	0.01
	Non-Native Riparian	--	--	<0.01	<0.01
	Riversidian Sage Scrub - Disturbed	--	--	0.02	0.02
	Urban/Developed	--	--	1.66	1.66
Total Phase 8		**0.12**	**0.12**	**2.00**	**2.00**
GRAND TOTAL		**1.8**	**4.3**	**25.8**	**25.9**
SOURCE: Appendix D.					

4.3.4.2 Indirect Impacts

As a result of project-related activities, biological resources may be affected in a manner that is not direct. Indirect impacts may occur later in time or at a place that is removed in distance from the proposed Project, but indirect impacts are still reasonably foreseeable and attributable to project-related activities. Indirect impacts consist of secondary effects of a project, including noise, decreased water quality (e.g., through sedimentation, urban contaminants, or fuel release), fugitive dust, colonization of non-native plant species, animal behavioral changes, and night lighting. The magnitude of an indirect impact can be the same as a direct impact; however, the effect usually takes a longer time to become apparent.

Examples include habitat fragmentation; elevated noise, dust, and lighting levels; changes in hydrology, runoff, and sedimentation; decreased water quality; soil compaction; increased human activity; and the introduction of invasive wildlife (domestic cats and dogs) and plants.

4.3.5 Threshold 1: Sensitive Species

Would the project result in a substantial adverse impact, either directly or through habitat modifications, to any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies or regulations, or by the CDFW or USFWS?

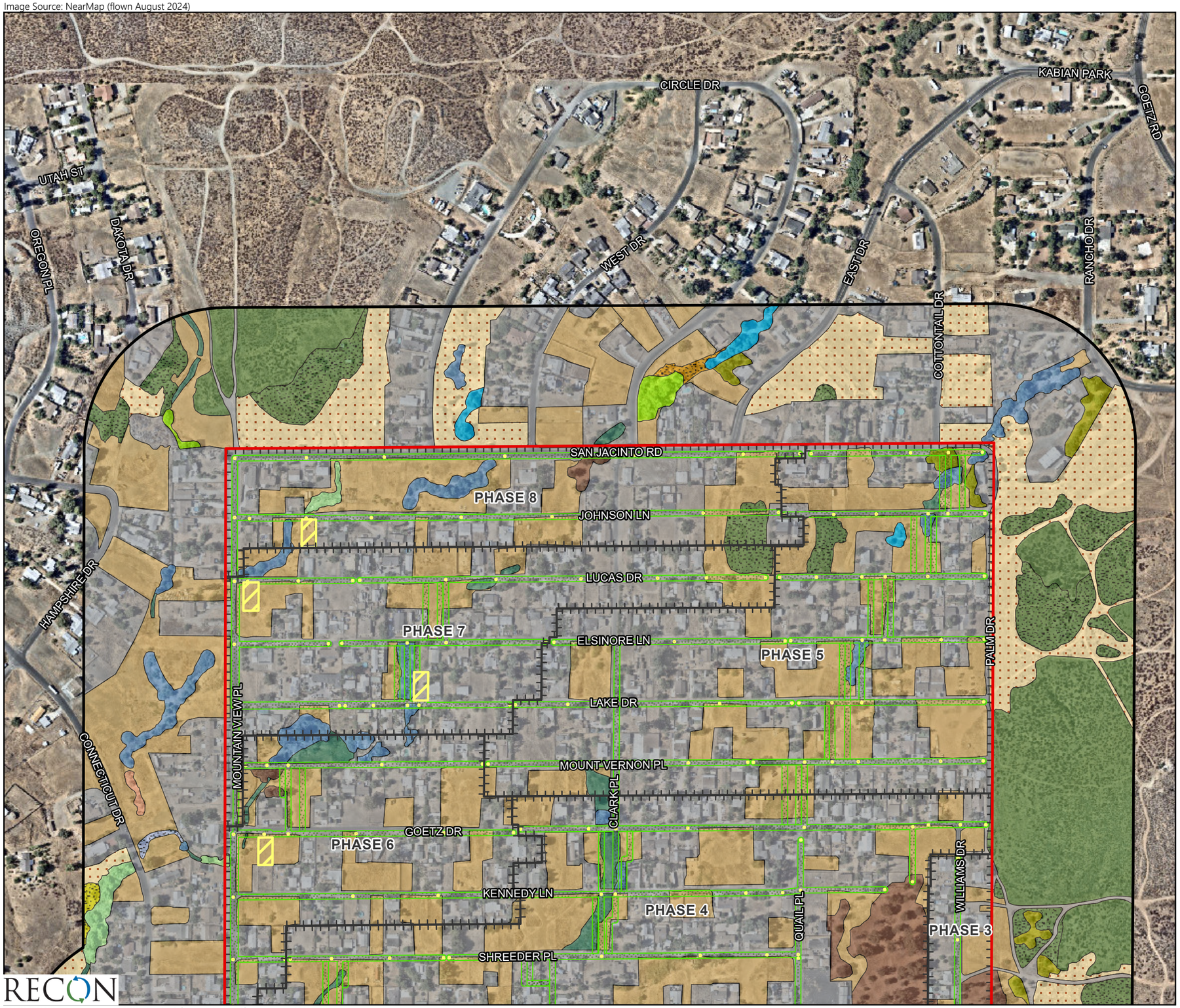
4.3.5.1 Impact Analysis

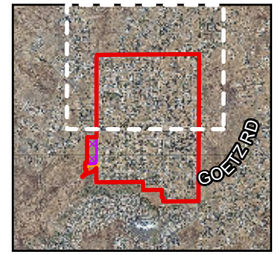
For purposes of this analysis, species are considered sensitive if they are (1) covered species under the MSHCP; (2) listed by state or federal agencies as threatened or endangered or are proposed for listing (CDFW 2025b, 2025c); (3) designated as fully protected or species of special concern by CDFW (2025c); or (4) on CRPR 1B (considered endangered throughout its range), CRPR 2 (considered endangered in California but more common elsewhere), CRPR 3 (more information about the plant's distribution and rarity needed), or CRPR 4 (plants of limited distribution) of the CNPS Inventory of Rare and Endangered Vascular Plants of California (CNPS 2025).

a. Sensitive Plants Species

As shown in Figures 4.3-8a and 4.3-8b, direct impacts to special-status plants could occur during vegetation removal associated with construction of the proposed Project, particularly in areas where work could occur within native habitats, such as LS-1 (Options 1 and 2).

Image Source: NearMap (flown August 2024)





- Project Boundary
- Survey Area
- Phase
- Permanent Impact
- Temporary Impact

Vegetation Communities

- Buckwheat Scrub - Disturbed
- Disturbed Habitat
- Disturbed Wetland
- Eucalyptus Woodland
- Freshwater Marsh - Disturbed
- Mule Fat Scrub - Disturbed
- Non-Native Grassland: Broadleaf-Dominated
- Non-Native Riparian
- Non-Native Woodland
- Riversidian Sage Scrub
- Riversidian Sage Scrub - Disturbed
- Southern Cottonwood Willow Riparian Forest
- Southern Willow Scrub
- Southern Willow Scrub - Disturbed
- Tamarisk Scrub
- Urban/Developed

0 Feet 350

FIGURE 4.3-8a
Impacts to Vegetation Communities and Land Covers

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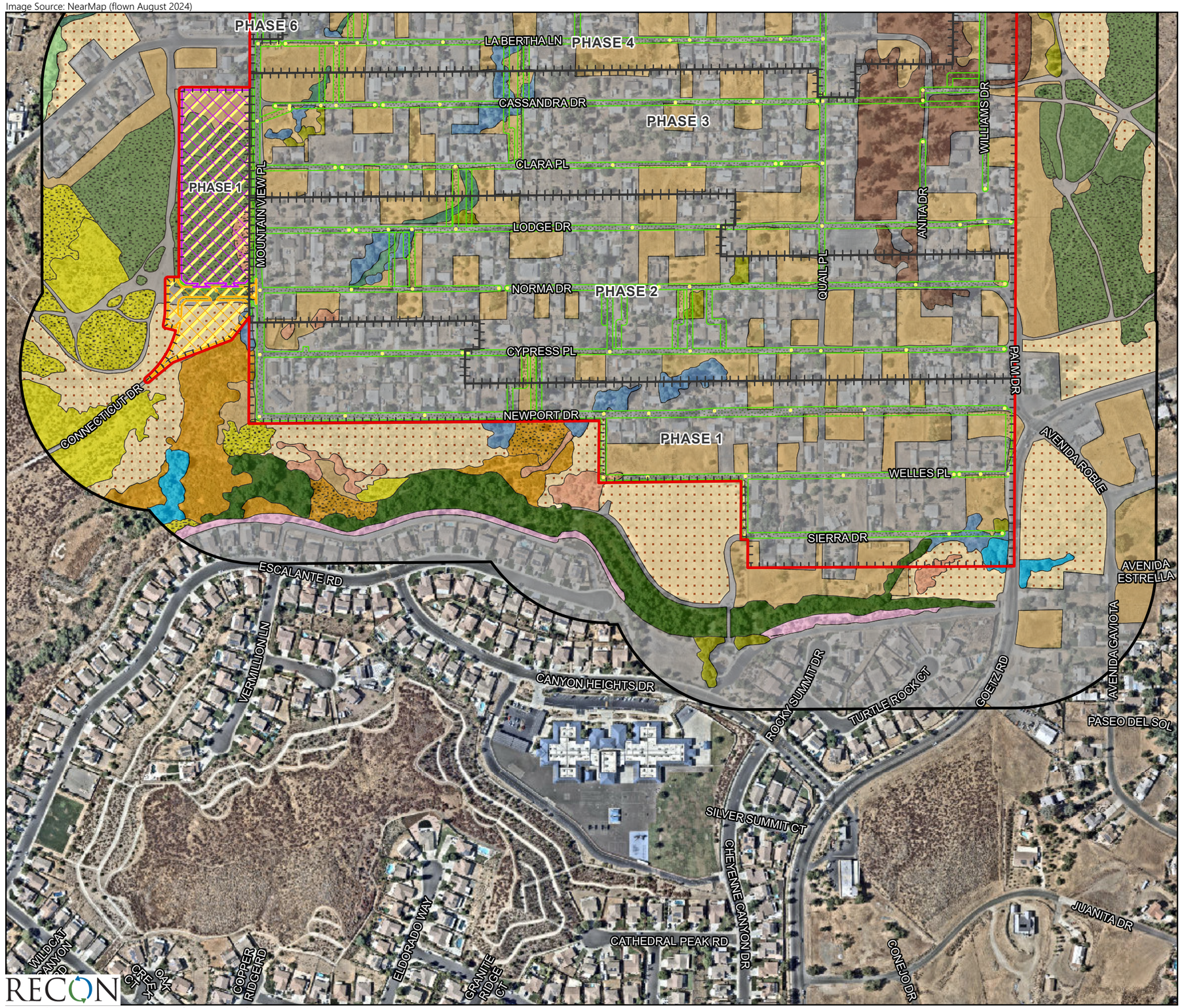
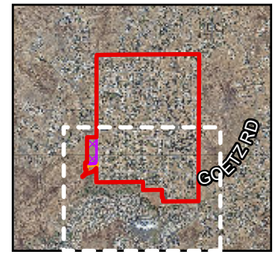
Image Source: NearMap (flown August 2024)





- Project Boundary
- Survey Area
- Phase
- LS-1 Option 1
- LS-1 Option 2
- Permanent Impact
- Temporary Impact

Vegetation Communities

- Buckwheat Scrub
- Buckwheat Scrub - Disturbed
- Disturbed Habitat
- Disturbed Wetland
- Eucalyptus Woodland
- Mule Fat Scrub
- Mule Fat Scrub - Disturbed
- Non-Native Grassland: Broadleaf-Dominated
- Non-Native Riparian
- Non-Native Woodland
- Riversidian Sage Scrub
- Riversidian Sage Scrub - Disturbed
- Southern Arroyo Willow Riparian Forest
- Southern Willow Scrub
- Southern Willow Scrub - Disturbed
- Tamarisk Scrub
- Tamarisk Scrub - Disturbed
- Urban/Developed
- Urban/Developed - Native Revegetated

0 Feet 350

FIGURE 4.3-8b
Impacts to Vegetation Communities and Land Covers

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Paniculate tarplant, a CRPR 4.2 species, was observed in two locations on the western portion of the survey area, just outside of the Project site. There is a low potential that this species would be directly impacted from the proposed Project within LS-1 (Options 1 and 2). Direct impacts to CRPR 4 species would be considered less than significant unless a regionally significant population was removed such that there was an impact to the local long-term survival of that species. This threshold applies to the following potentially occurring CRPR 4 species evaluated for the proposed Project:

- Palmer's grapplinghook
- paniculate tarplant
- Payson's jewelflower
- peninsular spineflower
- Robinson's peppergrass
- small-flowered microseris
- small-flowered morning-glory
- southern California black walnut, California black walnut

Because it is not known if a regionally significant population is present, the proposed Project could have a potentially significant impact on these CRPR 4 species.

Impacts to the following CRPR 1B.1 or 1B.2 species would be considered significant in nearly every instance, unless only a very small percentage of the known occurrence was impacted:

- Coulter's goldfields
- long-spined spineflower
- Munz's onion
- Parry's spineflower
- smooth tarplant

Overall, direct impacts to sensitive plants would be significant (Impact BIO-1). Mitigation measures BIO-1, BIO-2a, BIO-2b, BIO-2c, BIO-11, and BIO-13, detailed below, would be implemented during future construction phases to reduce potentially significant impacts to sensitive plant species.

Indirect impacts to sensitive plant species could occur as well, including altered hydrology from installation of pipeline infrastructure or increased impervious surfaces (e.g., paved areas around the lift stations), fugitive dust from grading, chemical and particulate pollution from construction equipment, and/or the introduction of non-native plant species resulting from vegetation removal during construction activities. These indirect impacts are considered less than significant because they are unlikely to cause direct mortality to sensitive plants such that there would be a regional long-term decline of a particular species.

b. Sensitive Federal or State Listed Wildlife Species

Direct impacts to the following federally or state listed wildlife species could occur during construction of the proposed Project through habitat removal/modification, with indirect impacts possible from increased noise and human activity during construction:

- Crotch's bumble bee
- burrowing owl
- coastal California gnatcatcher
- least Bell's vireo
- Stephens' kangaroo rat

Direct Impacts

Direct impacts to Crotch's bumble bee, burrowing owl, coastal California gnatcatcher, least Bell's vireo, and Stephens' kangaroo rat would occur if removal of habitat occurs during the proposed Project's construction activities, such as for grading of LS-1 (Options 1 and 2). The proposed Project's activities could permanently affect approximately 0.2 to 2.9 acres of coastal California gnatcatcher habitat (i.e., Riversidian sage scrub) depending on whether LS-1 (Option 1) or LS-1 (Option 2) were chosen, and approximately 1.0 to 2.9 acres of Stephens' kangaroo rat habitat, depending on whether LS-1 (Option 1) or LS-1 (Option 2) were chosen. Similarly, burrowing owl habitat (i.e., Riversidian sage scrub, buckwheat scrub, non-native grassland: broadleaf-dominated, and disturbed habitat) could also be affected during site preparation activities for both the lift stations and pipeline infrastructure. Although no willow habitat will be directly impacted from the proposed Project, small areas (up to 0.25 acres) of mule fat scrub and tamarisk scrub could be permanently impacted, which could affect least Bell's vireo if present in those areas. In addition, the loss of floral resources for Crotch's bumble bee particularly during the colony active period could result in mortality to individuals utilizing those resources at the time of vegetation removal. See **Table 4.3-3** above for a breakdown of impacts to habitat by project phase. Removal of habitat for listed species would be significant (**Impact BIO-2**).

Mitigation measures BIO-1, BIO-3a, BIO-3b, BIO-4, BIO-6a, BIO-6b, BIO-6c, BIO-7a, BIO-7b, BIO-8, BIO-9, BIO-11, and BIO-13, detailed below, would be implemented during future construction phases to reduce potentially significant direct impacts to sensitive federally and/or state listed wildlife species.

Indirect Impacts

Indirect impacts to Crotch's bumble bee, burrowing owl, coastal California gnatcatcher, least Bell's vireo and Stephens' kangaroo rat could occur during construction from additional human presence, increased vibration, and temporary removal of vegetation supporting populations of these species. These construction effects could result in a temporary reduction in habitat available to these species. These indirect impacts are less than significant because they are unlikely to cause direct mortality to these species.

Additional indirect impacts to coastal California gnatcatcher and least Bell's vireo may occur as a result of increased noise during construction of the proposed Project. Specifically, behavioral changes may occur, if noise thresholds over 60 decibels weighted hourly average [dB(A)] occur within potential habitat areas (see **Figure 4.3-3)** even where direct removal of vegetation does not occur. These behavioral changes also may occur if construction causes a 3 dB(A) increase in noise levels if ambient noise levels exceed 60 dB(A). Noise thresholds over 60 dB(A) have the potential to result in changes to foraging behaviors and avoidance of habitat areas that could result in additional risks to the species (e.g., loss of thermal protection, distraction causing increased risk for vehicular strikes, etc.). Noise can also cause nest abandonment, resulting in the direct take of eggs or chicks in the case of the listed avian species, which is prohibited under FESA and CESA. Impacts resulting in nest abandonment, resulting in the direct take of eggs or chicks, would be significant **(Impact BIO-3)**.

Noise modeling was performed for the proposed Project to better understand the possible extent of construction noise impacts on listed avian species. Noise contours were developed showing areas of potential habitat for coastal California gnatcatcher and least Bell's vireo that could experience more than a 60 dB(A) during construction. These areas are shown on **Figure 4.3-9**. Approximately 89.4 acres of potential habitat for coastal California gnatcatcher and 50.6 acres of potential habitat for least Bell's vireo occurs within the modeled 60 dB(A) noise contour. Potentially significant indirect noise impacts could occur to nesting individuals located within that area due to the potential for nest abandonment (**Impact BIO-3**).

Mitigation measures BIO-6b and BIO-7b would be implemented during future construction phases to reduce potentially significant indirect impacts to coastal California gnatcatcher and least Bell's vireo.

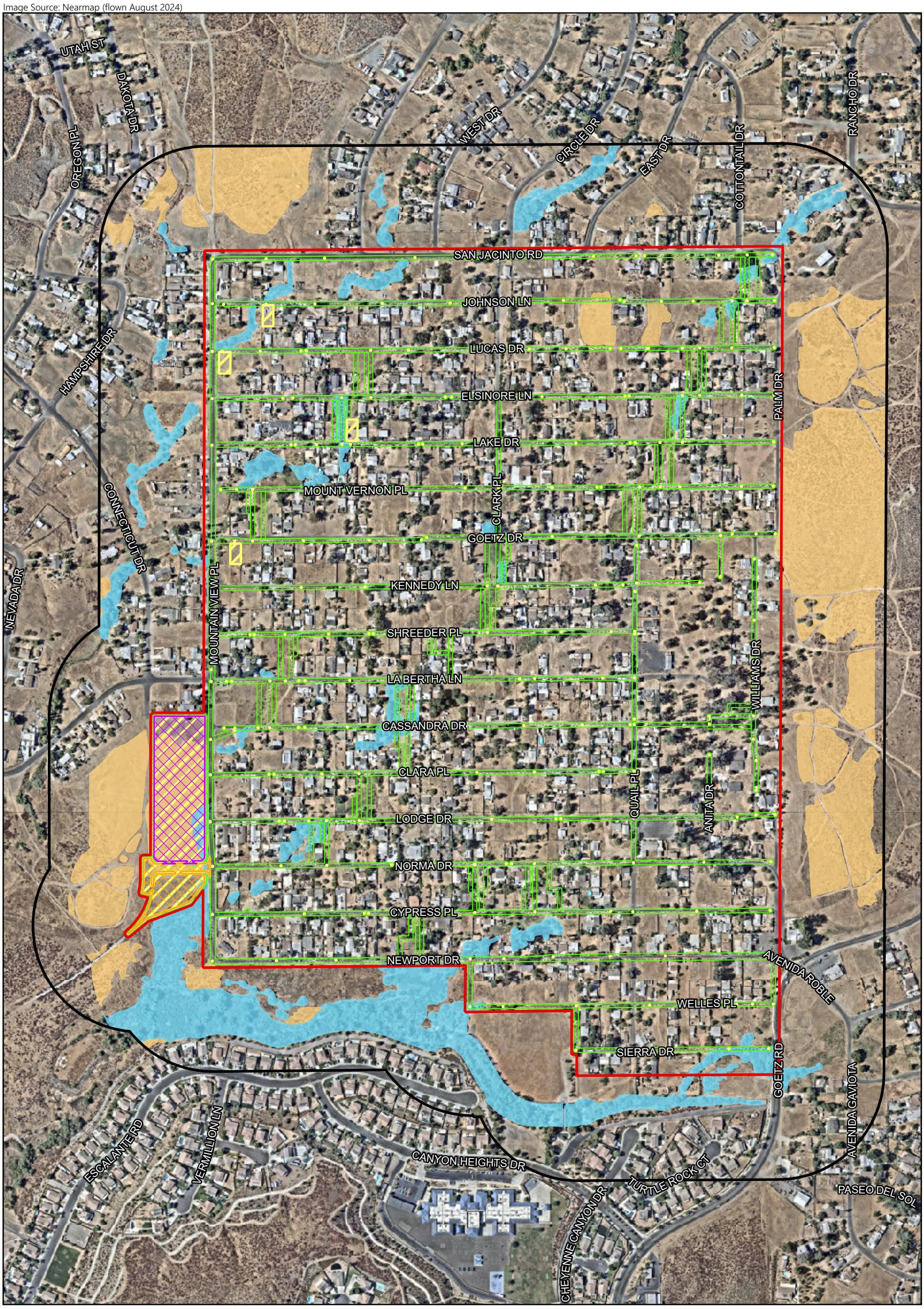
c. Special-Status Reptiles Direct Impacts

Direct and Indirect Impacts

Four special-status reptile species have a moderate or high potential to occur within the survey area or Project site: Belding's orange-throated whiptail, San Diegan tiger whiptail (=coastal whiptail), California glossy snake, and red-diamond rattlesnake. Permanent direct impacts could occur to individuals if they are present during construction activities, from vehicular or excavation equipment strikes. Permanent direct impacts from construction within suitable habitat for these species would vary from approximately 1.0 to 2.9 acres if Option 1 or Option 2 were chosen, respectively. See **Table 4.3-3** above for a breakdown of impacts to habitat by project phase. Direct mortality to these individuals may also occur if they are present during vegetation removal activities to build LS-1. These direct impacts would be significant (**Impact BIO-4**).

Mitigation measures BIO-3c, BIO-11, BIO-12, and BIO-13, detailed below, would be implemented during future construction phases to reduce potentially significant direct impacts to special-status reptile species.

Image Source: Nearmap (flown August 2024)



0 Feet 450

- Project Boundary
- Survey Area
- LS-1 Option 1
- LS-1 Option 2
- Permanent Impact
- Temporary Impact

Modeled Noise Impacts Over 60 A-Weighted Decibels

- Coastal California Gnatcatcher Habitat
- Least Bell's Vireo Habitat

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FIGURE 4.3-9
Noise Impacts on Listed Avian Species

Indirect impacts on special-status reptile species also could occur during construction from additional human presence during construction, excessive noise or vibration, and temporary removal of vegetation supporting populations of these species. These construction effects could result in a temporary reduction in habitat available to these species. These indirect impacts are less than significant because they are unlikely to cause direct mortality to these four special-status reptiles to the extent that there would be a regional long-term decline of any of the four species.

d. Special-Status Avian Species

Direct and Indirect Impacts

Permanent removal of native habitat would be necessary for the installation of lift stations, including the LS-1 (Options 1 and 2). Habitat for special-status avian species includes grasslands and/or sage scrub habitats. Proposed Project activities could permanently affect approximately 1.0 to 2.9 acres of habitat for these special-status avian species' foraging and/or nesting habitat, depending on whether LS-1 (Option 1) or LS-1 (Option 2) were chosen, respectively. See **Table 4.3-3** above for a breakdown of impacts to habitat by project phase. Permanent direct impacts may also occur on individuals from vehicular or excavation equipment strikes. Vehicular collisions occur most frequently during the vegetation clearing stage of construction, and involve eggs, nestlings, and recently fledged young that cannot safely avoid equipment. Additionally, vegetation trimming and removal could result in temporary removal of nesting or foraging habitat during construction, which has the potential to cause nest abandonment resulting in direct mortality. These direct impacts would be significant (**Impact BIO-5**).

Mitigation measures BIO-3c, BIO-5, BIO-11, and BIO-13, detailed below, would be implemented during future construction phases to reduce potentially significant direct impacts to special-status avian species.

Indirect impacts on special-status avian species also could occur during construction from additional human presence, excessive noise or vibration, and temporary removal of vegetation supporting populations of these species. These construction effects could result in a temporary reduction in habitat available to these species. Furthermore, noise impacts can affect these avian species in a similar way as described above, including mortality of eggs and chicks. Indirect noise impacts are significant due to the potential for nest abandonment (**Impact BIO-5**). Noise modeling and avoidance required under **Mitigation measures BIO-6b and BIO-7b** for coastal California gnatcatcher and least Bell's vireo would be implemented during future construction phases to reduce potentially significant indirect impacts to those species, but these measures also would reduce the potential for other special-status avian species since these species tend to use the same habitats as coastal California gnatcatcher and least Bell's vireo. Similarly, other special-status avian species nest at roughly the same time as these two species. Further avoidance of impacts to nesting special-status avian species would result from implementation of **mitigation measure BIO-5.**

e. Special-Status Mammals

Direct and Indirect Impacts

Proposed construction activities could impact San Diego black-tailed jackrabbit and western bonneted [=mastiff] bat that have a high potential to occur within the survey area. Project activities could permanently affect approximately 0.2 to 2.9 acres of San Diego black-tailed jackrabbit habitat (i.e., Riversidian sage scrub) depending on whether LS-1 (Option 1) or LS-1 (Option 2) were chosen. See **Table 4.3-3** above for a breakdown of impacts to habitat by project phase. Impacts to suitable habitat for San Diego black-tailed jackrabbit and western bonneted [=mastiff] bat would result in in a significant impact (**Impact BIO-6**).

Mitigation measure BIO-3c, BIO-11, and BIO-13, detailed below, would be implemented during construction phases to reduce potentially significant direct impacts to San Diego black-tailed jackrabbit and western bonneted [=mastiff] bat.

Impacts to maternal bat roost sites (e.g., palm fronds, tall trees, rock crevices, abandoned buildings, etc.) in the Project site, could occur if those roosts were removed during installation of proposed Project infrastructure. This could result in direct mortality to numerous immature common and special-status bats (e.g., western bonneted [=mastiff] bat) and potentially adult females tending the roost site (**Impact BIO-7**).

Mitigation measure BIO-10, detailed below, would be implemented during future construction phases to reduce potentially significant direct impacts to roosting bats.

Indirect impacts on special-status mammals also could occur during construction from additional human presence and excessive noise or vibration. These construction effects could result in a temporary reduction in habitat available to these species. These indirect impacts are less than significant because they are unlikely to cause direct mortality to San Diego black-tailed jackrabbit and western bonneted [=mastiff] bat the extent that there would be a regional long-term decline of the species.

f. Migratory Birds and Raptors

Direct and Indirect Impacts

The proposed Project may result in the direct removal of trees, native shrubs, and grassland habitat during construction. Each of these vegetation types potentially support avian species protected under the MBTA and CFGC. There is a potential that trees also may need to be trimmed to access construction areas. Tree removal and trimming have the potential to result in direct take of nesting bird species, including raptors, covered under the MBTA and CFGC Sections 3503 and 3503.5. In addition, indirect impacts could occur as a result of noise, night lighting, and human presence from construction activities is expected near potential nest locations (i.e., trees) (**Impact BIO-8**).

Mitigation measure BIO-5, detailed below, would be implemented during future construction phases to reduce potentially significant direct and indirect impacts to migratory birds and raptors.

4.3.5.2 Significance of Impacts

At this program level of analysis, the impacts summarized in **Table 4.3-4** and discussed above would be potentially significant.

4.3.5.3 Mitigation

Table 4.3-4 summarizes potentially significant impacts related to sensitive plants and wildlife, identifies mitigation measures to reduce those impacts, and discloses the level of significance after implementation of mitigation.

Table 4.3-4
Summary of Impact and Mitigation: Sensitive Plants and Wildlife

Significant Impact Description	Mitigation Measure(s) to Reduce Impacts	Impact After Mitigation Measure Implementation
Impact BIO-1: Impacts to Sensitive Plant Species	BIO-1, BIO-2a, BIO-2b, BIO-2c, BIO-11, BIO-13	Less than Significant
Impact BIO-2: Removal of Habitat for Federally and State Listed Wildlife Species	BIO-1, BIO-3a, BIO-3b, BIO-4, BIO-6a, BIO-6b, BIO-6c, BIO-7a, BIO-7b, BIO-8, BIO-9, BIO-11, BIO-13	Less than Significant
Impact BIO-3: Noise Impacts on Federally and State Listed Wildlife Species	BIO-6b, BIO-7b	Less than Significant
Impact BIO-4: Impacts to Special-Status Reptiles	BIO-3c, BIO-11, BIO-12, BIO-13	Less than Significant
Impact BIO-5: Impacts to Sensitive Avian Species	BIO-5, BIO-3c, BIO-11, BIO-13	Less than Significant
Impact BIO-6: Impacts to Sensitive Mammal Species	BIO-3c, BIO-11, BIO-13	Less than Significant
Impact BIO-7: Impacts to Bat Maternal Roost Sites	BIO-10	Less than Significant
Impact BIO-8: Impacts to Migratory Bird Treaty Act Avian Species and Raptors	BIO-5	Less than Significant

BIO-1: **Biological Resource Surveys.** Prior to the construction of any project phase or component sited within or adjacent to an undeveloped open space area (i.e., an area supporting naturalized habitat, sensitive habitat, and/or habitat potentially suitable for special-status species), the Eastern Municipal Water District (District) shall retain a qualified biologist to perform a general biological survey/habitat assessment to verify existing biological resources on and adjacent to the Quail Valley Subarea 4 Project (proposed Project) construction areas. The general biological survey/habitat assessment shall occur within 500 feet of the proposed Project components where access is allowed, with binocular surveys conducted to the extent possible in areas where access is not secured. The District shall provide the biologist with a copy of project plans that clearly depict the construction work limits, including construction staging, storage, and access areas, to determine which specific portion(s) of the proposed Project will require inspection of adjacent open space areas. The survey shall verify whether sensitive natural communities, including habitat suitable for special-status species, in addition to potential jurisdictional aquatic resources occur within 500 feet from planned project activities.

The biologist shall perform a visual inspection of the survey area, characterize the existing habitat types, and determine the likelihood for special-status species to occur, including but not limited to the coastal California gnatcatcher, least Bell's vireo, burrowing owl, Crotch's bumble bee, migratory songbirds, and other bird species with the potential to breed in the area.

The survey results shall be submitted to the District to determine the need to implement project-specific mitigation measures (provided below) to avoid, minimize, and mitigate impacts to such resources. The report shall verify whether the construction activities result in direct or indirect impacts to sensitive natural communities, special-status species, and potential jurisdictional aquatic resources.

BIO-2a: **Rare Plant Surveys.** If it is confirmed through the implementation of BIO-1 that project components could impact suitable habitat for special-status plant species, the Eastern Municipal Water District shall retain a qualified biologist to conduct focused presence/absence surveys for rare plants prior to project construction within 500 feet of project work activities, if accessible. Surveys shall follow protocols and guidelines approved by the U.S. Fish and Wildlife Service, California Department of Fish and Wildlife, and/or California Native Plant Society and shall be conducted by qualified biologists. Surveys for sensitive plants should occur during the blooming period of target species which may require two surveys to cover the spring and summer blooming species. One survey should occur in the spring (March to April), and a second survey should occur in summer (late May to early July). The specific timing shall be determined by the qualified biologist.

BIO-2b: **Rare Plant Avoidance.** If a rare plant species is identified within a project impact area, then the Eastern Municipal Water District (District) shall avoid impacts to the occurrence to the extent feasible through project-level design changes and/or construction methods (e.g., trenchless installation of pipelines, working on the other side of the road).

Prior to initiating construction activities, the District shall require that the rare plant locations detected during focused rare plant surveys are provided to the construction contractor and that the locations also are demarcated in the field by a qualified biologist. The rare plant locations to be avoided shall be protected-in-place through the installation of temporary construction fencing or alternative means that are approved by the qualified biologist. Staking and installation of construction fencing shall be monitored by the qualified biologist and conform to the conditions stated in **mitigation measure BIO-11**. The qualified biologist shall monitor construction activities, as appropriate and consistent with **mitigation measure BIO-11**, to help ensure avoidance of the demarcated areas and to ensure the fencing is kept in good condition.

BIO-2c: **Rare Plant Mitigation.** If project design (**BIO-2b**) cannot be modified to avoid impacts to rare plants species, the Eastern Municipal Water District shall consult with a qualified biologist to determine the severity of those impacts. Significant impacts shall be assumed if more than five percent of a mapped rare plant occurrence (i.e., all individuals mapped within 500 feet of project work activities) of a California Rare Plant Rank 1 or 2 species or a regionally-significant population of California Rate Plant Rank 4 species will be permanently impacted (i.e., removed). If significant impacts occur to rare plants, the Eastern Municipal

Water District (District) shall provide mitigation for those significant impacts that include one or a combination of the following:

a. Purchase of preservation credits at a 1:1 mitigation ratio for habitat occupied by that species from a conservation bank approved by the U.S. Fish and Wildlife Service and/or California Department of Fish and Wildlife;

b. Acquisition and preservation of off-site mitigation land containing occupied habitat for that species; and/or

c. Preparation and implementation of a rare plant salvage and relocation plan, to include the following requirements, at a minimum:

    i. Evaluation of options for plant salvage and relocation, including native plant mulching, selective soil salvaging, application of plant materials on manufactured slopes, and application/relocation of resources within existing or proposed preserved lands;

    ii. Seed collection and/or transplantation to a suitable receptor site based on the most reliable methods of successful relocation;

    iii. Recommendation for the method of salvage and relocation/application based on feasibility of implementation and likelihood of success; and

    iv. Implementation plan, maintenance and monitoring program, estimated completion time, and any relevant contingency measures.

In addition, a post-construction monitoring report shall be prepared by the qualified biologist and submitted to the District for their records summarizing monitoring activities conducted for special-status plants. The post-construction report shall be prepared within one month of the completion of construction activities and shall document what impacts occurred, if any, to special-status plant species. The report shall provide documentation showing where and how many special-status plants were (1) observed during pre-construction surveys, and (2) were impacted and/or avoided. Details on the duration and frequency of monitoring also shall be provided.

BIO-3a: **Federal and State Wildlife Species Surveys and Avoidance.** If it is confirmed through implementation of **BIO-1** that the Quail Valley Subarea 4 Project would impact suitable habitat for federally or state listed wildlife species, the Eastern Municipal Water District shall retain a qualified biologist to conduct focused, protocol-level surveys for special-status wildlife species prior to commencement of construction activities. Surveys shall follow protocols and guidelines approved by U.S. Fish and Wildlife Service and/or California Department of Fish and Wildlife and shall be conducted by qualified biologists permitted by the U.S. Fish and Wildlife Service and the California Department of Fish and Wildlife, as applicable. The qualified biologist shall prepare a Gantt Chart outlining the schedule for these needed protocol surveys.

If listed wildlife species are identified within a project impact area, the Eastern Municipal Water District shall avoid impacts to species and their habitat through project-level design changes and/or construction methods (e.g., trenchless installation of pipelines) or implement BIO-3b if avoidance is infeasible.

BIO-3b: Listed Wildlife Species Permitting. If impacts to listed wildlife cannot be avoided, the Eastern Municipal Water District (District) shall seek incidental take authorization by one of two methods, described below. Habitat-based compensatory mitigation for impacts to listed species shall be determined through the applicable regulatory mechanism.

1. Participating Special Entity process under the Multiple Species Habitat Conservation Plan (MSHCP). To obtain MSHCP coverage as a Participating Special Entity, the Quail Valley Subarea Project (proposed Project) is required to demonstrate MSHCP compliance through specific habitat assessments, applicable biological surveys, the provision of an MSHCP consistency analysis, and payment of impact fees. Additionally, impacts to certain species under the MSHCP will require a Determination of Biologically Equivalent or Superior Preservation. A Determination of Biologically Equivalent or Superior Preservation shall be prepared as appropriate and will be used to demonstrate avoidance and mitigation related to impacts.

2. Using the federal and/or state endangered species acts standard process. The District may elect to seek incidental take authorization from the U.S. Fish and Wildlife Service (USFWS) pursuant to Federal Endangered Species Act Sections 7 or 10 and/or California Department of Fish and Wildlife (CDFW) under California Fish and Game Code Sections 2080.1 and 2081(b), as applicable.

    a. Where species protected under federal law may be impacted, the District shall either consult directly with the USFWS to develop and implement a habitat conservation plan and obtain an Incidental Take Permit pursuant to Federal Endangered Species Act Section 10(a) or, in the case of projects with a federal action agency, the District shall adhere to the requirements of Federal Endangered Species Act Section 7, which requires the federal action agency to consult with the USFWS to obtain a Biological Opinion and Incidental Take Statement for the proposed Project; and/or

    b. Where species protected under state law may be impacted, the District shall consult with the CDFW pursuant to Sections 2081 or 2080.1 of the California Endangered Species Act. For projects with direct or indirect impacts to species that are only state listed and not federally listed as endangered or threatened, the District shall obtain a California Endangered Species Act Section 2081 Incidental Take Permit from the CDFW. For projects with impacts to species that are both state and federally listed as endangered or threatened, the District shall obtain a California Endangered Species Act Section 2080.1 Consistency Determination from the CDFW, unless otherwise required by the CDFW.

BIO-3c: Non-Listed Special-Status Wildlife Species Mitigation. For non-listed wildlife species, particularly reptiles and small mammals, an analysis shall be made after biological resource surveys are conducted in accordance with BIO-1, above to determine the potential level of impact the Quail Valley Subarea 4 Project (proposed Project) may have on these species. Unless there is a regionally significant population of a non-listed special-status wildlife species (e.g., multiple species within high-quality habitat, etc.) mitigation provided below such as biological construction monitoring, temporary construction fencing (BIO-11), revegetation of temporarily-impacted native vegetation (BIO-12), and worker training (BIO-13) shall be sufficient to reduce impacts to non-listed wildlife species.

If a regionally significant population of non-listed special-status wildlife are noted during surveys, the Eastern Municipal Water District shall compensate for the loss of occupied habitat through one or a combination of the following, at a minimum ratio of 1:1, as determined by the Eastern Municipal Water District in consultation with the U.S. Fish and Wildlife Service and/or California Department of Fish and Wildlife, as applicable:

a. Purchase of credits from a conservation bank approved by U.S. Fish and Wildlife Service and/or California Department of Fish and Wildlife; and/or

b. Acquisition and preservation of off-site mitigation land containing occupied habitat.

BIO-4: Direct Impact Avoidance for Crotch's Bumble Bee. To avoid direct impacts to Crotch's bumble bee, the following seasonal restrictions shall be implemented:

- Removal, trimming or trampling of habitat (i.e., any areas with floral resources) in the proposed area of disturbance must occur outside of the Colony Active Period between April 1 and August 31. If removal of floral resources in the proposed area of disturbance must occur during the Colony Active Period, a foraging bumble bee survey shall be conducted within a year of project or phase commencement.

- Within potential overwintering or nest sites, no soil disturbance (grading, digging, etc.) will occur between August 31 and April 1. If ground disturbance must occur between September 1 and March 31, a qualified biologist shall conduct an overwintering/nest survey to determine the presence or absence of Crotch's bumble bee within the proposed area of disturbance.

The surveys shall be conducted within 300 feet of project work resulting in removal, trimming or trampling of habitat within one year prior to the initiation of project activities (including removal of vegetation). Survey methods will be developed in consultation with the California Department of Fish and Wildlife (CDFW) and follow existing guidance (e.g., Survey Considerations for California Endangered Species Act Candidate Bumble Bee Species, dated June 6, 2023). Based on current standards, surveys may consist of three separate visits spaced two to four weeks apart. Survey results will be considered valid until the start of the next colony active period. Survey methods that involve lethal take of species are not acceptable. The qualified biologist and the District shall submit the results (including positive or negative survey results) of the pre-activity survey to CDFW for review.

If pre-activity surveys do identify Crotch's bumble bee individuals on-site, the qualified biologist shall notify and consult with CDFW to determine whether an avoidance plan would be an option. If it is determined that project activities would result in impacts to Crotch's bumble bee, an Incidental Take Permit (ITP) may be required. Take of any endangered, threatened, or candidate species that results from the Quail Valley Subarea 4 Project is prohibited, except as authorized by state law (CFGC Sections 86, 2062, 2067, 2068, 2080, 2085; California Code of Regulations, Title 14, Section 786.9) under the California Endangered Species Act.

Regardless of the outcome of the pre-activity survey, a qualified biologist shall conduct a pre-construction survey for Crotch's bumble bee within 14 days prior to ground-disturbing or vegetation removal activities, during suitable weather conditions. Surveys shall follow existing guidance (e.g., Survey Considerations for California Endangered Species Act Candidate Bumble Bee Species) for pre-construction surveys. If Crotch's bumble bee or their nests are observed, the biologist shall defer to the avoidance plan (if applicable) and/or ITP (if applicable). If there is no existing Crotch's bumble bee avoidance plan, or ITP conservation measures, a no-disturbance buffer around the observation or nest site will be established until the completion of the colony active period.

BIO-5: Avoidance of Nesting Birds and Raptors. To prevent direct impacts to nesting migratory birds, or raptors, protected under the Migratory Bird Treaty Act and California Fish and Game Code, the Eastern Municipal Water District shall implement the following:

Any proposed activity that could affect nesting migratory birds or raptors shall occur outside of the general bird breeding season of February 15 to August 31. If such activities cannot be conducted outside the general bird breeding season, a qualified biologist with experience in conducting nesting bird surveys shall be retained to conduct a pre-activity nesting bird survey (i.e., prior to any project activities, such as ground disturbance or vegetation removal, that could disrupt nesting birds). The pre-activity survey shall occur within 500 feet of the construction activity and no more than three days prior to the activities to confirm the presence or absence of active bird nests. These survey parameters (i.e., within 500 feet and no more than three days prior) shall be implemented for linear construction projects such as pipelines, as well as work within a specific parcel such as for construction of the lift stations.

If an active nest is found by the qualified biologist, a nest avoidance buffer of 300 feet for passerine birds and 500 feet for raptors should be demarcated by temporary fencing, flagging, and or staking as deemed appropriate to avoid impacts. No project construction activities, including vegetation removal and/or trimming activities, will be allowed within the buffer until the qualified biologist has determined that the nest is no longer active. The qualified biologist shall monitor the active nest with sufficient frequency and duration to determine if the buffer distances are appropriately sized to protect the breeding success of the nest. Avoidance buffers may be either increased or decreased by the qualified biologist based on such factors as the avian species involved, ambient levels of human activity, and screening vegetation.

BIO-6a: Coastal California Gnatcatcher Protocol Surveys and Avoidance. A qualified biologist (possessing a valid Federal Endangered Species Act Section 10(a)(1)(A) Recovery Permit) shall survey those habitat areas (i.e., Riversidian sage scrub and buckwheat scrub) within the Quail Valley Subarea 4 Project limits and up to a 500-foot buffer where access permits. The protocol survey shall be conducted per the current U.S. Fish and Wildlife Service protocol that currently requires six surveys during the period of March 15 to June 30, or nine surveys between July 1 and March 14. If coastal California gnatcatchers are confirmed as not present, then no mitigation for this species is required.

If coastal California gnatcatchers are confirmed as present, then no clearing, grubbing, ground-disturbing, or other construction activity shall occur within 500 feet of occupied coastal sage scrub during the coastal California gnatcatcher breeding season (March 1 through August 15). If avoidance is not possible and construction activities must occur during the breeding season within 500 feet of occupied habitat, or if clearing of occupied habitat is required, the Eastern Municipal Water District shall implement BIO-3b and BIO-6b. If the Project elects to be a Participating Special Entity in the Multiple Species Habitat Conservation Program, this measure is not required.

BIO-6b: Coastal California Gnatcatcher Mitigation. If construction activities are proposed within 500 feet of an occupied nest, a biological monitor shall be required to observe the behavior of breeding coastal California gnatcatchers where accessible. The construction supervisor shall be notified if the construction activities appear to be altering the birds' normal breeding behavior, work will be halted if necessary and as determined by the qualified biologist, and the nest avoidance buffer shall be expanded and/or work activities shall be modified until there is no discernible disturbance to the nest occupants. No construction activities will be allowed within 500 feet of an occupied nest until additional minimization measures have been performed. For habitat that is accessible, such measures may include retaining a qualified acoustician to determine ambient noise levels and project-related noise levels at the edge of the occupied habitat. Noise levels at the edge of the occupied habitat shall not exceed an hourly average of 60 decibels (dB[A]), or a 3 dB(A) increase in noise levels if ambient noise levels exceed 60 dB(A). If Project-related noise levels at the edge of the occupied habitat are above 60 dB(A) or the 3 dB(A) increase in noise occurs or the habitat is not accessible for measuring the noise levels, additional minimization measures shall be taken to reduce project-related noise levels to an acceptable level as determined by the biological monitor. Measures may include, but are not limited to, limitations on the use of certain equipment, placement of equipment, restrictions on the simultaneous use of equipment, use of noise barriers, or other noise attenuation methods as deemed appropriate by the biologist and acoustician. If the biological monitor determines the construction activities are posing a potential risk to the nest after implementing the additional minimization measures, the noise generating construction activities shall cease until alternative methods are applied or the breeding season is over. The biological monitor shall prepare written documentation of all gnatcatcher monitoring activities at the end of each monitoring day, and also a compiled monitoring report at the completion of construction activities, both of which shall be submitted to the District.

BIO-7a: **Least Bell's Vireo Protocol Surveys and Avoidance.** Construction activities (i.e., earthwork, clearing, and grubbing) within 500 feet of potential least Bell's vireo habitat shall occur outside of the breeding season for least Bell's vireo (March 15 through August 31).

If construction activities (i.e., earthwork, clearing, grubbing, etc.) must occur within 500 feet of least Bell's vireo habitat during the breeding season, protocol surveys for least Bell's vireo shall be conducted prior to commencement of construction activities, within all suitable habitat located within a 500-foot buffer of project activities to determine whether the habitat is occupied. Habitat withing the 500-foot buffer that is not accessible will be surveyed audibly from the accessible limits. Protocol surveys for least Bell's vireo shall be conducted by a qualified biologist and during the breeding season in accordance with the most recent U.S. Fish and Wildlife Service guidelines. Current survey guidelines require eight surveys 10 days apart from April 10 to July 31. The results of the protocol surveys shall be documented by the qualified biologist and submitted to the U.S. Fish and Wildlife Service and California Department of Fish and Wildlife.

If the qualified biologist determines that least Bell's vireo does not occur within 500 feet of the proposed construction, the activities shall be allowed to proceed without any further requirements. If the qualified biologist determines that the habitat is occupied by least Bell's vireo, the Eastern Municipal Water District shall clearly delineate the required avoidance buffer around the active least Bell's vireo nest. The buffer shall be clearly marked with flags and/or fencing prior to the initiation of construction activities. For work that is to occur within 500 feet of the occupied habitat, or if clearing of occupied habitat is required, then the Eastern Municipal Water District shall follow **BIO-3b** and **BIO-7b**.

BIO-7b: **Least Bell's Vireo Mitigation.** If construction activities are proposed within 500 feet of an occupied nest, a biological monitor shall be required to observe the behavior of breeding least Bell's vireo where accessible. The construction supervisor shall be notified if the construction activities appear to be altering the birds' normal breeding behavior work will be halted if necessary and as determined by the qualified biologist, and the nest avoidance buffer shall be expanded and/or work activities shall be modified until there is no discernible disturbance to the nest occupants. No construction activities will be allowed within 500 feet of an occupied nest until additional minimization measures have been performed. For habitat that is accessible, such measures may include retaining a qualified acoustician to determine ambient noise levels and project-related noise levels at the edge of the occupied habitat. Noise levels at the edge of the occupied habitat shall not exceed an hourly average of 60 decibels (dB[A]), or a 3 dB(A) increase in noise levels if ambient noise levels exceed 60 dB(A). If project-related noise levels at the edge of the occupied habitat are above 60 dB(A) or the 3 dB(A) increase in noise occurs or the habitat is not accessible for measuring the noise levels, additional minimization measures shall be taken to reduce project-related noise levels to an acceptable level as determined by the biological monitor. Measures may include, but are not limited to, limitations on the use of certain equipment, placement of equipment, restrictions on the simultaneous use of equipment, use of noise barriers, or other noise attenuation methods as deemed appropriate by the biologist and acoustician. If the biological monitor determines the construction activities are posing a potential risk to the nest after implementing the additional minimization

measures, the noise generating construction activities shall cease until alternative methods are applied or the breeding season is over. The biological monitor shall prepare written documentation of all monitoring activities at the completion of construction activities, which shall be submitted to the Eastern Municipal Water District.

BIO-8a: **Burrowing Owl Focused Survey and Pre-Construction Burrowing Owl Survey.** The Eastern Municipal Water District shall have a qualified biologist conduct focused burrowing owl surveys in accordance with the current guidelines at the time of the survey. At the time of this report, the survey would follow the California Department of Fish and Wildlife 2012 *Staff Report for Burrowing Owl Mitigation* unless the Quail Valley Subarea 4 Project has elected to be a Participating Special Entity under the Multiple Species Habitat Conservation Program, in which case the survey would follow the 2006 burrowing owl instruction for the Multiple Species Habitat Conservation Program. These focused surveys should be conducted either during the breeding season or non-breeding season in the year or months prior to the specific project phase if potential burrowing owl habitat is located within 500 feet of the proposed impact footprint for that project phase.

Additionally, 14-day and a 24-hour pre-construction "take avoidance" surveys for burrowing owls are required by the California Department of Fish and Wildlife 2012 guidelines (or a single survey 30-days prior if the project is permitted using the Participating Special Entity process) prior to initial ground-disturbing activities (e.g., vegetation clearing, clearing and grubbing, grading, tree removal, site watering, equipment staging and trenching/excavation) to ensure that no owls have colonized the site in the days or weeks preceding the ground-disturbing activities. These take avoidance surveys are required both inside and outside of the breeding season whenever work would occur within 500 feet of potential burrowing owl habitat. Working in collaboration with the construction contractor, the qualified biologist will ensure these survey parameters (i.e., within 14 days and again within 24 hours prior to the start of the activity) are implemented for linear construction projects such as pipelines, as well as work within a specific parcel such as for construction of the lift stations. If burrowing owl are not detected during the take avoidance survey, no further action is required. If burrowing owl are detected, the Eastern Municipal Water District will follow **BIO-8b**.

BIO-8b: **Burrowing Owl Mitigation.** A Burrowing Owl Take Avoidance Plan (BUOW Plan) shall be prepared by a qualified biologist. The BUOW Plan must be sent for approval by the California Department of Fish and Wildlife (CDFW) prior to initiating ground disturbance. The BUOW Plan shall include the number and location of occupied or known burrow sites, if applicable, and shall describe proposed avoidance (setback), shelter-in-place, unoccupied burrow/burrow surrogate collapse procedures, monitoring, minimization, and/or mitigation actions. The project proponent shall implement the BUOW Plan following CDFW review and approval. Avoidance and minimization measures may include:

a) Setback: No construction activities shall occur within specified setback distances. The default setback distances from the CDFW 2012 Staff Report are provided below.

CDFW 2012 Staff Report Default Setback Distances			
	Level of Disturbance (meters/feet)		
Time of Year	Low	Medium	High
April 1–Aug 15	200/656	200/656	500/1,640
Aug 16–Oct 15	200/656	200/656	200/656
Oct 16–Mar 31	50/164	100/328	500/1,640
SOURCE: CDFW 2012.			

When setback distances are applied to occupied burrows, an intensive monitoring program shall be implemented to ensure that the setback distance applied to the burrow is considered an effective buffer. Once a setback distance is applied to an occupied burrow, the biological monitor shall be present at all times during construction activities that occur adjacent to the setback distance to monitor the burrowing owl's behavior. The biological monitor will have the authority to increase the setback distance if the construction activities are affecting the burrowing owl. Setback distances may be reduced through shelter-in-place methods described below, which would be determined by the biological monitor.

b) Shelter in Place: If a reduced setback is needed to complete construction, shelter-in-place can be implemented to minimize impacts while allowing existing burrows to remain intact. Where appropriate, the setback buffers may be reduced by screening burrows (i.e., installing hay bales to create a visual and auditory barrier between construction and the burrow) to minimize disturbance. During the breeding season, hay bales (or other similar material) shall be stacked up to three bales high and 25 feet on either side of the burrow for a total of 50 feet. During the non-breeding season, hay bales shall be stacked up to two bales high and 25 feet on either side of the burrow for a total of 50 feet. Hay bales are generally three feet long and 18 inches tall. A minimum distance of five feet between the hay bales and the occupied burrow shall be left, allowing for perches near the burrow to be maintained. The minimum distance may be increased depending on the slope and topography of the area adjacent to the burrows.

If shelter-in-place is determined feasible, the biological monitor will provide guidance to the construction contractor regarding the location of the hay bales. During and following installation of the hay bales, a biological monitor shall be present daily to evaluate the effectiveness of the hay bales, monitor burrowing owl behavior for signs of stress or disturbance due to construction, and make adjustments to the buffer and/or hay bales in order to minimize impacts on the burrowing owl. If the burrowing owl continues to appear distressed from construction, the biological monitor will have the authority to halt construction until the project proponent and the CDFW can be contacted to determine the best course of action. Following installation of the hay bales, the biological monitor shall provide a report to the Eastern Municipal Water District and the CDFW describing the installation time frame; a map of the area; photographs of hay bales and construction activities; and a description of site conditions (e.g., surrounding vegetation, topography, observed species, burrowing owl line-of-sight conditions).

c) Burrow Collapse Procedures: No collapsing of occupied or known (i.e., those exhibiting signs of current or past burrowing owl use) burrows shall be conducted without a Section 2081 Incidental Take Permit, regardless of the time of year. Procedures for the collapse of unoccupied/potential (i.e., any subterranean hole three inches or larger for which no evidence is present to conclude that the burrow is being used or has been used by a burrowing owl) burrows shall be included in the BUOW Plan. Unoccupied and potential burrowing owl burrows may be excavated under the direct supervision of the burrowing owl Authorized Biologist after approval of the BUOW Plan.

d) If ground-disturbing activities occur but the site is left undisturbed for more than 14 days, another pre-construction "take avoidance" survey for burrowing owl shall be conducted and reported to CDFW as described above. If a burrowing owl is found, the same coordination described above shall be necessary.

No take of burrowing owl shall be conducted unless the project secures a Section 2081 Incidental Take Permit from CDFW. Take includes any actions that could harm burrowing owl, including but not limited to burrow exclusions on occupied or known burrows, passive relocation activities, and burrow collapse of an occupied or known burrow. Those activities shall only be conducted in accordance with the permit conditions contained in an Incidental Take Permit.

BIO-9: Stephens' Kangaroo Rat HCP Mitigation Fee. The Quail Valley Subarea 4 Project (proposed Project) is within the limits of the Stephens' Kangaroo Rat Habitat Conservation Plan Area. As such the proposed Project will pay the Stephens' Kangaroo Rat Mitigation fee of $500 per acre of impact to the Riverside County Habitat Conservation Agency, which implements the Stephens' Kangaroo Rat Habitat Conservation Plan.

BIO-10: Maternal Bat Roost Avoidance. Prior to construction, the Eastern Municipal Water District shall have a qualified biologist conduct a survey of potential bat roosts located within and/or immediately adjacent to the areas where Quail Valley Subarea 4 Project activities have the potential to directly impact active roosts or disrupt bat breeding activities. Potential roost sites (e.g., palm fronds, trees, rock crevices, abandoned buildings, etc.) will be identified by a qualified bat biologist and searched for signs of bat use, such as urine streaking, grease marks and droppings, moth wings, and dead bats.

If any project activities are proposed during the bat maternity season (April 1 through August 31), a qualified biologist will conduct a dusk emergent bat survey of potential roost sites that have signs of bat use, no more than two weeks prior to construction. Dusk emergence count surveys shall be conducted on a warm night when nighttime lows are not less than 45 degrees Fahrenheit and during dry weather conditions. Surveys should be conducted from approximately 15 minutes before sunset to 1 hour after sunset. Prior to any dusk emergence count, the lead biologist shall identify the primary locations where bats may be roosting so these locations can be targeted during the emergence count. Surveys should include both a visual component using night visions googles as appropriate, as well as an electronic acoustic monitoring device / bat detector (e.g., AnaBat).

If bats are detected during the dusk emergence surveys, the District will not trim or remove the roost (e.g., palm trees) until it can be determined that the bats no longer are present. In addition, if a maternal roost is identified, no construction will occur within 200 feet of the maternal roost during the pupping season (typically April 1 through August 31).

BIO-11: Biological Construction Monitoring and Temporary Construction Fencing. If it is confirmed through pre-construction surveys that the Quail Valley Subarea 4 Project would occur within or immediately adjacent to sensitive habitat areas (including aquatic resources) and/or habitat occupied by special-status species, then the Eastern Municipal Water District (District) shall retain a qualified biologist to monitor construction activities and supervise the installation of temporary construction fencing, which clearly delineates the edge of the approved limits of grading and clearing, and the edges of environmentally sensitive areas that occur beyond the approved limits. This fencing shall be installed prior to construction and maintained by the contractor for the duration of construction activity. Fencing shall be installed in a manner that does not impact habitats to be avoided.

Once the fencing is installed, the District and qualified biologist shall determine the need for additional inspections and monitoring activities throughout the duration of construction, not to be less than once per week. If determined necessary by the District and qualified biologist, the monitoring shall include the inspection of construction work areas, including staging and storage areas, to confirm that activities are kept within the approved limits and that best management practices are in place to prevent incidental animal entrapment and burrow and nest establishment within equipment and staged materials. Temporary construction fencing shall be maintained regularly and repairs to the fencing shall be made with one calendar day of any damage being noted. If work occurs beyond the fenced or demarcated limits of impact, or if a trapped animal or burrow or nest is found, work in the affected areas shall cease until the problem has been remedied to the satisfaction of the District and qualified biologist. Temporary construction fencing shall be removed upon completion of construction of the Quail Valley Subarea 4 Project.

BIO-12: Revegetation of Upland Native Vegetation. Prior to impacts to upland native vegetation, a biologist shall make a list of native plants occurring in each community. As soon as practical after construction is complete, temporary impacts to upland native vegetation shall be reseeded with a seed mix containing species observed within the habitat being impacted. Additionally, native vegetation being cleared and grubbed (duff) shall be collected, stored on-site, and pulled/raked back over the disturbed area after construction to allow for passive restoration over time. The construction contractor shall be responsible for the collection, storing and raking activities at the appropriate times during construction.

BIO-13: Worker Environmental Awareness Program. If it is confirmed through the implementation of pre-construction surveys that the Quail Valley Subarea 4 Project would occur within or immediately adjacent to sensitive habitat areas and/or habitat potentially suitable for special-status species, the Eastern Municipal Water District shall retain a qualified biologist to prepare and present a Worker Environmental Awareness Program to inform construction crews of the sensitive resources and associated avoidance and/or minimization requirements. The Worker Environmental Awareness Program shall be developed and presented prior to ground-disturbing activities by a qualified biologist and shall be

available in both English and Spanish. Handouts summarizing potential impacts on special-status biological resources and the potential penalties for impacts on these resources shall be provided to all construction personnel. At a minimum, the education program shall include the following:

- a description of special-status species observed or potentially on the Project site including representative photographs and general ecology;
- sensitivity of the species to human activities;
- regulatory framework for biological resource protection and consequences if violated;
- occurrences of aquatic resource features regulated by the U.S. Army Corps of Engineers, Regional Water Quality Control Board and/or the California Department of Fish and Wildlife in the project area;
- avoidance and minimization measures designed to reduce the impacts on special-status biological resources;
- environmentally responsible construction practices;
- reporting requirements and communication protocol to resolve conflicts that may arise at any time during the construction process.

It shall be the responsibility of the construction contractor to maintain a copy of the Worker Environmental Awareness training materials on the jobsite for the duration of project activities. The construction contractor shall also ensure that all workers, including any new members entering the Project site for the first time, review the training materials. All construction workers shall sign an acknowledgement form indicating their understanding of the material before beginning work.

4.3.5.4 Significance of Impacts After Mitigation

Implementation of **mitigation measures BIO-1 through BIO-13**, detailed above would be implemented when project level development plans are submitted under each phase of construction to (1) identify potential impacts to sensitive species, and (2) outline appropriate measures to reduce the impacts to below a level of significance. Implementation of **mitigation measures BIO-1 through BIO-13** would reduce impacts to sensitive and special-status species (plants and wildlife) to a less than significant level.

4.3.6 Threshold 2: Sensitive Natural Communities and Riparian Habitat

Would the project result in a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the CDFW or USFWS?

4.3.6.1 Impact Analysis

Table 4.3-3 summarizes the estimated total permanent and temporary impacts associated with the proposed Project by vegetation community and construction phase (see Figure 4.3-8a and 4.3-8b). Impacts associated with construction of LS-1 (Option 1) would incur smaller permanent impacts than LS-1 (Option 2). The connector pipe options CP-2 and CP-3 would be comparable in size to those estimated for CP-1. As such, impacts for the two CP options (CP-2 and CP-3) are assumed to be roughly equivalent to the impacts presented for CP-1.

a. Sensitive Upland Natural Communities

No sensitive upland natural communities were observed within the Project site. Therefore, the proposed Project would not result in direct permanent impacts or temporary impacts to sensitive upland natural communities, as defined by CDFW (CDFW 2025d).

b. Riparian Habitat

Direct Impacts

As shown in Table 4.3-3, direct permanent and temporary impacts to riparian habitat could occur within mule fat scrub, tamarisk scrub and tamarisk scrub–disturbed (Impact BIO-9). Direct impacts to riparian habitat considered jurisdictional by the USACE, RWQCB, and/or CDFW are described in Section 4.3.7, below.

Mitigation measures BIO-11, BIO-13, BIO-14a and 14b, detailed below, would be implemented during future construction phases to reduce potentially significant direct impacts to riparian habitat.

Indirect Impacts

Indirect impacts resulting from increased erosion or sedimentation on riparian habitat would be avoided through implementation of standard Best Management Practices (BMPs) for stormwater, as described in more detail in Section 4.3.7, below. At a minimum, fiber rolls and silt fencing would be installed adjacent to proposed Project work areas to reduce impacts from sediment. Additional significant indirect impacts could occur as a result of altered hydrology, fugitive dust, chemical and particulate pollution, and introduction of non-native plant species during construction activities. Habitat degradation from non-native plant species infestations after ground disturbance associated with project activities has the potential to reduce the long-term availability of habitat for special-status plants and wildlife species resulting in a potentially significant impact (Impact BIO-10).

Mitigation measures BIO-11, BIO-12, and BIO-13, described in Section 4.3.5.3 above, would be implemented during future construction phases to reduce potentially significant indirect impacts to riparian habitat.

4.3.6.2 Significance of Impacts

At this program level of analysis, the impacts summarized in **Table 4.3-5** and discussed above would be potentially significant.

4.3.6.3 Mitigation

Table 4.3-5 summarizes potentially significant impacts related to sensitive communities and riparian habitat, identifies mitigation measures to reduce those impacts, and discloses the level of significance after implementation of mitigation.

Table 4.3-5
Summary of Impact and Mitigation: Sensitive Natural Communities and Riparian Habitat

Significant Impact Description	Mitigation Measure(s) to Reduce Impacts	Impact After Mitigation Measure Implementation
Impact BIO-9: Direct impacts to Riparian Habitat	BIO-11, BIO-13, BIO-14a, BIO-14b	Less than Significant
Impact BIO-10: Impacts to Native Vegetation Communities from Invasive Species	BIO-11, BIO-12, BIO-13	Less than Significant

See **mitigation measures BIO-11, BIO-12, and BIO-13**, set out in subsection 4.3.5.3 above.

BIO-14a: Acquire Permits for Impacts to Jurisdictional Aquatic Resources. Prior to construction or ground-disturbing activities occurring within potentially jurisdictional aquatic resources for any phase or component of the Quail Valley Subarea 4 Project , the Eastern Municipal Water District (District) shall apply for and obtain the following regulatory permits and approvals from the U.S. Army Corps of Engineers, Regional Water Quality Control Board, and/or California Department of Fish and Wildlife, as applicable:

- Clean Water Act Section 404 Permit;
- Clean Water Act Section 401 Water Quality Certification; and/or
- California Fish and Game Code Section 1602 Streambed Alteration Agreement.

If the District elects to seek incidental take authorization through the Multiple Species Habitat Conservation Act Participating Special Entity process, the District shall also prepare for approval by the Western Riverside County Regional Conservation Authority, U.S. Fish and Wildlife Service, and California Department of Fish and Wildlife a Determination of Biologically Equivalent or Superior Preservation for impacts to Multiple Species Habitat Conservation Program Section 6.1.2, Riparian and Riverine Areas.

BIO-14b: Mitigation for Jurisdictional Impacts. The Eastern Municipal Water District shall mitigate for permanent and temporary impacts to jurisdictional aquatic resources off-site in accordance with the applicable permit condition(s) described in **mitigation measure BIO-14a**, estimated at no less than a 1:1 ratio. Temporary impacts are to be restored in place and permanent

impacts shall include a minimum 1:1 establishment/re-establishment component, unless otherwise negotiated by the Eastern Municipal Water District with the regulatory agencies.

4.3.6.4 Significance of Impacts After Mitigation

Implementation of **mitigation measures BIO-11, BIO-12, BIO-13, BIO-14a, and BIO-14b**, detailed above, would be implemented when project level development plans are submitted under phases 1, 2, and/or 3 of construction. Implementation of **mitigation measures BIO-11, BIO-12, BIO-13, BIO-14a, and BIO-14b** would reduce impacts on riparian habitat to a less than significant level.

4.3.7 Threshold 3: Jurisdictional Wetlands

Would the project result in 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?

4.3.7.1 Impact Analysis

a. Direct Impacts

The proposed Project could result in permanent direct impacts to potential jurisdictional resources during installation of the lift stations and manhole covers. Temporary impacts also may occur to potential jurisdictional resources during installation of the sewer mains, force mains, and connector pipes, as well as within work areas around the proposed Project components. **Table 4.3-6** summarizes direct permanent and temporary impacts to potential jurisdictional resources, as shown in **Figures 4.3-10a and 4.3-10b**. It is expected that direct impacts to some jurisdictional aquatic resources would be avoided through construction methods such as jack and bore, micro-drilling, and/or the use of standard BMPs. Jack and bore is a method of digging a pit on both sides of a stream or riparian habitat and using a machine that drills under the resources and allows the pipe to be placed without surface impacts. This is a dry drill method that does not use water or mud that can spill (frack out) and pollute the resource. Micro-drilling is a trenchless boring method that involves drilling holes smaller than three millimeters in diameter using a remote-controlled tunnelling machine.

This method provides a high degree of precision as it uses a laser-guided steerable remote-control system. BMPs also may avoid direct impacts by requirements that include flagging the limits of the wetland resources, not operating equipment within the limits of wetlands, and educating the workers on the location and significance of resources. However, any impacts not avoided would represent a significant impact (**Impact BIO-11**).

Mitigation measures BIO-11, BIO-13, BIO-14a and BIO-14b, would be implemented during future construction phases to reduce potentially significant indirect impacts to jurisdictional wetlands.

Table 4.3-6 Direct Impacts to Potential Jurisdictional Resources					
		Permanent Impact Area (acres)		Temporary Impact Area (acres)	
Phase	Potential Jurisdictional Resource Type[2]	Regional Lift Station 1 (Option 1), Lift Stations 2–5, Manholes	Regional Lift Station 1 (Option 2), Lift Stations 2–5, Manholes	Gravity Sewer with Connector Pipe Option 1, Force Mains, Manhole Work Areas, Regional Lift Station 1 (Option 1)	Gravity Sewer with Connector Pipe Option 1, Force Mains, Manhole Work Areas, Regional Lift Station 1 (Option 2)
1	USACE/RWQCB Non-Wetland Waters / CDFW Streambed	<0.01	--	0.01	<0.01
	USACE/RWQCB Wetland Waters / CDFW Wetland and/or Riparian Habitat	0.02	0.25	0.16	0.13
Phase 1 Total[1]		**0.03**	**0.25**	**0.16**	**0.13**
2	USACE/RWQCB Non-Wetland Waters / CDFW Streambed	<0.01	<0.01	0.01	0.01
	USACE/RWQCB Wetland Waters / CDFW Wetland and/or Riparian Habitat	0.01	0.01	0.07	0.11
Phase 2 Total		**0.01**	**0.01**	**0.08**	**0.12**
3	USACE/RWQCB Non-Wetland Waters / CDFW Streambed	--	--	0.01	0.01
	USACE/RWQCB Wetland Waters / CDFW Wetland and/or Riparian Habitat	--	--	0.06	0.08
Phase 3 Total		**--**	**--**	**0.07**	**0.09**
4	USACE/RWQCB Non-Wetland Waters / CDFW Streambed	<0.01	<0.01	0.01	0.01
	USACE/RWQCB Wetland Waters / CDFW Wetland and/or Riparian Habitat	<0.01	<0.01	0.18	0.18
Phase 4 Total		**<0.01**	**<0.01**	**0.19**	**0.19**
5	USACE/RWQCB Non-Wetland Waters / CDFW Streambed	<0.01	<0.01	0.02	0.02
	USACE/RWQCB Wetland Waters / CDFW Wetland and/or Riparian Habitat	<0.01	<0.01	0.12	0.12
Phase 5 Total		**<0.01**	**<0.01**	**0.14**	**0.14**
6	USACE/RWQCB Non-Wetland Waters / CDFW Streambed	--	--	<0.01	<0.01
	USACE/RWQCB Wetland Waters / CDFW Wetland and/or Riparian Habitat	--	--	0.01	0.01

Table 4.3-6 (cont.) Direct Impacts to Potential Jurisdictional Resources					
		Permanent Impact Area (acres)		Temporary Impact Area (acres)	
Phase	Potential Jurisdictional Resource Type[2]	Regional Lift Station 1 (Option 1), Lift Stations 2–5, Manholes	Regional Lift Station 1 (Option 2), Lift Stations 2–5, Manholes	Gravity Sewer with Connector Pipe Option 1, Force Mains, Manhole Work Areas, Regional Lift Station 1 (Option 1)	Gravity Sewer with Connector Pipe Option 1, Force Mains, Manhole Work Areas, Regional Lift Station 1 (Option 2)
Phase 6 Total		**--**	**--**	**0.01**	**0.01**
7	USACE/RWQCB Non-Wetland Waters / CDFW Streambed	<0.01	<0.01	0.01	0.01
	USACE/RWQCB Wetland Waters /CDFW Wetland and/or Riparian Habitat	<0.01	<0.01	0.14	0.14
Phase 7 Total		**<0.01**	**<0.01**	**0.15**	**0.15**
8	USACE/RWQCB Non-Wetland Waters / CDFW Streambed	--	--	<0.01	<0.01
	USACE/RWQCB Wetland Waters /CDFW Wetland and/or Riparian Habitat	--	--	<0.01	<0.01
Phase 8 Total		**--**	**--**	**0.01**	**0.01**
Total[1]		**0.04**	**0.25**	**0.80**	**0.83**

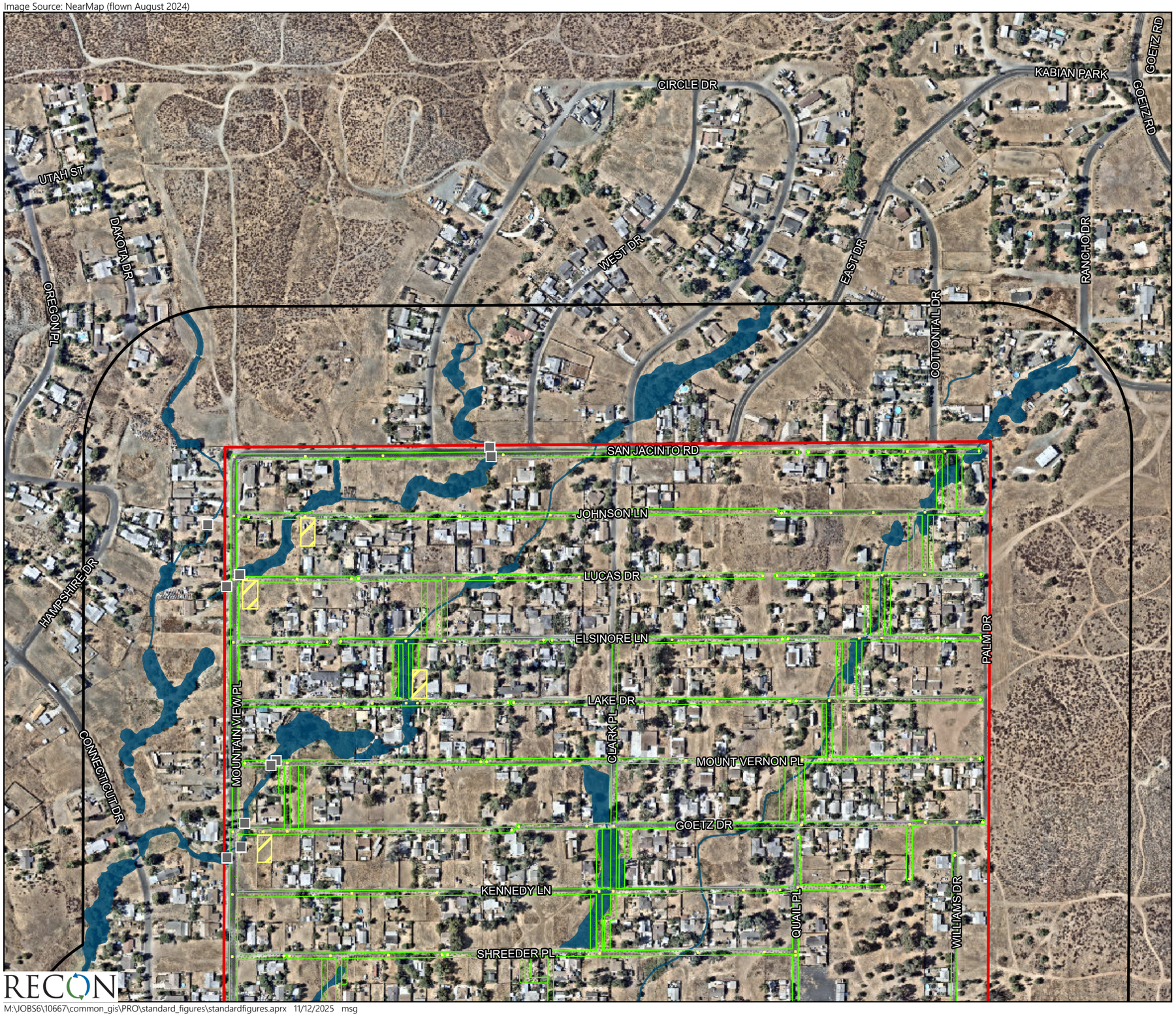
NOTE: The reported acreage and linear footage are approximate, as they are based on a constraints-level delineation. A formal aquatic resources delineation would be required to determine precise values.

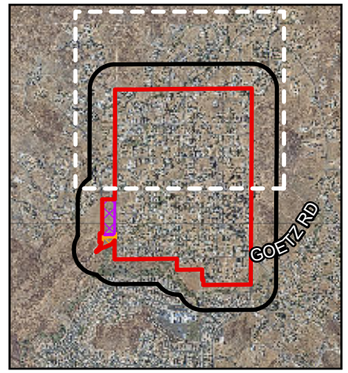
[1]Areas are presented in acres, rounded to the nearest 0.001; discrepancies are due to rounding.

[2]Any potentially U.S. Army Corps of Engineers or Regional Water Quality Control Board jurisdictional areas are also considered Western Riverside Multiple Species Habitat Conservation Program Riparian/Riverine Areas. As such, a separate table for these impacts is not provided.

SOURCE: Appendix D.

Image Source: NearMap (flown August 2024)





- Project Boundary
- Survey Area
- Culvert
- Permanent Impact
- Temporary Impact
- Potential USACE/RWQCB/CDFW Jurisdictional Resource

0 Feet 350

FIGURE 4.3-10a
Impacts to Potential Jurisdictional Resources

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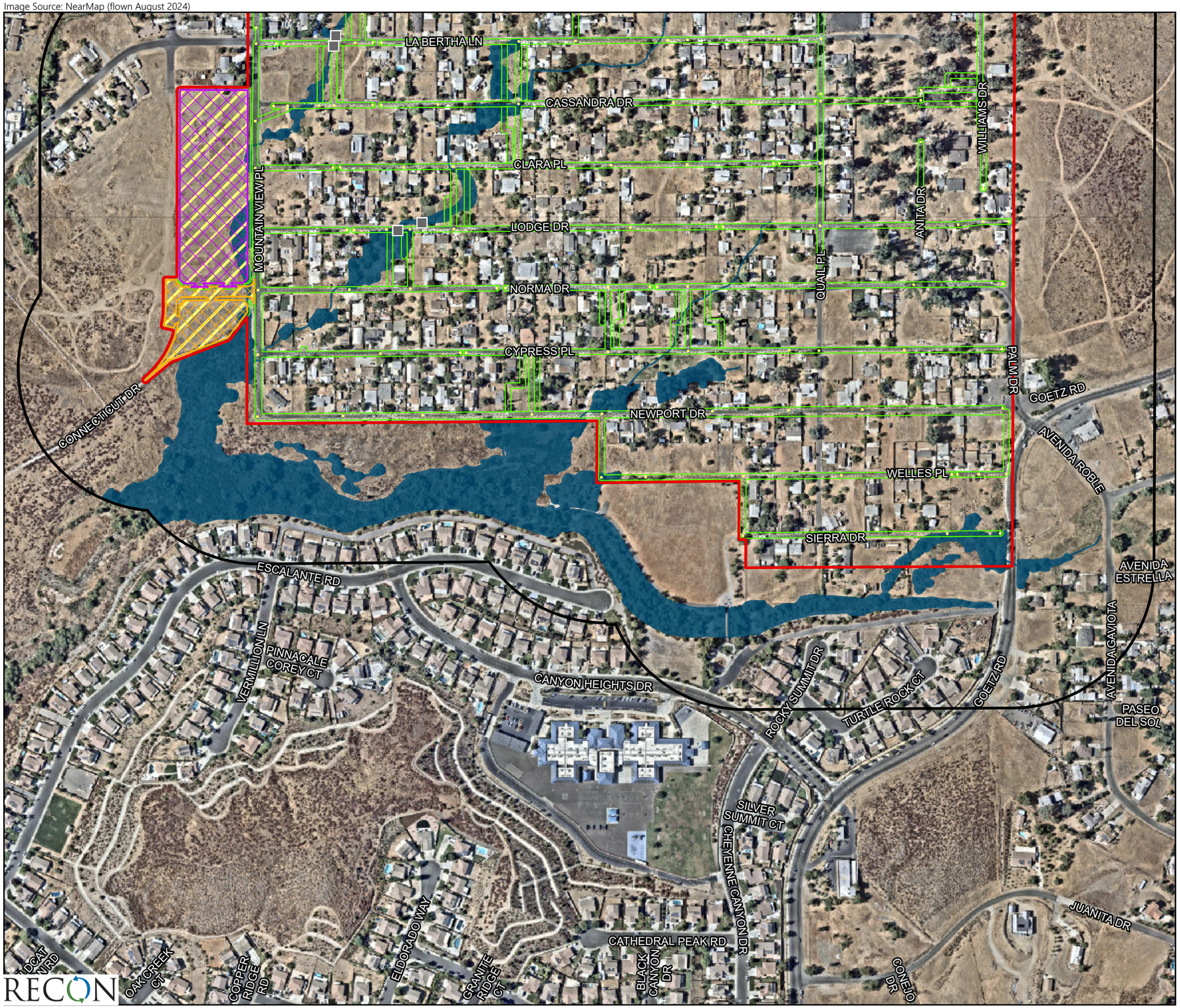
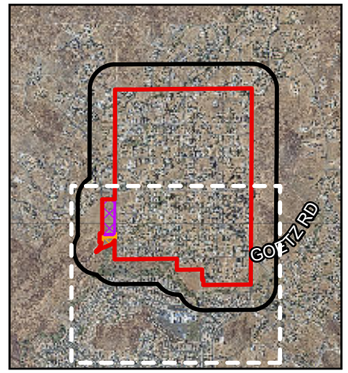
Image Source: NearMap (flown August 2024)





- Project Boundary
- Survey Area
- LS-1 Option 1
- LS-1 Option 2
- Culvert
- Permanent Impact
- Temporary Impact
- Potential USACE/RWQCB/CDFW Jurisdictional Resource

0 Feet 350

RECON

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FIGURE 4.3-10b
Impacts to Potential Jurisdictional Resources

b. Indirect Impacts

Indirect impacts from the proposed Project would be reduced through implementation of standard construction BMPs. As discussed in Section 4.9 of this PEIR, future phased development would require preparation of a Storm Water Pollution Prevention Plan. Implementation of a Storm Water Pollution Prevention Plan and associated BMPs are required under the statewide General Construction Permit (2009-0009-DWQ). Specific BMPs may include, but would not necessarily be limited to, maintaining the proposed Project work areas free of trash and debris; employing appropriate standard spill prevention practices and clean-up materials; installing and maintaining sediment and erosion control measures; maintaining effective control of fugitive dust; and properly storing, handling, and disposing of toxins and pollutants, including waste materials.

4.3.7.2 Significance of Impacts

At this program level of analysis, the impacts summarized in **Table 4.3-7**, as discussed above, would be potentially significant.

4.3.7.3 Mitigation

Table 4.3-7 summarizes potentially significant impacts related to jurisdictional wetlands, identifies mitigation measures to reduce those impacts, and discloses the level of significance after implementation of mitigation.

Table 4.3-7
Summary of Impact and Mitigation: Jurisdictional Wetlands

Significant Impact Description	Mitigation Measures to Reduce Impacts	Impact After Mitigation Measure Implementation
Impact BIO-11: Direct impacts to Jurisdictional Wetlands	BIO-11, BIO-13, BIO-14a, BIO-14b	Less than Significant

See **mitigation measures BIO-14a and BIO-14b,** set out in subsection 4.3.6.3 and **mitigation measures BIO-11 and BIO-13**, set out in subsection 4.3.5.3.

4.3.7.4 Significance of Impacts After Mitigation

Implementation of **mitigation measures BIO-11, BIO-13, BIO-14a, and BIO-14b**, detailed above, would be implemented when project level development plans are submitted under phases 1, 2, and/or 3 of construction. Implementation of **mitigation measures BIO-11, BIO-13, BIO-14a, and BIO-14b** would reduce impacts on jurisdictional wetlands to a less than significant level.

4.3.8 Threshold 4: Wildlife Corridors and Native Wildlife Nursery Sites

Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

4.3.8.1 Impact Analysis

a. Wildlife Corridors

The proposed Project is not anticipated to significantly alter the quality of habitat for migratory bird species because future wastewater collection facilities would predominantly be located underground. The proposed lift stations would have some aboveground components; however, LS-2 through LS-5 would be constructed within urban/developed areas that do not currently provide quality habitat for migratory bird species or support terrestrial wildlife connectivity. Only LS-1 (Options 1 and 2) would be constructed within native habitats, permanently impacting 1.1 to 3.1 acres of land that could provide wildlife movement corridors, depending on the location chosen. Both options would be constructed primarily within disturbed stands of Riversidian sage scrub, tamarisk scrub and/or non-native grassland dominated by broadleaf weedy species. As such, these locations do not currently provide high-quality habitat for terrestrial wildlife species or migratory bird species. Therefore, the proposed Project would not result in a significant physical barrier to large-scale wildlife movement.

b. Nursery Sites

The project site contains habitat suitable for roosting bats, including palm trees, many of which have not been trimmed to remove the dead fronds. These thick, overlapping palm fronds support microhabitat for bat roost sites, and removal of these palms during proposed Project construction could impact these potential nursery sites. Impacts could include direct mortality of maternal roost sites and multiple individual bats, some of which also could be sensitive. As stated above under Section 4.3.5.1.e, impacts to these potentially occurring maternal bat roost sites would be potentially significant (**Impact BIO-7**).

Mitigation measure BIO-10 would be implemented during future construction phases to reduce potentially significant direct impacts to nursery sites.

As previously discussed under subsection 4.3.5.1.f. above, the proposed Project may result in direct removal of trees, native shrubs, and grassland habitat as a result of construction. Each of these vegetation types potentially support avian species protected under the MBTA and CFGC. There is a potential that trees also may need to be trimmed to access construction areas. Tree removal and trimming have the potential to result in direct take of nesting bird species, including raptors, covered under the MBTA and CFGC Sections 3503 and 3503.5. In addition, indirect impacts could occur as a result of noise, night lighting, and human presence from construction activities is expected near potential nest locations (i.e., trees; **Impact BIO-8**).

4.3.8.2 Significance of Impacts

At this program level of analysis, the impacts summarized in **Table 4.3-8**, as discussed above, would be potentially significant.

4.3.8.3 Mitigation

Table 4.3-8 summarizes potentially significant impacts related to wildlife corridors and nursery sites, identifies mitigation measures to reduce those impacts, and discloses the level of significance after implementation of mitigation.

Table 4.3-8
Summary of Impact and Mitigation: Wildlife Corridors and Nursery Sites

Significant Impact Description	Mitigation Measure to Reduce Impacts	Impact After Mitigation Measure Implementation
Impact BIO-7: Direct Impacts to Jurisdictional Wetlands	BIO-10	Less than Significant
Impact BIO-8: Impacts to MBTA Avian Species and Raptors	BIO-5	Less than Significant

See **mitigation measures BIO-5 and BIO-10**, set out in subsection 4.3.5.3.

4.3.8.4 Significance of Impacts After Mitigation

Implementation of **mitigation measures BIO-5 and BIO-10** would be implemented when project level development plans are submitted. Implementation of **mitigation measures BIO-5 and BIO-10** would reduce impacts on nursery sites to a less than significant level.

4.3.9 Thresholds 5 and 6: Local Ordinances/Habitat Conservation Plan

Would the project conflict with any local policies or ordinances protecting biological resources, such as tree preservation policy or ordinance?

Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

4.3.9.1 Impact Analysis

The local regulations determined to be of relevance to this project is the MSHCP and the SKR HCP as defined in subsection 4.3.2.3.

4.3.9.2 Impact Analysis

The proposed Project is not located within an MSHCP designated criteria cell. The proposed Project site is not located within any MSHCP narrow endemic plant species survey area, criteria area plant species survey area, or wildlife species survey area, except for the small portion of the proposed Project site that is located within the MSHCP survey area for burrowing owl. Specifically, options for LS-1 (Options 1 and 2) are located within the MSHCP survey area for burrowing owl. As discussed in subsection 4.3.5.1.b above, requirements for burrowing owl surveys would be implemented, if required.

The MSHCP requires projects with potential direct or indirect impact to riparian and riverine resources to avoid or mitigate for impacts. The proposed Project occurs adjacent to and directly within riparian and riverine habitats. As discussed in subsection 4.3.6.1.b, requirements consistent with the MSHCP would be implemented, if required.

The District is not a signatory to the MSHCP and, as such, is not subject to the requirements of the MSHCP. The District has the option to obtain take authorization for activities by receiving coverage through the Participating Special Entity process. Coastal California gnatcatcher, least Bell's vireo, burrowing owl, and Stephen's kangaroo rat are covered species under the MSHCP. If the proposed focused surveys observed any of these species within any of the proposed Project phases, the District may consider pursuing the Participating Special Entity process for take coverage. As discussed in subsection 4.3.6.1.b, requirements consistent with the MSHCP would be implemented, if required.

Due to the implementation of requirements consistent with the MSHCP, the proposed Project would not conflict with the MSHCP. These requirements include focused plant and animal surveys, avoidance of impacts to wildlife species habitat during critical development stages, riparian/riverine avoidance and minimization measures, and habitat-based mitigation. As such, implementation of the proposed Project would not conflict with the MSHCP.

Similarly, the Project is located within the limits of the Stephens' Kangaroo Rat HCP Area. In accordance with **mitigation measure BIO-9**, the District will pay the Stephens' Kangaroo Rat Mitigation fee of $500 per acre of impact to the RCHCA, which implements the Stephens' Kangaroo Rat HCP. As such, implementation of the proposed Project would not conflict with the Stephens' Kangaroo Rat HCP.

4.3.9.3 Significance of Impacts

The proposed Project would not conflict with an adopted HCP intended to protect biological resources, and impacts would be less than significant.

4.3.9.4 Mitigation

No mitigation is required.

4.3.9.5 Significance of Impacts After Mitigation

No mitigation is required.

4.4 Cultural and Tribal Cultural Resources

This section analyzes impacts related to cultural and tribal cultural resources that could result from implementation of the proposed Project. Construction of the proposed Project is planned to be carried out in eight phases implemented over a 20-year period. This evaluation is programmatic, focusing on the environmental impacts that could occur from implementation of all phases of construction (see Chapter 3). As each phase is constructed, project-level analyses may be required to further quantify any identified significant impacts.

This section includes a setting discussion that describes the existing cultural resources conditions in and around the Project site and summarizes applicable regulations related to cultural resources. This section also includes an evaluation of potential impacts of the proposed Project related to cultural and tribal cultural resources. The cultural resources described in this section are based on the findings provided in the Cultural Resources Survey Report prepared for the proposed Project (Appendix E).

4.4.1 Existing Conditions

4.4.1.1 Natural Setting

The Project site consists of a series of small hills, with elevations ranging from approximately 1,400 feet above mean sea level in a stream in the southwest corner, to 1,700 feet above mean sea level on a hill in the eastern portion.

There are several small drainages generally flowing northeast to southwest in low areas through the main portion of the Project site. A larger unnamed stream flows east to west just south of the Project site. This larger stream terminates at Canyon Lake, approximately 0.8 miles to the southwest of the Project site. During prehistoric time, the San Jacinto River was approximately one mile west of the Project site. Currently, this is the Railroad Canyon Reservoir that forms Canyon Lake at its south end.

As shown in Figure 4.6-1 the majority of the Project site has been mapped as Lodo rocky loam with 8 to 25 percent slope. Rock outcrops occupy 2 to 10 percent of the surface. Lodo series consists of excessively drained upland soils that developed on metamorphosed fine-grained sandstone. In a typical soil profile of the Project site, the top layer is brown gravelly loam, about 8 inches thick, and underlain by weathered fine-grained metamorphosed, sandstone from 8 to 15 inches in depth (U.S. Department of Agriculture 1971).

4.4.1.2 Cultural Setting

The following is a cultural chronology of Riverside County based on a synthesis of existing literature. This chronology is intended as a general model, which is dynamic and subject to modification as new information is uncovered. The prehistory of western Riverside County is grouped into prehistoric, ethnohistoric, and historic periods. The prehistory of Riverside County spans four general temporal periods: Early Holocene, Middle Holocene, Late Holocene, and ethnohistory.

a. Early Holocene (10,000 to 7,000 Before Present [B.P.])

The early occupants of Riverside County were adapted to a wetter environment before the warmer climate led to the evaporation of the lakes (Moratto 1984). These early populations are archaeologically represented by an archaeological pattern known as the Western Pluvial Lakes Tradition (WPLT; Bedwell 1970). The WPLT includes the Playa, San Dieguito, Lake Mojave, and Death Valley I cultural complexes. The archaeological pattern of the WPLT is defined by the following:

- Site locations being on or near former pluvial lakeshores or along old streams;
- A focus on hunting mammals and collecting and gathering plant materials;
- A toolkit including chipped-stone crescents, large flake and core scrapers, choppers, scraper planes, hammerstones, cores, drills and gravers, and a variety of flakes;
- A developed flaked-stone technology with percussion-flaked foliate knives and points, Silver Lake and Lake Mojave points; and
- A lack of ground stone artifacts.

The people lived in small social units that used a forager-like strategy and revisited the same locations depending on seasonal resource productivity (Sutton et al. 2007).

b. Middle Holocene (7,000 to 1,500 B.P.)

The Middle Holocene brings a shift toward a more generalized economy and an increased emphasis on seed resources, small game, and shellfish along the coast because of the warmer and drier conditions (Byrd and Raab 2007). The archaeological pattern for Middle Holocene populations in western Riverside County is termed the Millingstone Horizon. The Millingstone Horizon includes the La Jolla, Pauma, and Sayles cultural complexes represented by an abundance of milling stones, manos, and scrapers (Moratto 1984). The La Jolla Complex was defined from coastal San Diego sites (Rogers 1938, 1945). An apparent inland manifestation of the La Jolla Complex was termed the "Pauma Complex" by D. L. True (1958). Archaeological investigations in the Cajon Pass in San Bernardino County were used to define the Sayles Complex as a variant of the Millingstone Horizon in San Bernardino and Riverside counties (Kowta 1969). The Sayles Complex, also termed the Greven Knoll Pattern III, is characterized by contact with the desert rather than the coast as noted by the absence of shell beads, and shellfish (Sutton and Gardner 2010).

c. Late Holocene (1,500 B.P. to 1796)

One model maintains that Takic-speaking people (also referred to as Shoshonean speakers) from the Colorado River region moved westward into Riverside County (Moratto 1984) during the Late Holocene. Another model advocates that a proto-Takic group arrived from Northern Uto-Aztecan speakers from the north to Los Angeles and Orange counties during the Middle Holocene, replacing previous inhabitants. Between 1,500 and 1,000 B.P. Takic languages diffused south and east and were adopted by Yuman people (Sutton 2009). Cultures representative during the Late Holocene are the San Luis Rey Complex in northern San Diego County and western Riverside County and the Irvine

Complex in Orange County (Meighan 1954; Moratto 1984; True et al. 1974). The San Luis Rey Complex is divided into an early phase, San Luis Rey I, and a later phase, San Luis Rey II. San Luis Rey I sites often have recognizable midden soils and may include cremations and bedrock mortars. The artifact assemblage includes metates, Cottonwood Triangular type projectile points, drills, bifacially flaked knives, bone awls, occasional steatite arrow shaft straighteners, and bone and shell ornaments. San Luis Rey II sites consist of the same assemblage with the addition of Tizon Brown Ware ceramics, red and black pictographs, cremation remains in urns, and historic materials such as glass beads and metal objects (True and Waugh 1981).

d. Ethnohistory

The Project site includes an area where the traditional territories of the Cahuilla, Luiseño, and the Gabrielino intersect, according to Kroeber (1925) and Bean and Smith (1978).

The Cahuilla are one of the most southwesterly of the Shoshonean or Uto-Aztecan speakers. They are members of the Takic branch of this large language family. Traditional Cahuilla territory originally included western and part of central Riverside County and extended into northeastern San Diego and northwestern Imperial counties. The western boundary generally followed the Santa Ana, Elsinore, and Palomar mountains. The northern boundary extended north of Riverside to the San Gabriel and San Bernardino mountains. Cahuilla territory extended east to include the Coachella Valley and down the valley as far south as the approximate middle of the Salton Sea. The approximate southern territorial limits included Borrego Springs and the south end of the Santa Rosa Mountains. The Cahuilla territory consisted of the mountain, the pass or western, and the desert divisions (Bean 1978; Hooper 1920; Strong 1929).

According to Kroeber (1925), Cahuilla society consisted of two ceremonial divisions or moieties: wildcat and coyote. People were further divided into somewhat localized, patrilineal clans. Each clan had a chief: *net* in Cahuilla (Kroeber 1925). Some villages contained people of only one clan, but other villages had more than one clan. Also, people of one clan may have lived in more than one village. Chiefs were usually chosen by heredity. They were primarily concerned with economic issues such as determining where and when people should gather particular foods or hunt game, and for the correct maintenance of the ritual aspect of the clan. Choice hunting and gathering areas were owned by the clan. The clan chief also settled intraclan disputes and met with other *nets* to solve interclan problems and organize ceremonies among clans (Bean 1978).

The Luiseño were Shoshonean or Uto-Aztecan-speaking populations that were found in northern San Diego, southern Orange, and southeastern Riverside counties from the onset of ethnohistoric times through the present day. These people are linguistically and culturally related to the Gabrielino and Cahuilla and appear to be the direct descendants of Late Prehistoric populations. The basic unit of Luiseño social structure was the clan triblet. The triblet was composed of patrilineally related people who were politically and economically autonomous from neighboring triblets. Unlike other Takic-speaking tribes that surround them, the Luiseño do not appear to have been organized into exogamous moieties (descent groups that married outside one's birth group), but may have been loosely divided into mountain-oriented groups and ocean-oriented groups (Bean and Shipek 1978). One or more clans would reside together in a village (Oxendine 1983). A heredity village chief held a position that controlled economic, religious, and warfare powers (Bean and Shipek 1978).

The Gabrielino were Cupan speakers. The Cupan languages are part of the Takic family, which is part of the Uto-Aztecan linguistic stock. Their tribal territory included the watersheds of the Los Angeles, San Gabriel, and Santa Ana rivers, all of the Los Angeles Basin, the coast from Aliso Creek in the south to Topanga Creek in the north, and the islands of San Clemente, San Nicholas, and Santa Catalina. Villages or triblets were politically autonomous and made up of different lineages. Each lineage had its own leader and would seasonally leave the village to collect resource items. The Gabrielino traded with the Serrano to the east. They traded their coastal shell through middlemen to the interior of southern California and the Southwest. Steatite from Santa Catalina Island was their main trade item (Bean and Smith 1978).

e. Historic Period

The Spanish Period in California (1769–1821) represents a time of European exploration and settlement. Military and religious contingents established the San Diego Presidio and the San Diego Mission in 1769, San Carlos Borroméo de Carmelo (Carmel) in 1770, and San Gabriel Arcángel in 1771. Mission San Gabriel Arcángel claimed the areas around Riverside, Jurupa, San Jacinto, and the San Gorgonio Pass. The opening of the mission system created the need to link Alta California with Sonora. Juan Bautista de Anza of Tubac was commissioned to open up a road across the Colorado Desert to San Gabriel and on to Monterey. The first de Anza Expedition took place between 1774 and 1775. Anza stopped in the vicinity of present-day Riverside at an Indian Village along the Santa Ana River southwest of Mount Rubidoux (Hoover et al. 2002).

During the Mexican Period (1821–1848), the missions were secularized, opening vast tracts of former mission lands for private use and settlement. The numerous grants dramatically expanded the rancho system. A total of 16 land grants were established in what became Riverside County. Quail Valley was located between La Laguna (Stearns) Rancho to the southwest and the San Jacinto Nuevo y Potrero Rancho to the northeast. Cattle ranching still dominated the economy and the development of the hide and tallow trade with New England merchant ships increased during the early part of the Mexican Period. The Mexican Period ended when Mexico signed the Treaty of Guadalupe Hidalgo on February 2, 1848, concluding the Mexican–American War (1846–1848; Rolle and Verge 2008). California became a state in 1850.

American influence in the Riverside area began slowly, but the construction of the transcontinental railroad in 1883 spurred a great influx of homesteaders, developers, and speculators. Riverside County was created in 1893 from a small (590 square miles) but wealthy part of San Bernardino County and a large (6,044 square miles) part of San Diego County (Holmes 1912). In 1883, the California Southern Railroad as subsidiary of the Santa Fe Railroad was completed through Perris where the San Jacinto and Temecula branches met. The main branch of the Southern California Railroad was completed from National City through Oceanside, Temecula, Elsinore, and Perris, terminating in Colton in 1882, where it connected to the Southern Pacific Railroad (Bryant and Frailey 2020; Glischinski 2008). By 1888, the San Jacinto branch of the Southern California Railroad was completed from Perris through San Jacinto Canyon. The areas near railroad stations developed into towns including Temecula, Perris, Colton, and San Jacinto City (Guinn 1907).

The community of Quail Valley began with the purchase of 300 acres by Charles L. Cooper and a group of Los Angeles bankers from Farmer's and Merchant's Bank in 1891. In 1910, six men associated

with the bank formed the Quail Valley Land Company, which owned 2,000 acres of land in the Menifee Valley. The land was used as a game reserve for hunting quail, dove, and rabbit. By the 1920s, the land was sold to investors who developed the Lake Elsinore Lodge with amenities such as a club house, tennis courts, handball courts, dancing, hunting, hiking, riding, and a large outdoor plunge. Additionally, there were cabin sites available for purchase within the recreational area. The portion of the property that had not been sold in the mid-1940s was sold to Pacific Coast Finance Company and renamed to the Quail Valley Country Club by its president, son of Charles L. Cooper, in honor of his father. After being surrounded by a fence and establishing a guarded front entrance, the resort thrived in the 1950s; however, financial issues forced the country club to file for bankruptcy in the late 1960s. The club house fell to disrepair and the lot remains vacant (Johnson 2013).

4.4.2 Applicable Regulatory Requirements

4.4.2.1 Federal

a. National Historic Preservation Act of 1966

The National Historic Preservation Act of 1966 established the National Register of Historic Places (NRHP) as the official federal list of cultural resources that have been nominated by state offices for their historical significance at the local, state, or national level. The NRHP, which is administered by the National Park Service, is "an authoritative guide to be used by federal, state, and local governments, private groups, and citizens to identify the nation's cultural resources and to indicate what properties should be considered for protection from destruction or impairment." Listing in the NRHP assists in preservation of historic properties through the following actions: recognition that a property is of significance to the nation, the state, or the community; consideration in planning for federal or federally assisted projects; eligibility for federal tax benefits; consideration in the decision to issue a federal permit; and qualification for federal assistance for historic preservation grants, when funds are available.

Properties may qualify for NRHP listing if they qualify under the following criteria:

Criterion A: Associated with events that have made a significant contribution to the broad patterns of history;

Criterion B: Associated with the lives of persons significant in the past;

Criterion C: Embody the distinctive characteristics of a type, period, or method of construction; represent the work of a master; possess high artistic values, represent a significant and distinguishable entity whose components may lack individual distinction; or

Criterion D: Have yielded, or may be likely to yield, information important in prehistory or history.

Structures and features must usually be at least 50 years old to be considered for listing on the NRHP, barring exceptional circumstances. According to the NRHP guidelines, a resource must retain its

integrity, or the "ability to convey its significance." The seven aspects of integrity are location, design, setting, materials, workmanship, feeling, and association.

b. Federal Native American Graves Protection and Repatriation Act

The Native American Graves Protection and Repatriation Act (NAGPRA) is a federal law that was established in 1990. NAGPRA provides a process for museums and federal agencies to return certain Native American cultural items—human remains, funerary objects, sacred objects, or objects of cultural patrimony—to lineal descendants, and culturally affiliated Native American tribes and Native Hawaiian organizations. NAGPRA includes provisions for unclaimed and culturally unidentifiable Native American cultural items, intentional and inadvertent discovery of Native American cultural items on federal and tribal lands, and penalties for noncompliance and illegal trafficking in these items. On March 15, 2010, the U.S. Department of the Interior issued a final rule on 43 Code of Federal Regulations Part 10, of the NAGPRA Regulations–Disposition of Culturally Unidentifiable Human Remains. The final rule implements NAGPRA by adding procedures for the disposition of culturally unidentifiable Native American human remains in the possession or control of museums or federal agencies. The rule also amends sections related to purpose and applicability of the regulations, definitions, inventories of human remains and related funerary objects, civil penalties, and limitations and remedies. The rule became effective on May 14, 2010.

Federal curation regulations are also provided in 36 Code of Federal Regulations Part 79, which apply to collections that are excavated or removed under the authority of the Antiquities Act (16 U.S.C. 431-433), the Reservoir Salvage Act (16 U.S.C. 469-469c), Section 110 of the National Historic Preservation Act (16 U.S.C. 470h-2), or the Archaeological Resources Protection Act (16 U.S.C. 470aa–mm). Such collections generally include those that are the result of a prehistoric or historic resources survey, excavation or other study conducted in connection with a federal action, assistance, license, or permit.

4.4.2.2 State

a. California Environmental Quality Act Guidelines and California Register of Historical Resources

CCR Title 14, Chapter 3, Section 15064.5 (CEQA Guidelines) establishes the procedure for determining the significance of impacts to archaeological and historical resources, as well as classifying the type of resource. Cultural resources are aspects of the environment that require identification and assessment for potential significance. The evaluation of cultural resources under CEQA is based upon the definitions of resources provided in State CEQA Guidelines Section 15064.5, as follows:

- A resource listed in, or determined to be eligible by, the State Historical Resources Commission, for listing in the California Register of Historical Resources (CRHR; PRC Section 5024.1, Title 14 CCR, Section 4850 et seq.).

- A resource included in a local register of historical resources, as defined in Section 5020.1(k) of the PRC, or identified as significant in a historical resource survey pursuant to the requirements of section 5024.1(g) of the PRC, shall be presumed to be historically or culturally

significant. Public agencies must treat any such resource as significant unless the preponderance of evidence demonstrates that it is not historically or culturally significant.

- Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered to be an historical resource, provided the lead agency's determination is supported by substantial evidence in light of the whole record.

Generally, a resource shall be considered by the lead agency to be "historically significant" if the resource meets the criteria for listing on the CRHR (PRC Section 5024.1, Title 14 CCR, Section 4852) including the following:

1) Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;

2) Is associated with the lives of persons important in our past;

3) Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or

4) Has yielded, or may be likely to yield, information important in prehistory or history.

The fact that a resource is not listed in, or determined to be eligible for listing in, the CRHR, not included in a local register of historical resources (pursuant to Section 5020.1[k] of the PRC), or identified in a historical resources survey (meeting the criteria in Section 5024.1[g] of the PRC) does not preclude a lead agency from determining that the resource may be a historical resource as defined in PRC Sections 5020.1(j) or 5024.1.

The CRHR may also include properties listed in local registers of historic properties. A "local register of historic resources" is broadly defined in Section 5020.1(k) as "a list of properties officially designated or recognized as historically significant by a local government pursuant to a local ordinance or resolution." Local registers of historic properties come in two forms: (1) surveys of historic resources conducted by a local agency in accordance with Office of Historic Preservation procedures and standards, adopted by the local agency and maintained as current and (2) landmarks designated under local ordinances or resolutions (PRC Sections 5024.1, 21804.1, and 15064.5). The minimum age criterion for the CRHR is 50 years. Properties less than 50 years old may be eligible for listing on the CRHR, if "it can be demonstrated that sufficient time has passed to understand its historical importance" (Chapter 11, Title 14, Section 4842[d][2]).

A tribal cultural resource may be considered significant if it is included in a local or state register of historical resources or determined by the lead agency to be significant pursuant to criteria set forth in PRC Section 5024.1; is a geographically defined cultural landscape that meets one or more of these criteria; or is a historical resource described in PRC Section 21084.1 or a unique archaeological resource described in PRC Section 21083.2, or a non-unique archaeological resource if it conforms with the above criteria.

b. California Health and Safety Code Sections 7050.5, 7051, and 7054

These sections collectively address the illegality of interference with human burial remains, as well as the disposition of Native American burials in archaeological sites. The law protects such remains from disturbance, vandalism, or inadvertent destruction, and establishes procedures to be implemented if Native American skeletal remains are discovered during construction of a project, including the treatment of remains prior to, during, and after evaluation, and reburial procedures. HSC Section 7050.5 states that no further disturbance shall occur until the County Coroner has determined the origin and disposition pursuant to PRC Section 5097 et seq. described in Section 4.4.2.2.c below. The County Coroner must be notified of the find immediately. If the human remains are determined to be prehistoric (Native American), the Coroner will notify the Native American Heritage Commission (NAHC), which will determine and notify a Most Likely Descendant (MLD). The MLD shall complete the inspection of the site within 48 hours of notification and may recommend scientific removal and non-destructive analysis of human remains and items associated with Native American burials.

c. Native American Historic Cultural and Sanctified Cemetery Sites (Public Resources Code Section 5097 et seq.)

State law addresses the disposition of Native American burials in archaeological sites and protects such remains from disturbance, vandalism, or inadvertent destruction; establishes procedures to be implemented if Native American skeletal remains are discovered during construction of a project; and establishes the NAHC to resolve disputes regarding the disposition of such remains. In addition, the Native American Historic Resource Protection Act makes it a misdemeanor punishable by up to a year in jail to deface or destroy a Native American historic, cultural, or sacred site that is listed or may be eligible for listing in the CRHR. In 2006, the law was amended to revise the process for the discovery of Native American remains during land development. The revisions encourage culturally sensitive treatment of Native American remains, and to require meaningful discussions and agreements concerning treatment of the remains at the earliest possible time. The intent is to foster the preservation and avoidance of human remains during development. The changes in the law allow additional time to notify, consult, and confer with the MLD/Native American representatives on any given project. In addition, the new language provides more protection for reinterment sites.

Specifically, PRC Section 5097.9 states that no public agency, and no private party using or occupying public property or operating on public property, shall interfere with the free expression or exercise of Native American religion, nor shall any such agency cause severe or irreparable damage to any Native American sanctified cemetery, place of worship, religious or ceremonial site, or sacred shrine located on public property, except on a clear and convincing showing that the public interest and necessity so require.

d. Assembly Bill 52

California AB 52 specifies that a project that causes a substantial adverse change in the significance of tribal cultural resources may have a significant effect on the environment. AB 52 requires that a lead agency consult with California Native American tribes that are traditionally and culturally affiliated with geographic areas and that request notification. AB 52 applies to projects that have a

notice of preparation or a notice of negative declaration or mitigated negative declaration on or after July 1, 2015. This bill also required the separate consideration of tribal cultural resources in the CEQA thresholds.

Assembly Bill 52 Consultation Process

Any project that requires a notice of preparation, mitigated negative declaration, or environmental impact report requires AB 52 consultation, which would entail the following:

1) Within 14 days of determining that an application for a project is complete or a decision by a public agency to undertake a project, the lead agency shall provide formal notification to California Native American tribes that are traditionally and culturally affiliated with the geographic area of the project and have requested to the lead agency, in writing, to be informed of projects.

2) Such California Native American tribes have 30 days of receipt of formal notification to request consultation. Prior to the release of a negative declaration, mitigated negative declaration, or environmental impact report for a project, the lead agency must begin consultation with the tribe who requested consultation.

4.4.3 Significance Determination Thresholds

Thresholds used to evaluate impacts to cultural and tribal cultural resources are based on applicable criteria in the CEQA Guidelines (CCR Sections 15000–15387), Appendix G. The proposed Project would have a significant impact on the environment if it would:

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

2) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5; or

3) Disturb any human remains, including those interred outside of dedicated cemeteries.

Additionally, a significant impact related to tribal cultural resources would occur if the proposed Project would:

1) Cause a substantial adverse change in the significance of a tribal cultural resource, defined in PRC 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:

    a. Listed or eligible for listing in the CRHR, or in a local register of historical resources as defined in PRC Section 5020.1(k), or

    b. 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

PRC Section 5024.1. In applying the criteria set forth in subdivision (c) of PRC Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American.

4.4.4 Methodology

A Cultural Resources Survey Report was prepared for the proposed Project (see Appendix E). The area of potential effect analyzed in the Cultural Resources Survey Report consists of Subarea 4 and the potential site options for LS 1 (Options 1 and 2), which is synonymous with Project site. Future sewer infrastructure that would be constructed under the proposed Project includes 10-mile gravity sewer; approximately 1.1 miles of force mains; 247 manholes; 24 CP lots; several property acquisition or easement lots for sewer line extensions, LS-1 (Options 1 and 2); and LS-2, LS-3, LS-4, and LS-5. A pedestrian survey was conducted of the potential site options for LS-1 (Options 1 and 2) on July 23, 2025, followed by a windshield survey of Subarea 4 on August 12, 2025.

In order to determine if the proposed Project would adversely impact significant archaeological resources, a cultural resources records search was performed, topographic maps and historic aerial photographs reviewed, and a pedestrian survey conducted of LS-1 (Options 1 and 2). A windshield survey was also conducted of the roadways and parcels where property acquisition or sewer easements would be required including 24 CP lots, lots for LS-2 through LS-5, and lots for sewer line extensions. An archaeological survey was not completed for these areas because access was not granted for these properties. During the windshield survey, photographs were taken of the 24 CP lots, 4 smaller LS lots, and several property acquisition or easement lots for sewer line extensions from the edge of each property boundary (see Appendix E).

4.4.4.1 Pedestrian Survey and Windshield Survey

The pedestrian survey of the potential site options for LS-1 (Options 1 and 2) recorded one isolated historic-era feature (post marker; 10667-F-1) within the LS-1 (Option 2) site. The subsequent windshield survey did not identify any prehistoric or historic cultural material.

4.4.4.2 Archaeological and Built Environment Resources

RECON performed a cultural resources records and literature search with a 0.25-mile search radius buffer at the South Coastal Information Center (SCIC) at San Diego State University on May 28, 2025. The purpose of the archival investigation is to identify previously recorded cultural resources and archaeological investigations present within the Project site. Historic U.S. Geological Survey topographic maps and aerial photographs were also reviewed to determine changes within the Project site through time.

The SCIC records search indicated that there have been nine cultural investigations conducted within 0.25 miles of the Project site; none of which include the Project site. As shown in **Table 4.4-1**, the record search also indicated six cultural resources previously recorded within 0.25 miles of the Project site. The cultural resources include one prehistoric quarry site, two single-family houses, two water conveyance features, and one recreational building that used to be the Quail Valley Country Club. The recreational building and two single-family houses are within the Project site.

Table 4.4-1 Previously Recorded Resources within 0.25 Miles of the Project Site				
Primary Number	Trinomial Number	Period	Site Type	Recording Events
P-33-007652*	--	Historic	Recreational building: Quail Valley Country Club	1982 (Riverside County Historical Committee)
P-33-007653*	--	Historic	Single-family house	1982 (Riverside County Historical Committee)
P-33-007679*	--	Historic	Adobe single-family house	1982 (Riverside County Historical Committee)
P-33-017369	CA-RIV-9026	Prehistoric	Lithic quarry	2004 (Hoover and Blevins)
P-33-029207	--	Historic	Water conveyance feature: standpipe	2020 (ECORP Consulting)
P-33-029208	--	Historic	Water conveyance feature: pipeline	2021 (ECORP Consulting)
*Within the Project site SOURCE: Appendix E.				

4.4.4.3 Sacred Lands Search

RECON contacted the NAHC on July 29, 2025, requesting a search of their Sacred Lands File to identify spiritually significant and/or sacred sites or traditional use areas, and to provide a list of local Native American tribes, bands, or individuals who may have concerns about the proposed Project. The NAHC responded on August 6, 2025, indicating that their search of the Sacred Lands File was negative (see Attachment 1 to Appendix E).

4.4.4.4 Historic Aerial Photographs and Topographic Maps

Review of historic topographic maps and aerial photographs indicates that development of the Project site had started by 1943. The 1943 topographic map, the earliest available map online at Nationwide Environmental Title Research, LLC (NETR) shows the majority of the roadways within the Project site were present at this time, with the exception of the roadways within the northwestern portion of the Project site. A few houses can be seen near the Quail Valley Country Club. The 1954 topographic map shows the entire roadway network within the Project site and an increase in houses. The 1967 aerial photograph exhibits few houses with minimal grading noted; although, a greater number of houses were within the area bound by Goetz Drive in the north, Quail Place in the west, Welles Place in the south, and Palm Drive in the east. A slow increase in houses and development is noted in the aerial photos from 1979, 1997, 2002, and 2005, when the development resembles current conditions (NETR 2025).

4.4.5 Threshold 1: Historic Resources

Would the project cause a substantial adverse change in the significance of a historic resource pursuant to CEQA Section 15064.5?

4.4.5.1 Impact Analysis

The isolated historic-era feature (10667-F-1) recorded during the pedestrian survey within the LS-1 (Option 2) site is a District monument. The vertically placed, formed, concrete post marker exhibits "EMWD" stamped vertically onto the east-facing side. The post measures 3 inches by 3 inches and stands 39 inches (exposed) above ground surface. The marker exhibits a rounded top, 90-degree angled corners, and blue paint at the base of the east-facing side. The resource first appears along the Mountain View Place perpendicular to Cassandra Drive alignment between 1961 and 1967 (NETR 2025). Although the concrete post marker (10667-F-1) is associated with the installation of water infrastructure by the District sometime between 1961 and 1967, this association is not considered a significant event to the history of Menifee. The post marker therefore does not qualify under Criterion A. The post marker does not qualify under Criterion B, as is not associated with a person significant to the past. The method of construction is not unique or distinctive; therefore, the post marker does not qualify under Criterion C. The post marker does not qualify under Criterion D, as it does not possess important data to the local history. Because the post marker lacks characteristics that would qualify it for listing on the NRHP or the CRHR, the feature has been recommended not eligible for the NRHP or the CRHR. Similarly, there are no previously recorded historic-era resources or other unevaluated structures located within the footprints of either LS-1 option. Therefore, construction of either LS-1 option would not result in an adverse effect to historic properties per Section 106 requirements or known historic resources per CEQA criteria.

As shown in **Table 4.4-1**, the SCIC records search indicated that a recreational building and two single-family houses are within the Project site. However, the proposed wastewater collection and conveyance system components would not affect these properties since they do not occur within the 24 CP lots, lots for LS-2 through LS-5, and lots for sewer line extensions in which the wastewater system would be constructed. Furthermore, all 24 CP lots, lots for LS-2 through LS-5, and lots for sewer line extensions are vacant and do not possess any structures.

4.4.5.2 Significance of Impacts

The proposed Project would not result in an adverse effect to any historic resources per CEQA criteria, and impacts would be less than significant.

4.4.5.3 Mitigation

No mitigation is required.

4.4.5.4 Significance of Impacts After Mitigation

No mitigation is required.

4.4.6 Threshold 2: Archaeological Resources

Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Section 15064.5?

4.4.6.1 Impact Analysis

As documented in Section 4.4.4.3 above, the SCIC records search did not identify any prehistoric resources within the Project site. A letter was sent on July 29, 2025, to the NAHC requesting a search of their Sacred Lands File to identify spiritually significant and/or sacred sites or traditional use areas in the vicinity of the Project site. A response was received from the NAHC on August 6, 2025, indicating that their search of the Sacred Lands File was negative.

The pedestrian surveys of the potential footprints of LS-1 did not identify any archaeological resources. Additionally, the potential for discovery of buried archaeological resources within the potential footprints of LS-1 during construction activities is considered low because the soil profile of Lodo soil series indicates a top layer extending approximately eight inches before encountering subsoils, which is too shallow to likely possess buried archaeological resources. Additionally, no archaeological resources have been recorded within the 24 CP lots, lots for LS-2 through LS-5, and lots for sewer line extensions. However, none of the vacant 24 CP lots, lots for LS-2 through LS-5, and lots for sewer line extensions in which the Project site would be constructed have been surveyed for archaeological resources. Therefore, future development of the Project site could potentially adversely affect unknown significant archaeological resources (**Impact CUL-1**).

4.4.6.2 Significance of Impacts

At a program level of analysis, it cannot be known with certainty that impacts to archaeological resources could be fully avoided, which would be considered a potentially significant impact (**Impact CUL-1**).

4.4.6.3 Mitigation

CUL-1: **Pre-Construction Phase I Cultural Resources Study.** As future phases are funded and development parcels are acquired by the Eastern Municipal Water District, a Phase I Cultural Resources Survey of those parcels shall be completed by a qualified archaeologist during the planning phase of the project. In the event that archaeological resources are identified during the Phase I study, then such resources must be recorded using Department of Parks and Recreation 523 forms in accordance with all applicable regulations. In addition, these resources must be evaluated for significance and eligibility for inclusion in federal, state, and local registers of significant resources. This evaluation shall be undertaken by a cultural resource professional who minimally meets the Secretary of Interior's Professional Qualifications Standards for Archaeology. In the event that such resources are recommended to historic properties per the National Register of Historic Places or historical resources pursuant to the California Environmental Quality Act and avoidance is not feasible, a data recovery and construction monitoring program must be implemented to reduce the impacts the archaeological resource to below a significant level. The data recovery program

must be approved by the Eastern Municipal Water District and Traditionally and Culturally Affiliated tribe(s) and completed prior to ground-disturbing activities.

CUL-2: Pre-excavation Agreement. Prior to construction of projects that are determined to have the potential to encounter cultural resources, the Eastern Municipal Water District (District) shall enter into a pre-excavation agreement with the Luiseño Consulting Tribe(s). The agreement shall address the treatment of archaeological resources inadvertently discovered on the Quail Valley Subarea 4 Project site; project grading; ground disturbance and development scheduling; the designation, responsibilities, and participation of tribal monitor(s) during grading, excavation, and ground disturbing activities; and compensation for the tribal monitors, including overtime, weekend rates, and mileage reimbursements. The agreement will also indicate the disposition of artifacts recovered during monitoring.

The District shall relinquish ownership of all cultural resources to the Luiseño Consulting Tribe, including sacred items, burial goods, and all archaeological artifacts and non-human remains as part of the required mitigation for impacts to cultural resources, and adhere to the following:

1. Preservation-in-place is the preferred option; preservation-in-place means avoiding the resources and leaving them in the place where they were found with no development affecting the integrity of the resource.

2. If preservation-in-place is not feasible, the pre-excavation agreement shall determine an on-site reburial of the discovered items as the next preferable treatment measure. This shall include measures and provisions to protect the future reburial area from any future impacts in perpetuity. Reburial shall not occur until all legally required cataloging and basic recordation have been completed. No recordation of sacred items is permitted without the written consent of all Consulting Native American Tribal Governments.

3. In the event that on-site reburial is not feasible, the District will enter into a curation agreement with an appropriate qualified repository within Riverside County that meets federal standards per Title 36 of the Code of Federal Regulations, Parts 79 and 800 and therefore would be curated and made available to other archaeologists/researchers for further study. The collections and associated records shall be transferred, including title, to an appropriate curation facility within Riverside County, to be accompanied by payment of the fees necessary for permanent curation.

CUL-3: Construction Monitoring. For projects that are determined to have the potential to encounter cultural resources during CUL-1, construction monitoring by a qualified archaeologist and Luiseño Native American monitor shall be implemented. A qualified archaeologist and Luiseño Native American monitor would attend a pre-construction meeting with the Eastern Municipal Water District (District), contractor, and any applicable subcontractors. The archaeologist and Luiseño Native American monitor would be present during the original cutting of previously undisturbed soils. Inspections would vary based on materials excavated and presence of artifacts and features. If subsurface cultural resources are encountered during construction, all ground-disturbing activity shall cease within 50 feet of the resources, and the resources should be evaluated for significance. Isolated artifacts

shall be minimally documented in the field. Significant archaeological discoveries include intact features, stratified deposits, previously unknown archaeological sites, and human remains. The project archaeologist shall inform the District of the discovery. The significance of the resource would be determined by the project archaeologist and Native American monitor in consultation with the District. To mitigate potential impacts to significant cultural resources, a Research Design and Data Recovery Program should be prepared by the project archaeologist in consultation with the Native American monitor, approved by the District, and implemented using professional archaeological methods. Construction activities would be allowed to resume after the completion of the recovery of an adequate sample and the recordation of features.

CUL-4: **Final Monitoring Report and Curation.** After monitoring completion, a report shall be prepared. If no significant cultural resources are discovered, a brief letter shall be prepared. If significant cultural resources are discovered, a report with the results of the monitoring and data recovery (including the interpretation of the data within the research context) shall be prepared. All cultural material collected during the monitoring and data recovery program shall be processed and conveyed to a Native American group of appropriate tribal affinity. Alternatively, the cultural material may be curated at a local curation facility.

4.4.6.4 Significance of Impacts After Mitigation

Implementation of **mitigation measures CUL-1 through CUL-4** would reduce impacts on archaeological resources (**Impact CUL-1**) to a less than significant level.

4.4.7 Threshold 3: Human Remains

Would the project disturb any human remains, including those interred outside of dedicated cemeteries?

4.4.7.1 Impact Analysis

There are no known burial sites or cemeteries within the Project site. Future phased development associated with the Project site could disturb native soils and, therefore, could have the potential to encounter human remains. Therefore, although considered unlikely, the Project site would have the potential to impact human remains.

4.4.7.2 Significance of Impacts

At a program level of analysis, it cannot be known with certainty that impacts to human remains could be fully avoided, which would be considered a potentially significant impact (**Impact CUL-2**).

4.4.7.3 Mitigation

CUL-5: **Procedure for Inadvertent Discovery of Human Remains.** If human remains are unintentionally disturbed during archaeological excavations or construction activities, implementation of the procedures set forth in Public Resources Code Section 5097.98 and

California State Health and Safety Code 7050.5 would be implemented in consultation with the Most Likely Descendant as identified by the Native American Heritage Commission (NAHC). California State Health and Safety Code Section 7050.5 dictates that no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition pursuant to Public Resources Code Section 5097.98. If the remains are determined by the County Coroner to be Native American, the NAHC shall be notified within 24 hours. The NAHC shall identify the Most Likely Descendant with whom consultation shall occur to determine in the treatment and disposition of the remains.

4.4.7.4 Significance of Impacts After Mitigation

Implementation of **mitigation measure CUL-5** would reduce impacts on human remains (**Impact CUL-2**) to a less than significant level.

4.4.8 Threshold 4: Tribal Cultural Resources

Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in PRC Section 21074 as either a site, features, 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) Listed or eligible for listing in the CRHR, or in a local register or
ii) 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 PRC Section 5024.1?

4.4.8.1 Impact Analysis

Consistent with the requirements of AB 52, the District sent notification letters to six Native American tribes that are traditionally and culturally affiliated with the geographic scope of the Project site on September 10, 2025. The District received three responses to the notification letter. **Table 4.4-2** provides a summary of the responses. The Pechanga Band of Indians and Soboba Band of Luiseño Indians requested consultation, while the Yuhaaviatam of San Manuel Nation declined. The District subsequently reached out to set up consultation with the Pechanga Band of Indians on November 4, 2025, and with the Soboba Band of Luiseño Indians on October 29, 2025.

Table 4.4-2 Assembly Bill 52 Consultation Responses Summary Table			
Tribe	Individual Contacted	Date Letter Mailed	Consultation Held
Agua Caliente Band of Cahuilla Indians	Pattie Garcia	September 10, 2025	Not Applicable
Morongo Band of Mission Indians	Laura Chatterton	September 10, 2025	Not Applicable
Pechanga Band of Indians	Ebru Ozdil	September 10, 2025	November 4, 2025
Rincon Band of Luiseño Indians	Cheryl Madrigal	September 10, 2025	Not Applicable
Soboba Band of Luiseño	Jospeh Ontiveros	September 10, 2025	October 29, 2025
Yuhaaviatam of San Manuel Nation	Alexandra McCleary	September 10, 2025	Declined
SOURCE: Martha Vilchis, Water Resources Specialist Assistant I (District), personal communication (email), November 3, 2025.			

As described in Section 4.4.6.1 above, construction of future phased development under the Project site would have the potential to unearth unknown cultural resources, including religious or sacred uses. Therefore, future development could potentially adversely affect significant tribal cultural resources (**Impact CUL-3**).

4.4.8.2 Significance of Impacts

At a program level of analysis, it cannot be known with certainty that impacts to tribal cultural resources could be fully avoided, which would be considered potentially significant (**Impact CUL-3**).

4.4.8.3 Mitigation

Implementation of **mitigation measures CUL-1 through CUL-4** would reduce impacts on tribal cultural resources (**Impact CUL-3**) to a less than significant level.

4.4.8.4 Significance of Impacts After Mitigation

Less than significant.

4.5 Energy

This section analyzes impacts related to energy that could result from implementation of the proposed Project. Construction of the proposed Project is planned to be carried out in eight phases implemented over a 20-year period. This evaluation is programmatic, focusing on the environmental impacts that could occur from implementation of all phases of construction (see Chapter 3). As each phase is constructed, project-level analyses may be required to further quantify any identified significant impacts.

This section includes a setting discussion that describes existing energy conditions in and around the Project site and a summary of applicable regulations related to energy. This section also includes an evaluation of potential impacts of the proposed Project related to energy.

4.5.1 Existing Conditions

4.5.1.1 Electricity

Electricity, as a consumptive utility, is a man-made resource. The production of electricity requires the consumption or conversion of energy resources, including water, wind, oil, gas, coal, solar, geothermal, and nuclear resources, into energy. The delivery of electricity involves several system components for distribution and use. The electricity generated is distributed through a network of transmission and distribution lines commonly called a power grid.

Energy capacity, or electrical power, is generally measured in watts, while energy use is measured in watt-hours or kilowatt-hours (kWh). Southern California Edison (SCE) is the electricity provider in the City. SCE is regulated by the California Public Utilities Commission (CPUC), which is responsible for ensuring California utilities customers have safe and reliable utility service. SB 1078 established the California Renewables Portfolio Standard (RPS) Program, which requires SCE and other statewide energy utility providers to achieve renewable energy goals by certain milestone dates (see Section 4.7.2.2.e). SCE currently has 41 percent RPS procurement based on the latest available data (CPUC 2024).

Table 4.5-1 summarizes the SCE power mix as of 2023. As shown, SCE's default power mix included 37.6 percent of its energy from renewable resources in 2023, and SCE offered "green rate" enrollment options for customers who wanted to purchase additional renewable energy (SCE 2024). SCE also offers a Community Renewables Program that allows customers to purchase energy from specific solar projects in the community.

Based on most recent data for 2024, SCE serves 5,321,000 customers, sold 81,841 million kWh of electricity, and has a generating resource capacity of 3,521 megawatts (SCE 2024).

Table 4.5-1 Southern California Edison Content Label					
	Southern California Edison				2023
Energy Resources	Default Power Mix	Green Rate (50% Option)	Green Rate (100% Option)	Community Renewable	California Power Mix
Eligible Renewable[1]	37.6%	68.7%	100.0%	64.6%	36.9%
Biomass & Biowaste	*0.1%*	*0.1%*	*0.0%*	*0.1%*	*2.1%*
Geothermal	*5.2%*	*2.6%*	*0.0%*	*3.0%*	*4.8%*
Eligible Hydroelectric	*0.7%*	*0.4%*	*0.0%*	*0.4%*	*1.8%*
Solar	*19.8%*	*59.8%*	*100.0%*	*54.8%*	*17.0%*
Wind	*11.7%*	*5.9%*	*0.0%*	*6.6%*	*11.2%*
Coal	0.0%	0.0%	0.0%	0.0%	1.8%
Large Hydroelectric	4.5%	2.2%	0.0%	2.5%	11.7%
Natural Gas	20.0%	10.0%	0.0%	11.3%	36.6%
Nuclear	9.1%	4.5%	0.0%	5.1%	9.3%
Other	0.1%	0.0%	0.0%	0.0%	0.1%
Unspecified Power[2]	28.8%	14.5%	0.0%	16.4%	3.7%

% = percent
SOURCE: Southern California Edison 2023
[1]The eligible renewable percentage above does not reflect Renewable Portfolio Standard compliance, which is determined using a different methodology.
[2]Unspecified power is electricity that has been purchased through open-market transactions and is not traceable to a specific generation source.

4.5.1.2 Natural Gas

Natural gas is a combustible mixture of simple hydrocarbon compounds (primarily methane) that is used as a fuel source. Natural gas consumed in California is obtained from naturally occurring reservoirs and delivered through high-pressure transmission pipelines. Natural gas provides almost one-third of the state's total energy requirements. Natural gas is measured in terms of both cubic feet and British thermal units.

The Project site is served by the Southern California Gas Company (SoCalGas), which is the principal distributor of natural gas in southern California. SoCalGas, along with five other California utility providers, released the 2024 California Gas Report, presenting a forecast of natural gas supplies and requirements for California through the year 2040. This report predicts gas demand for all sectors (residential, commercial, industrial, energy generation and wholesale exports) and presents best estimates, as well as scenarios for hot and cold years. Overall, SoCalGas predicts a decrease in natural gas demand in future years due to a decrease in per capita usage, energy efficiency policies, and the state's transition to renewable energy displacing fossil fuels including natural gas (California Gas and Electric Utilities 2024).

SoCalGas receives gas supplies from several sedimentary basins in the western U.S. and Canada, including supply basins located in New Mexico (San Juan Basin), west Texas (Permian Basin), the Rocky Mountains, and western Canada, as well as local California supplies (California Gas and Electric Utilities 2024). Gas supply available to SoCalGas averaged 2,279 million cubic feet per day in 2024, the most recent year for which data are available (California Gas and Electric Utilities 2025).

4.5.2 Applicable Regulatory Requirements

4.5.2.1 Federal Regulations

a. Corporate Average Fuel Economy

The Corporate Average Fuel Economy program was established by Congress under the Energy Policy and Conservation Act of 1975 to reduce national energy consumption by improving vehicle fuel efficiency. Under this authority, the National Highway Traffic Safety Administration (NHTSA) sets fuel economy standards for passenger cars and light trucks at the "maximum feasible level," considering technological feasibility, economic practicability, the effect of other standards, and the nation's need to conserve energy (49 U.S.C. Section 32902). The U.S. EPA implements complementary GHG emissions standards under the federal CAA. Together the agencies have developed coordinated fuel consumption and GHG standards for medium- and heavy-duty vehicles.

The U.S. EPA and NHTSA jointly adopted Phase 1 (model years 2014–2018) and Phase 2 (model years 2021–2027) heavy-duty vehicle standards, requiring reductions in fuel consumption of up to approximately 25 percent compared to baseline levels depending on vehicle type and compliance year (U.S. EPA 2011, 2016). In April 2024, the U.S. EPA finalized Phase 3 GHG standards for heavy-duty vehicles beginning with model year 2027, further strengthening fuel efficiency and emission requirements (U.S. EPA 2024). The NHTSA also continues to update Corporate Average Fuel Economy standards for light-duty vehicles and, in June 2025, issued an interpretive rule ("Resetting the Corporate Average Fuel Economy Program") revising how electric vehicles and other advanced technologies are treated for compliance (NHTSA 2025).

4.5.2.2 State Regulations

a. California Energy Action Plan II

The California Energy Action Plan II is the state's principal energy planning and policy document (California Energy Commission [CEC] 2008). The plan identifies statewide energy goals, describes a coordinated implementation plan for state energy policies, and identifies specific action areas to ensure that California's energy is adequate, affordable, technologically advanced, and environmentally sound. In accordance with this plan, the first priority actions to address California's increasing energy demands are energy efficiency and demand response (i.e., reduction of customer energy usage during peak periods in order to address system reliability and support the best use of energy infrastructure). Additional priorities include the use of renewable sources of power and distributed generation (i.e., the use of relatively small power plants near or at centers of high demand). To the extent that these actions are unable to satisfy the increasing energy and capacity needs, clean and efficient fossil-fired generation is supported.

b. Senate Bill 1389

SB 1389, codified in PRC Sections 25300-25323, requires the CEC to prepare a biennial Integrated Energy Policy Report (IEPR) assessing energy trends, forecasting demand, and recommending

policies for electricity, natural gas, and transportation fuels. The most recent 2023 IEPR as well as the 2024 IEPR Update evaluate statewide energy reliability, renewable integration, transmission planning, and building decarbonization, and informs other state planning efforts such as the CARB Scoping Plan and the CPUC Integrated Resource Planning process. It is noted that the 2025 IEPR is currently in development and will update analyses from the 2023 report, addressing topics such as energy reliability, renewable energy reliability, climate adaptation, and decarbonization strategies across the electricity, transportation, and building sectors. Once finalized, the 2025 IEPR will inform updates to statewide planning and regulatory decisions related to energy supply, demand, and infrastructure (CEC 2025a).

c. Senate Bill 1078 (SB 1078, Sher; Chapter 516, Statutes of 2002) and Senate Bill 107 (SB 107, Simitian; Chapter 464, Statutes of 2006) and Executive Order S-14-08

The State of California has adopted standards to increase the percentage that retail sellers of electricity, including investor-owned utilities and community choice aggregators, must provide from renewable sources. The standards are referred to as the RPS and require 33 percent by 2020 and 50 percent by 2040. On September 10, 2018, Governor Jerry Brown signed SB 100, which further increased California's RPS and requires retail sellers and local publicly owned electric utilities to procure eligible renewable electricity for 44 percent of retail sales by December 31, 2024, 52 percent by December 31, 2027, and 60 percent by December 31, 2030, and that CARB should plan for 100 percent eligible renewable energy resources and zero-carbon resources by December 31, 2045.

d. Title 24, Building Standards Code of California Green Building Standards Code

The CEC first adopted the Building Energy Efficiency Standards (CCR Title 24, Part 6) in 1978 in response to a legislative mandate to reduce energy consumption in the state. The standards are updated triennially to incorporate advances in technology and align with state climate goals. The California Green Building Standards Code (CALGreen; Title 24, Part 11), first adopted in 2010, establishes mandatory measures for sustainable design, energy efficiency, water conservation, and material use in residential and nonresidential construction. The 2025 Title 24 code cycle was adopted July 1, 2025, and becomes effective January 1, 2026, while the most recent CALGreen amendments took effect July 1, 2024.

e. California Assembly Bill 1493 (Pavley), (Chapter 200, Statutes of 2002)

AB 1493 (Chapter 200, Statutes of 2002) directed CARB to adopt GHG emission standards for passenger vehicles and light-duty trucks beginning with model year 2009. These standards formed the basis of California's Advanced Clean Cars program, which integrates low-emission vehicle standards, zero-emission vehicle (ZEV) requirements, and GHG emission reductions. CARB subsequently adopted Advanced Clean Cars II in 2022, requiring 100 percent of new passenger vehicle sales in California to be zero-emission by 2035.

f. California Global Warming Solutions Act of 2006 (Assembly Bill 32) and Senate Bill 32

In 2006, the California State Legislature adopted AB 32 (codified in the HSC), Division 25.5–California Global Warming Solutions Act of 2006), which focuses on reducing GHG emissions in California to 1990 levels by 2020. Under HSC Division 25.5, CARB has the primary responsibility for reducing the state's GHG emissions; however, it also tasked the CEC and the CPUC with providing information, analysis, and recommendations to CARB regarding strategies to reduce GHG emissions in the energy sector.

In 2016, the California State Legislature adopted SB 32 and its companion bill AB 197; both were signed by Governor Jerry Brown. SB 32 and AB 197 amend HSC Division 25.5 and establish a new climate pollution reduction target of 40 percent below 1990 levels by 2030 and include provisions to ensure that the benefits of state climate policies reach into disadvantaged communities. Refer to Section 4.7, Greenhouse Gas Emissions, for details regarding these regulations.

g. California Air Resources Board Heavy-Duty On-Road and Off-Road Vehicle Regulations

In 2004, the CARB adopted an Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling in order to reduce public exposure to diesel particulate matter emissions (Title 13 CCR Section 2485). The measure applies to diesel-fueled commercial vehicles with gross vehicle weight ratings greater than 10,000 pounds that are licensed to operate on highways, regardless of where they are registered. This measure does not allow diesel-fueled commercial vehicles to idle for more than five minutes at any given location. While the goal of this measure is primarily to reduce public health impacts from diesel emissions, compliance with the regulation also results in energy savings in the form of reduced fuel consumption from unnecessary idling.

In addition to limiting exhaust from idling trucks, CARB also promulgated emission standards for off-road diesel construction equipment of greater than 25 horsepower, such as bulldozers, loaders, backhoes, and forklifts, as well as many other self-propelled off-road diesel vehicles. The In-Use Off-Road Diesel-Fueled Fleets regulation adopted by CARB on July 26, 2007, aims to reduce emissions by installation of diesel soot filters and encouraging the retirement, replacement, or repower of older, dirtier engines with newer emission control models (13 CCR Section 2449). The compliance schedule requires full implementation by 2023 in all equipment for large and medium fleets and by 2028 for small fleets. While the goal of this measure is primarily to reduce public health impacts from diesel emissions, compliance with the regulation has shown an increase in energy savings in the form of reduced fuel consumption from more fuel-efficient engines.

4.5.2.3 Eastern Municipal Water District Regulations

The District adopted a Climate Action Plan (CAP) that outlines strategies, goals, and actions that can reduce the District's GHG emissions (Eastern Municipal Water District 2022). As discussed in Section 4.7 Greenhouse Gas, the CAP includes reduction measures necessary to meet GHG goals. District measures to reduce energy consumption include internal combustion engine conversions to electric engines, energy efficiency improvements at regional water reclamation facilities and water filtration

plants, water conservation programs, on-site solar generation, electrification of energy infrastructure, use of renewable natural gas, clean energy procurement, ZEV fleet conversion, and construction best practices. Along with ZEV fleet conversion which would reduce fuel consumption from routine maintenance trips, construction best practices are the most relevant to the proposed Project. The following are examples of construction BMPs that can be implemented during construction to achieve GHG emissions reductions (Eastern Municipal Water District 2022):

- BMP 1: Limit idling of equipment to five minutes or less. Provide clear signage that posts this requirement and develop a plan for on-site enforcement.
- BMP 2: Provide temporary electric power to the construction site. If generators must be used, use alternative fuels to the maximum extent feasible.
- BMP 3: Use electric, hybrid, or alternative-fueled equipment, as availability allows or as future regulation requires.
- BMP 4: Perform on-site hauling using vehicles with on-road engines, where feasible and efficient.
- BMP 5: Limit material and equipment deliveries and hauling to off-peak traffic hours.
- BMP 6: Use high-efficiency lighting and Energy Star-compliant heating and cooling units in temporary construction offices. Require development and implementation of procedures to ensure all office equipment, heating or cooling units, and lighting are turned off at the end of each workday.

4.5.3 Significance Determination Thresholds

Thresholds used to evaluate impacts to energy are based on applicable criteria in the CEQA Guidelines (CCR Sections 15000–15387), Appendix G. The proposed Project would have a significant impact on the environment if it would:

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

2) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

4.5.4 Methodology

The potential for adverse impacts on energy has been evaluated based on information concerning current service levels and the ability of the service providers to accommodate the construction and operation of the proposed Project. Energy use associated with the proposed Project would mainly be from fuel consumed during construction. Operational energy use would result from routine maintenance trips and lift station operations.

4.5.4.1 Construction

Grading and construction activities consume energy through the operation of heavy off-road equipment, trucks, and worker traffic. Fuel consumption associated with on-road worker trips and delivery trips were calculated using CARB's 2025 EMissions FACtor (EMFAC2025) model fuel consumption rates and the anticipated number of trips calculated using the CalEEMod as a part of the air quality and GHG analyses prepared for the proposed Project. It was assumed that worker vehicles would consist of light-duty automobiles, light-duty trucks, and light-heavy-duty trucks, and hauling/delivery vehicles would consist of a wide range of diesel heavy-duty trucks as classified in EMFAC2025. Fuel consumption associated with on-site construction equipment was calculated using CARB's OFFROAD model. Detailed methodology and calculating trips and the required amount of construction equipment is discussed in Section 4.2.4. Fuel consumption rates for the soonest construction year of 2027 were modeled for the entire 20-year construction period. This is conservative since newer equipment often consumes less fuel.

4.5.4.2 Operation

Long-term operational energy use associated with buildout of the proposed Project would include fuel consumption of maintenance vehicles; electricity by the lift stations, and fuel associated with periodic emergency generator testing. Natural gas consumption is also discussed. The calculations are based on light industrial land use and are purely for informational and comparative purposes.

Site visits are routinely conducted to inspect the condition and security of the lift stations. The proposed Project is not anticipated to require additional staffing. As part of the air quality and GHG emission calculations conducted using CalEEMod, a total of one round trip (two one-way trips) with a one-way distance of 20 miles was modeled for each weekday. No weekend trips were modeled. In actuality, the lift stations would not require maintenance five days per week. Fuel consumption was calculated using the total vehicle miles traveled (VMT) calculated by CalEEMod along with EMFAC2025 fuel efficiency rates for the soonest year of 2027. This is conservative since maintenance trips would not begin until the lift stations are fully constructed and operational.

For the proposed Project, energy use would occur at the proposed lift stations. Electricity and natural gas consumption were calculated using CalEEMod. Lift stations were modeled as a light industrial land use using all model defaults. This is conservative since the lift stations would not require the use of natural gas and they would be unmanned.

Diesel fuel consumption would result from routine testing of the emergency generators located at each of the lift stations. Fuel consumption was calculated assuming a 400-horsepower emergency generator would be tested a maximum of one hour in a day and a total of 50 hours per year for each lift station for a total of five hours in a day and 250 hours in a year.

4.5.5 Threshold 1: Energy Consumption

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

4.5.5.1 Impact Analysis

a. Construction

Construction of the proposed Project would result in energy consumption from the use of heavy-duty construction equipment, on-road trucks, and construction workers commuting to and from the Project site.

Electricity would be consumed during construction activities to power potential lighting, electronic equipment, and certain construction equipment (e.g., hand tools or other electric equipment). Electricity use during construction would be variable depending on lighting needs and the use of electric-powered equipment and would be temporary for the duration of construction activities. It is expected that construction electricity use would generally be considered as temporary and negligible over the long-term.

Heavy-duty construction equipment would be primarily diesel-fueled. The assumption that diesel fuel would be used for most equipment represents the most conservative scenario for maximum potential energy use during construction since diesel consumption rates are generally greater than gasoline consumption rates. Modeled construction equipment is summarized in **Table 4.2-3** in Section 4.2, Air Quality. Fuel consumption associated with worker trips and delivery/hauling trips is summarized in **Table 4.5-2**. The estimated total diesel fuel that would be consumed by heavy-duty construction equipment is shown in **Table 4.5-3**. Energy calculations are provided in Appendix F.

Table 4.5-2
Off-Site Construction Vehicle Annual Fuel Consumption

Trip Type	Miles Traveled	Gasoline	Diesel	(kWh)
Workers	198,912	7,075	325	7,720
Deliveries/Hauling	440	0	62	0
TOTAL	**199,352**	**7,075**	**387**	**7,720**

kWh = kilowatt hours
SOURCE: Appendix F.

Table 4.5-3
On-Site Construction Equipment Annual Fuel Consumption

Equipment	Amount	Daily Usage (Hours)	Work Days per Year	Gallons per Day	Gallons per Year
Tractors/Loaders/Backhoes	2	8	261	28	7,279
Excavators	2	8	261	37	9,607
Off-Highway Trucks–Water Truck	2	8	261	79	20,492
Off-Highway Trucks–Utility Truck	2	8	261	107	27,777
Air Compressors	2	8	261	18	4,755
Concrete/Industrial Saws	2	8	261	22	5,790
Sweepers/Scrubbers	2	8	261	17	4,377
Bore/Drill Rigs	2	8	261	54	13,959
Dumpers/Tenders	2	8	261	107	27,777

Table 4.5-3 (cont.) On-Site Construction Equipment Annual Fuel Consumption					
Equipment	Amount	Daily Usage (Hours)	Work Days per Year	Gallons per Day	Gallons per Year
Generator Sets	2	8	261	48	12,428
Dozer	2	8	261	67	17,361
Crane	2	8	261	68	17,715
Paver	2	8	261	36	9,467
TOTAL	--	--	--	**686**	**178,783**
NOTE: Totals may vary due to independent rounding. SOURCE: Appendix F.					

Diesel and gasoline fuel would be provided by local or regional suppliers and vendors. proposed Project fuel consumption would be minimal compared to reported County totals of 966,000,000 gallons of gasoline and 168,000,000 gallons of diesel sold in 2024 (CEC 2025b). The amount of energy used would not represent a substantial portion of the available energy supply in terms of equipment and transportation fuels. Furthermore, compliance with the previously discussed anti-idling and emissions regulations (see Section 4.5.2.2.g) would result in a more efficient use of construction-related energy and the minimization or elimination of wasteful and unnecessary consumption of energy. Therefore, construction of the proposed Project would not result in the wasteful, inefficient, and unnecessary consumption of energy resources, and impacts would be less than significant.

It should also be noted that the proposed Project would be required to implement **mitigation measure AQ-1**, which would require the use of Tier 4 construction equipment. Although this mitigation measure is not necessary to reduce energy-related impacts to a less than significant level, it would further reduce construction-related energy consumption.

b. Operation

Long-term operational energy use would include fuel consumption of maintenance vehicles; electricity and natural gas consumption by the lift stations, and fuel associated with periodic emergency generator testing.

Based on CalEEMod calculations and the methodology discussed in Section 4.5.4.2 above, maintenance trips would generate a maximum of approximately 10,429 VMT annually. Using EMFAC2025 total VMT and fuel consumption data, it was estimated that gasoline vehicles have an average fuel efficiency of 24.5 miles per gallon and diesel vehicles have an average fuel efficiency of 19.8 miles per gallon. The total annual fuel consumption would range from 425 to 526 gallons. Maintenance trip fuel consumption calculations are provided in Appendix F.

Electricity and natural gas consumption associated with the lift stations was calculated using CalEEMod. As discussed in Section 4.5.4.2 above, lift stations were modeled as a light industrial land use using all model defaults. This is conservative since the lift stations would not require the use of natural gas and they would be unmanned. Based on CalEEMod defaults for light industrial uses, the proposed Project would consume 105,260 kWh of electricity per year and 472,454 thousand British thermal units of natural gas per year. CalEEMod output is provided as Attachment 1 of Appendix C.

The lift stations would include periodic testing of the emergency generators. Based on a total of 250 testing hours per year and an OFFROAD fuel consumption rate of 2.98 gallons per hour, emergency generators would consume 745 gallons of diesel fuel annually. Calculations are provided in Appendix F.

Although the proposed Project would consume some energy during operation, this energy use would be minimal as it would be limited to occasional maintenance trips, lift station electricity, and emergency generator testing. Associated energy demand would be consistent with energy demand associated with other wastewater management projects in the region and would not be associated with inefficient or wasteful energy use. With respect to operational transportation-related fuel usage, the District has policies in place that would support statewide efforts to improve transportation energy efficiency and reduce transportation energy consumption in line with Connect SoCal 2024, the Regional Transportation Plan/Sustainable Communities Strategy (SCAG 2024). Maintenance trips would be conducted by District staff in District vehicles. The District's CAP includes Measure 7: ZEV Fleet Conversion. This measure aims to convert gasoline- and diesel-powered fleet vehicles to ZEVs. Vehicles would be replaced over time as the fleet ages, and replacement vehicles will increasingly be ZEVs. It is anticipated that the fleet makeup would be 15 percent ZEVs by 2030 and 30 percent ZEVs by 2045 (Eastern Municipal Water District 2022). Therefore, operational energy use would not result in wasteful, inefficient, or unnecessary consumption of energy resources, and impacts would be less than significant.

4.5.5.2 Significance of Impacts

Construction and operation of the proposed Project would not result in the wasteful, inefficient, and unnecessary consumption of energy resources, and impacts would be less than significant.

4.5.5.3 Mitigation

No mitigation is required.

4.5.5.4 Significance of Impacts After Mitigation

No mitigation is required.

4.5.6 Threshold 2: Consistency with Energy Plans

Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

4.5.6.1 Impact Analysis

Applicable renewable energy and energy efficiency plans and regulations include CARB's In-Use Off-Road Diesel-Fueled Fleets regulation, federal and state fuel economy and efficiency standards, Connect SoCal 2024 transportation RPS renewable energy requirements, and state energy code requirements provided in Title 24 and CALGreen. As required by law, construction equipment would comply with all CARB regulations and idling restrictions. Further, although not necessary to reduce

the significance of energy-related impacts, the proposed Project would be required use Tier 4 construction equipment in accordance with **mitigation measure AQ-1**.

Overall, the District has policies in place in the CAP that would support and promote energy efficiency with respect to transportation fuel consumption in line with Connect SoCal 2024 (refer to Section 4.5.2.3). During project operation, maintenance trips would be minimal and would be conducted using the District's fleet, which would include more ZEVs in accordance with the District's CAP. Energy consumption associated with lift station operation would also be minimal. Electricity would be supplied by SCE, which currently has 41 percent RPS procurement and is in line to achieve future RPS goals (CPUC 2024). Further, emergency generator testing would only be periodic and all emergency generators would be permitted by SCAQMD and meet all necessary SCAQMD rules and regulations. As calculated by CalEEMod and discussed under Threshold 1, lift station operation would conservatively consume 105,260 kWh of electricity per year and 472,454 thousand British thermal units of natural gas per year, based on lift stations being modeled as light industrial land uses. Proposed Project operation would consume a minimal amount of energy resources, especially in comparison to SCE's generating capacity discussed in Section 4.5.1 above. Consequently, the proposed Project's burden on energy demand would be minimal and would not result in a need for increased supply or distribution infrastructure capabilities.

4.5.6.2 Significance of Impacts

Construction and operation of the proposed Project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency, and impacts would be less than significant.

4.5.6.3 Mitigation

No mitigation is required.

4.5.6.4 Significance of Impacts After Mitigation

No mitigation is required.

4.6 Geology/Soils

This section analyzes impacts related to geology and soils that could result from implementation of the proposed Project. Construction of the proposed Project is planned to be carried out in eight phases implemented over a 20-year period. This evaluation is programmatic, focusing on the environmental impacts that could occur from implementation of all phases of construction (see Chapter 3). As each phase is constructed, project-level analyses may be required to further quantify any identified significant impacts.

This section includes a setting discussion that describes existing geology, soils, and paleontological resource conditions in and around the Project site and summarizes applicable regulations related to geology and soils. This section also includes an evaluation of potential impacts of the proposed Project related to geology and soils. The analysis in this section is based on the findings provided in the Geotechnical Exploration report prepared for the proposed Project (included as Appendix F to Appendix B).

4.6.1 Existing Conditions

4.6.1.1 Topography

The Project site is located within Sections 25 and 36, Township 05 South, Range 04 West, as depicted on the USGS 7.5-minute topographic map, Romoland quadrangle (USGS 2003; see **Figure 3-3**). Site topography consists of a series of small hills, with elevations ranging from approximately 1,400 feet above mean sea level in a stream in the southwest corner of the Project site, to 1,700 feet above mean sea level on a hill in the eastern portion of the Project site. The site drains to the south, where a main natural drainage exists along the southern boundary of the site and serves to carry surface water southwest to Canyon Lake.

4.6.1.2 Regional Geology

The Project site is located within a prominent natural geomorphic province in southwestern California known as the Peninsular Ranges. It is characterized by steep, elongated ranges and valleys that trend northwestward. More specifically, the Project site is situated within the Perris Block, an eroded mass of Cretaceous and older crystalline rock. The Perris Block, approximately 20 miles by 50 miles in extent, is bounded by the San Jacinto Fault Zone to the northeast, the Elsinore Fault Zone to the southwest, the Cucamonga Fault Zone to the northwest, and the Temecula Basin to the southeast. The Perris Block has had a complex tectonic history, apparently undergoing relative vertical land movements of several thousand feet in response to movement on the Elsinore and San Jacinto Fault Zones. Thin sedimentary and volcanic materials locally mantle the crystalline bedrock. Alluvial and colluvial deposits fill the lower valleys.

4.6.1.3 Site Geology

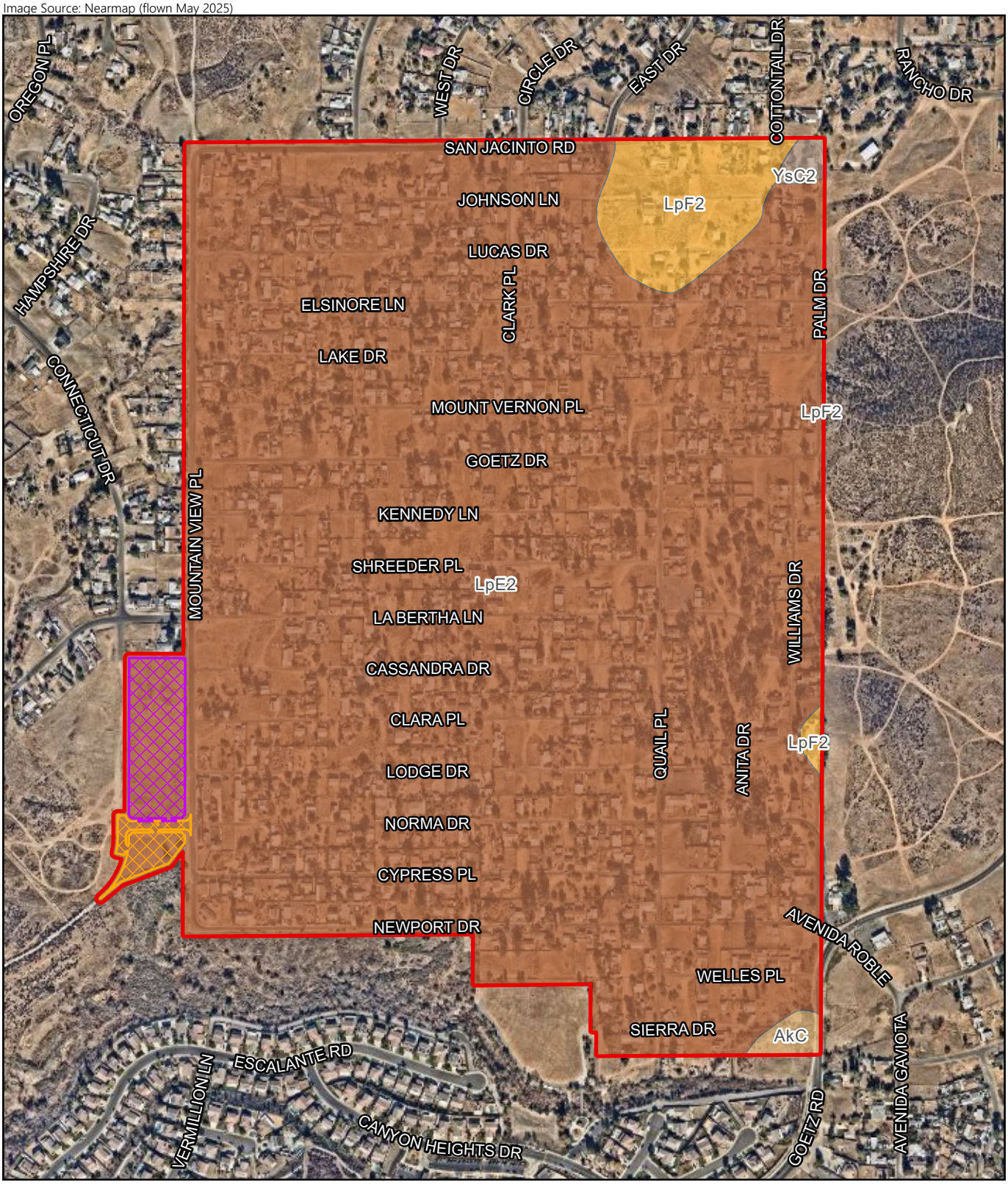
The Project site is situated in an old alluvial valley formed by a tributary of the San Jacinto River. Site geology generally consists of very old alluvium underlain by Mesozoic age metasedimentary bedrock. Figure 4.6-1 identifies the soil types within the Project site including Arbuckle loam, Lodo rocky loam, and Ysidora gravelly very fine sandy loam. The soil/rock conditions within the Project site vary depending on location and depth. A summary of the underlying geologic units that exist within the Project site and the corresponding soil types is provided below.

Artificial Fill: Artificial fill was encountered and is generally associated with existing pavement and associated subgrade soils within the upper one to two feet. The artificial fill extended to a depth of four to five feet below ground surface. The encountered artificial fill generally consisted of silty sand with gravel generated from on-site alluvial soils. The encountered artificial fill is expected to possess an expansion index of less than 50. The expansion index is a measure of the soil's potential to expand or shrink with changes in moisture content. An expansion index of less than 50 indicates that the artificial fill has low expansion potential, meaning it is not expected to undergo significant swelling or shrinkage that could adversely affect foundations, pavements, or other improvements. Where borings were drilled in existing asphalt, the measured thickness of asphaltic concrete varied from two inches to nine inches (see Figure 2 in the Geotechnical Exploration Report, included as Appendix F to Appendix B of this PEIR). The asphaltic concrete appeared to have been placed directly on subgrade soils at most locations.

Very Old Alluvium: Very old alluvial deposits were encountered in most of the borings overlying the bedrock and generally consist of dense silty sand and sandy gravel (see Figure 2 in the Geotechnical Exploration Report, included as Appendix F to Appendix B of this PEIR). More silt and clay content was observed in this alluvium along the southern portion of the Project site close to the existing drainage. Ysidora gravelly very fine sandy loam (YsC2) is associated with this geologic unit. The expansion index is expected to range from very low to low expansion.

Mesozoic Phyllite and Quartz-Rich Metasedimentary Rock: The Mesozoic age metasedimentary bedrock encountered was generally fissile black phyllite and highly to moderately weathered. Auger refusal was encountered in the less weathered phyllite in some areas at shallow depth. The bedrock encountered in the northern and eastern portions of the alignment was quartz-rich metasedimentary rock and generally exhibited similar weathering characteristics to the phyllite encountered. Soils generated from this bedrock generally consisted of gravelly sand to silty sand with gravel. Oversized rocks should be anticipated during excavation depending on the relative weathering and fracture patterns of the rock encountered. Arbuckle loam (AkC) and Lodo rocky loam (LpF2 and LpE2) are associated with this geologic unit. Soils generated from these rock units are anticipated to possess low expansion potential.

Image Source: Nearmap (flown May 2025)



Project Boundary
LS-1 Option 1
LS-1 Option 2

Soils

- AkC | Arbuckle loam, 2 to 8 percent slopes
- LpF2 | Lodo rocky loam, 25 to 50 percent slopes, eroded
- LpE2 | Lodo rocky loam, 8 to 25 percent slopes, eroded
- YsC2 | Ysidora gravelly very fine sandy loam, 2 to 8 percent slopes, eroded

0 Feet 600

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FIGURE 4.6-1
Soil Types

4.6.1.4 Faulting and Ground Shaking

The Project site is located within a seismically active southern California region, located near the active margin between the North American and Pacific tectonic plates. The principal source of seismic activity is movement along the northwest-trending regional fault systems such as the Elsinore, San Jacinto, and San Andreas Fault Zones. Based on published geologic hazard maps, the Project site is not located within a currently designated Alquist-Priolo Earthquake Fault Zone, or a County Fault Zone. As shown in **Figure 4.6-2**, the nearest Alquist-Priolo Earthquake Faults Zones are the Wildomar Segment of the Elsinore Fault, located approximately 6.3 miles southeast of the Project site, and the Casa Loma Segment of the San Jacinto Fault, located approximately 13.8 miles northeast of the Project site (California Department of Conservation [DOC] 2024).

According to the Southern California Earthquake Data Center (2026), no recent earthquakes with a moderate or large magnitude have been recorded near the Project site. While small, low-magnitude seismic events occur throughout southern California, these events are generally not damaging and are typical of background regional seismicity. The most notable regional earthquake affecting areas nearby was the Chino Hills earthquake, which occurred on July 29, 2008, had a magnitude of 5.4, and was located approximately 34 miles northwest of the Project site.

4.6.1.5 Liquefaction

Liquefaction is a seismic phenomenon in which loose, saturated, granular soils behave similarly to fluid when subject to high intensity ground shaking. Liquefaction occurs when the following three general conditions exist: (1) shallow groundwater; (2) low-density, non-cohesive (granular) soils; and (3) high-intensity ground motion. Liquefaction is typified by a buildup of pore-water pressure (pressure exerted by water within the pores of soil or rock) in the affected soil layer to a point where a total loss of shear strength occurs, causing the soil to behave as a liquid. Generally, saturated, loose- to medium-dense, near surface, cohesionless soils exhibit the highest liquefaction potential, while dry, dense, cohesionless soils and cohesive soils exhibit low to negligible liquefaction potential.

As shown in **Figure 4.6-3**, the Project site is mapped within an area identified as having very low liquefaction susceptibility. Although groundwater was encountered during the geotechnical exploration at depths ranging from approximately 3 to 23 feet below ground surface, soils on-site consist of very old alluvial deposits and metasedimentary rock that are relatively dense and not prone to liquefaction. Therefore, the presence of groundwater does not materially increase the potential for liquefaction at the Project site.

Image Source: Nearmap (flown May 2025)

Project Boundary
LS-1 Option 1
LS-1 Option 2

CGS Alquist Priolo Fault Zones

CGS Alquist Priolo Fault Traces

Accurately Located
Approximately Located
Inferred
Concealed

0 Miles 3

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FIGURE 4.6-2
Seismic Hazards

Image Source: Nearmap (flown May 2025)

Project Boundary
LS-1 Option 1
LS-1 Option 2

Liquefaction Susceptibility
Moderate
Very low

0 Feet 1,000

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FIGURE 4.6-3
Liquefaction Susceptibility

4.6.1.6 Landslides

Landslides occur when earth on slopes become destabilized, typically after heavy rains, when the precipitation saturates the soil and makes it less stable, or when significant erosion from rainfall destabilizes the ground. Slopes that have recently burned face a greater risk from rain-induced landslides, as the fires burn up many of the trees, brush, and other vegetation that help stabilize the earth. Earthquakes may also be a source of landslides as the shaking can destabilize already loosened soil. As shown in **Figure 4.6-4**, the majority of the Project site has been assigned a landslide susceptibility class of 0 (No Risk) by the California Geological Survey (CGS) on an ordinal scale where 0 represents no risk and higher classes indicate progressively greater susceptibility. Some areas within the Project site have been assigned landslide susceptibility classes ranging from V (Moderate Risk) to IX (High Risk; DOC 2025a). **Table 4.6-1** identifies the landslide susceptibility class mapped within each lift station site.

Table 4.6-1
Lift Station Sites Landslide Susceptibility Class

Lift Station	Landslide Susceptibility Class
LS-1 (Option 1)	V, VIII
LS-1 (Option 2)	V, VIII
LS-2	V
LS-3	V
LS-4	V
LS-5	V, VIII

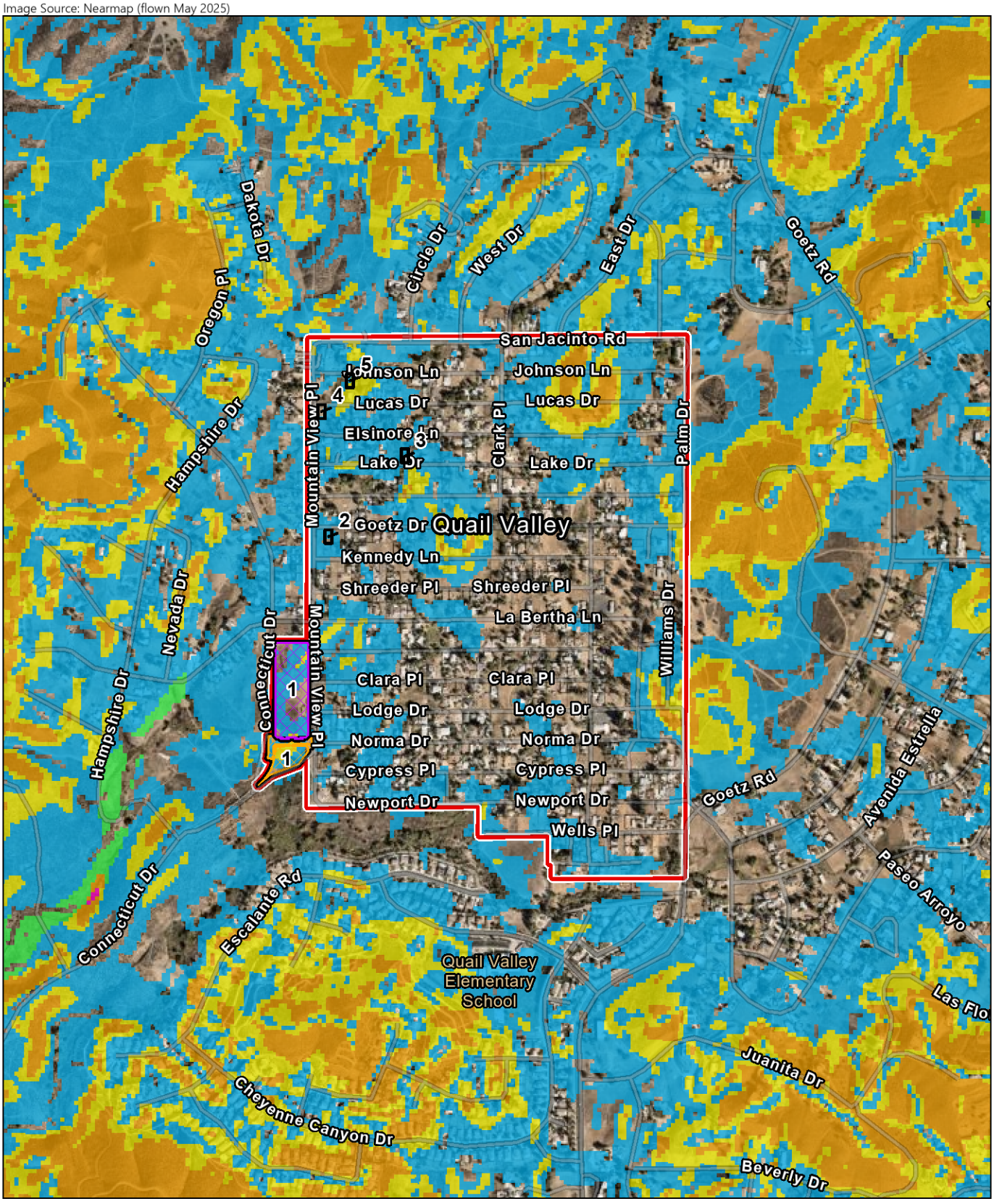
SOURCE: DOC 2025a.

4.6.1.7 Expansive Soils

Expansive soils are characterized by their ability to undergo significant volume change (shrink or swell) due to variations in moisture content. Changes in soil moisture content can result from rainfall, landscape irrigation, utility leakage, roof drainage, perched groundwater, drought, or other factors, and may cause unacceptable settlement or heaving of structures, concrete slabs supported on grade, or pavements supported over these materials. Depending on the extent and location below finished subgrade, expansive soils can have a detrimental effect on structures.

Soils within the Project site generally consist of very old alluvium underlain by Mesozoic age metasedimentary bedrock. As part of the geotechnical exploration, expansion index tests were performed on near-surface soil samples to evaluate their susceptibility to expansion in the presence of water. Based on the results of the testing, the soils on the Project site have a low to very low potential for expansion (see Appendix F to Appendix B).

Image Source: Nearmap (flown May 2025)



Project Boundary
Lift Station (LS)
LS-1 Option 1
LS-1 Option 2

Landslide Susceptibility Class

0
III
V
VI
VII
VIII
IX
X

0 Feet 1,000

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FIGURE 4.6-4
Landslide Susceptibility

4.6.1.8 Paleontological Resources

Paleontological sensitivity refers to the potential of a geologic unit to yield scientifically significant fossils. Sensitivity is determined by several factors, including the rock type, the history of the geologic unit in producing significant fossils, and the presence of recorded fossil localities. Importantly, paleontological sensitivity is based on fossil data collected from the entire geologic unit, not just from site-specific surveys.

According to the *Standard Guidelines for the Assessment and Mitigation of Adverse Impacts to Nonrenewable Paleontologic Resources* (Society of Vertebrate Paleontology [SVP] 2010), rock units are classified into the following four categories of paleontological sensitivity (potential):

- **High Potential.** High-potential rock units include sedimentary formations, some volcaniclastic formations (e.g., ashes or tephras), certain low-grade metamorphic rocks known to contain significant fossils, and sedimentary units suitable for fossil preservation (e.g., middle Holocene and older, fine-grained fluvial sandstones, argillaceous or carbonate-rich paleosols, cross-bedded point bar sandstones, and fine-grained marine sandstones).

- **Low Potential.** Some rock units can be identified as having a low potential for yielding significant fossils based on reports in the paleontological literature or field surveys conducted by a qualified paleontologist. These rock units are generally poorly represented in institutional fossil collections and, according to scientific consensus, rarely preserve fossils—the occurrence of fossils is the exception rather than the rule (e.g., basalt flows or recent colluvium). Rock units with low potential typically do not require mitigation measures to protect paleontological resources.

- **Undetermined Potential.** Rock units for which little information is available concerning their paleontological content, geologic age, and depositional environment are considered to have undetermined potential. Further study is necessary to determine if these rock units have high or low potential to contain significant paleontological resources. A field survey by a qualified professional paleontologist to specifically determine the paleontological resource potential of these rock units is required before a paleontological resource impact mitigation program can be developed. In cases where no subsurface data are available, paleontological potential can sometimes be determined by strategically located excavations into subsurface stratigraphy.

- **No Potential.** Some rock units have no potential to contain significant paleontological resources, for instance high-grade metamorphic rocks (such as gneisses and schists) and plutonic igneous rocks (such as granites and diorites). Rock units with no potential require no protection nor impact mitigation measures relative to paleontological resources.

Geologic mapping was used to assign paleontological sensitivity levels to the geologic units present at the surface or in the subsurface of the Project site, in accordance with SVP (2010) guidelines. As shown in **Table 4.6-2**, soils within the Project site that are derived from Mesozoic metamorphic rocks (phyllite and quartz-rich metasedimentary rocks) are considered to have low potential for fossil vertebrates and soils overlying Very Old Alluvium have low potential for fossil occurrence. Artificial fill is not fossiliferous and is considered to have no paleontological sensitivity.

Table 4.6-2
Soil Types and Associated Paleontological Sensitivities

Soil Type	Description	Geologic Unit	Paleontological Sensitivity
AkC	Arbuckle loam, 2–8% slopes	Very Old Alluvium	Low
LpF2	Lodo rocky loam, 25–50% slopes, eroded	Mesozoic Phyllite and Quartz-Rich Metasedimentary Rock	Low
LpE2	Lodo rocky loam, 8–25% slopes, eroded	Mesozoic Phyllite and Quartz-Rich Metasedimentary Rock	Low
YsC2	Ysidora gravelly very fine sandy loam, 2–8% slopes, eroded	Very Old Alluvium	Low

SOURCES: SVP 2010; DOC 2025b.

4.6.2 Applicable Regulatory Requirements

4.6.2.1 Federal Regulations

a. U.S. Geological Survey Landslide Hazard Program

The USGS created the Landslide Hazard Program in the mid-1970s. The program's primary objective is to reduce long-term losses from landslide hazards by improving understanding of the causes of ground failure and suggesting mitigation strategies. The federal government takes the lead role in funding and conducting this research, but the reduction of losses due to geologic hazards is primarily a state and local responsibility.

b. Soil and Water Resources Conservation Act

The purpose of the Soil and Water Resources Conservation Act of 1977 is to protect or restore soil functions on a permanent, sustainable basis. Protection and restoration activities include prevention of harmful soil changes, rehabilitation of the soil of contaminated sites and of water contaminated by such sites, and precautions against negative soil impacts. In addition, the Federal Water Pollution Control Act (also referred to as the CWA) requirements, through the NPDES permitting process, provide guidance for the protection of geologic and soil resources.

c. National Pollutant Discharge Elimination System

Section 402 of the CWA establishes the permit program to regulate pollutant discharge from point sources and discharge pollutants into U.S. waters. In the state of California, the U.S. EPA has authorized the SWRCB permitting authority to implement the NPDES program. In general, the SWRCB issues two baseline general permits: one for industrial discharges and one for construction activities. Rather than setting numeric effluent limitations for storm water and urban runoff, CWA regulation calls for the implementation of best management practices to reduce or prevent pollutant discharge from these activities to the maximum extent practicable for urban runoff and meeting the Best Available Technology Economically Achievable and Best Conventional Pollutant Control Technology standards for construction storm water. Regulations and permits have been

implemented at the federal, state, and local level to form a comprehensive regulatory framework to serve and protect the quality of the country's surface water resources.

d. Earthquake Hazards Reduction Act

The Earthquake Hazards Reduction Act of 1977 (Public Law 95-124) established the National Earthquake Hazards Reduction Program (NEHRP) which is coordinated through the Federal Emergency Management Agency (FEMA), the USGS, the National Science Foundation, and the National Institute of Standards and Technology. The purpose of the NEHRP is to establish measures for earthquake hazards reduction and promote the adoption of earthquake hazards reduction measures by federal, state, and local governments; national standards and model code organizations; architects and engineers; building owners; and others with a role in planning and constructing buildings, structures, and lifelines through (1) grants, contracts, cooperative agreements, and technical assistance; (2) development of standards, guidelines, and voluntary consensus codes for earthquake hazards reduction for buildings, structures, and lifelines; and (3) development and maintenance of a repository of information, including technical data, on seismic risk and hazards reduction. The NEHRP is intended to improve the understanding of earthquakes and their effects on communities, buildings, structures, and lifelines through interdisciplinary research that involves engineering, natural sciences, and social, economic, and decision sciences.

e. Occupational Safety and Health Administration Regulations

Excavation and trenching are among the most hazardous construction activities. Occupational Safety and Health Administration's Excavation and Trenching standard, Title 29 CFR Part 1926.650, covers requirements for excavation and trenching operations. The Occupational Safety and Health Administration requires that all excavations in which employees could potentially be exposed to cave-ins be protected by sloping or benching the sides of the excavation, supporting the sides of the excavation, or placing a shield between the side of the excavation and the work area.

4.6.2.2 State Regulations

a. Earthquake Fault Zoning Act (Alquist-Priolo Act)

The State of California Alquist-Priolo Earthquake Fault Zoning Act (1972) was established to mitigate the hazard of surface faulting to structures for human occupancy. Pursuant to the act, the state geologist has established regulatory zones (known as earthquake fault zones) around surface traces of active faults. Application for a development permit for any project within a delineated earthquake fault zone shall be accompanied by a geologic report, prepared by a geologist registered in the state of California, that is directed to the problem of potential surface fault displacement through a project site.

b. Seismic Hazard Mapping Act

The Seismic Hazard Mapping Act (SHMA) was adopted in 1990 to protect the public from the effects of non-surface fault rupture earthquake hazards, including strong ground shaking, liquefaction, seismically induced landslides, ground amplification, or other ground failure caused by earthquakes. The goal of the act is to minimize loss of life and property by identifying and mitigating seismic

hazards. CGS is the primary agency responsible for the implementation of the SHMA. TCGS prepares maps identifying seismic hazard zones and provides them to local governments, which include areas susceptible to amplified shaking, liquefaction, earthquake-induced landslides, and other ground failures. SHMA requires responsible agencies to only approve projects within these zones following a site-specific investigation to determine if the hazard is present, and if so, the inclusion of appropriate mitigation. In addition, the SHMA requires real estate sellers and agents at the time of sale to disclose whether a property is within one of the designated seismic hazard zones.

c. California Building Standards Code (Title 24)

CCR Title 24 provides state regulations that govern the design and construction of buildings, associated facilities, and equipment. These regulations are also known as building standards (see California Health and Safety Code Section 18909). Cities and counties are required by state law to enforce CCR Title 24 and may adopt ordinances making more restrictive requirements than provided by CCR Title 24 due to local climatic, geological, or topographical conditions. Title 24 includes CBC Section 3417: Earthquake Evaluation and Design for Retrofit of Existing Buildings.

d. California Public Resources Code Section 5097.5(a)

PRC Section 5097.5 prohibits excavation, removal, destruction, injury, or defacement of historic or prehistoric ruins, burial grounds, archaeological or vertebrate paleontological sites, and other related features on public lands without express permission from the public agency having jurisdiction over the lands.

4.6.2.3 Regional Regulations

a. South Coast Air Quality Management District Rules 402 and 403

SCAQMD Rules 402 and 403 require that fugitive dust be controlled during construction activities to limit exposure of nearby sites to fugitive dust resulting from construction activities. Rule 402 requires dust suppression techniques be implemented to prevent dust and soil erosion from creating a nuisance offsite. Rule 403 requires that fugitive dust be controlled with best available control measures so that the presence of such dust does not remain visible in the atmosphere beyond the property line of the emissions source. This would reduce erosion potential during construction.

4.6.2.4 Local Regulations

a. City of Menifee Local Hazard Mitigation Plan

The City's Local Hazard Mitigation Plan (LHMP) was created in 2015 as a result of the adoption of The Disaster Mitigation Act of 2000, commonly known as the 2000 Stafford Act amendment. The LHMP is largely used to assess the environmental hazards present in the City. The identified risks are contextualized within the City, as well as in terms of potential effects to the City's critical infrastructure. In order to minimize potential risks identified within the LHMP, mitigation is provided in order to reduce potential risks. The mitigation measures include preventive actions, property

protection techniques, structural projects, natural resource protection strategies, emergency services, and public education and awareness activities.

b. City of Menifee Municipal Code

Chapter 9 of the City's Municipal Code contains the City's Development Code. Within Chapter 9.190 of the Development Code, the City has defined acceptable standards for hillside developments. Specifically, the purpose of the Development Code is for hillside developments to preserve the public health, safety and welfare and specifically protect the public and property from hazards, such as seismic, geologic, and fire hazards.

Municipal Code Chapter 8.26.070 requires geotechnical reports for developments that involve grading permit applications or grading plan reviews unless waived by the City Engineer/Public Works Director. This ordinance requires that the geotechnical report contain analyses for soil engineering, engineering geology, and important earth materials, contaminants, and seismicity. The City requires that these reports be created by a reputable professional, such as an engineering geologist, a geophysicist or a civil engineer, with expertise in earthquake technology and its application to buildings or other civil engineering works.

c. City of Menifee General Plan

The City's General Plan includes the following goals and policies related to geology and soils.

Safety Element

Goal S-2: A community that has used engineering solutions to reduce or eliminate the potential for injury, loss of life, property damage, and economic and social disruption caused by geologic hazards such as slope instability; compressible, collapsible, expansive or corrosive soils; and subsidence due to groundwater withdrawal.

- Policy S-2.1: Require all new developments to mitigate the geologic hazards that have the potential to impact habitable structures and other improvements.

- Policy S-2.2: Monitor the losses caused by geologic hazards to existing development and require studies to specifically address these issues, including the implementation of measures designed to mitigate these hazards, in all future developments in these areas.

- Policy S-2.3: Minimize grading and modifications to the natural topography to prevent the potential for man-induced slope failures.

- Policy S-2.4: Manage the groundwater resources in the area to prevent overdrafting of the aquifers, which in turn could result in regional subsidence.

4.6.3 Significance Determination Thresholds

Thresholds used to evaluate impacts to geological resources are based on applicable criteria in the CEQA Guidelines (CCR Sections 15000–15387), Appendix G. The proposed Project would have a significant impact on the environment if it would:

1) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:

    a. 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,

    b. Strong seismic ground shaking,

    c. Seismic-related ground failure, including liquefaction,

    d. Landslides;

2) Result in substantial soil erosion or the loss of topsoil;

3) 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;

4) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property;

5) 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;

6) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

4.6.4 Methodology

The potential for significant impacts associated with the proposed Project has been determined based upon review of the Geotechnical Exploration report (see Appendix F to Appendix B), existing secondary source information, and data relative to the geology and soils resources available for the Project site.

4.6.5 Threshold 1: Seismic Hazards and Threshold 3: Geologic Instability

Would the project 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; or

(iv) landslides?

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?

4.6.5.1 Impact Analysis

i. Fault Rupture

As shown in Figure 4.6-2, the Project site is not located on an active earthquake fault. The nearest zoned faults are the Wildomar Segment of the Elsinore Fault, located approximately 6.3 miles southwest of the Project site, and the Casa Loma Segment of the San Jacinto Fault, located approximately 13.8 miles northeast of the Project site (DOC 2024). The proposed Project would not intersect with an active fault and therefore would not activate movement along an active fault nor cause a seismic event. The risk of earthquake ground rupture at the Project site is low, and impacts related to the exposure of people or structures to rupture of a known earthquake fault would be less than significant.

ii. Ground Shaking

The proposed Project is limited to construction/operation of a new sewer collection system, and would not introduce any residential, commercial, or other uses that could expose people to strong ground shaking. Therefore, impacts related to strong seismic shaking would be less than significant.

iii. Liquefaction

As shown in Figure 4.6-3, the Project site is mapped within an area identified as having very low liquefaction susceptibility. Borings completed in support of the Geotechnical Exploration report (see Appendix F to Appendix B) encountered groundwater at depths ranging from approximately 3 to 23 feet below ground surface. The Project pipelines would be installed in very old alluvial deposits of

metasedimentary rock. Due to the relatively dense nature of these materials, the proposed Project would not cause or increase the potential for liquefaction. Future phased development of the proposed Project would be required to adhere to the recommendations in the Geotechnical Exploration Report (see Appendix F to Appendix B). Therefore, the proposed Project would not cause or increase the potential for liquefaction, and impacts would be less than significant.

iv. Landslides

As shown in **Figure 4.6-4**, the majority of the Project site has been assigned a landslide susceptibility class of 0 (No Risk) by CGS. Some areas within the Project site have been assigned landslide susceptibility classes ranging from V (Moderate Risk) to IX (High Risk; DOC 2025b). CGS landslide susceptibility classifications represent relative potential for deep-seated landsliding based on regional geologic and slope conditions and do not indicate that landslides will occur.

The proposed pipelines would be installed completely underground, and the proposed lift stations would be primarily subterranean, with above-ground features including access hatches, electrical control panels, an emergency generator within an enclosure, and other associated equipment. As shown on **Figure 4.6.4** and in **Table 4.6-1**, the proposed lift station sites are located within areas mapped as landslide susceptibility classes V (Moderate Risk) and VIII (High Risk).

Construction of the above-ground components associated with the proposed lift stations would be in accordance with the CBC to meet all seismic design parameters. In addition, future phased development of the proposed Project would be required to implement the recommendations of the Geotechnical Exploration Report (see Appendix F to Appendix B), which includes measures to address slope stability and site-specific geologic constraints. Given the limited extent of above-ground development, compliance with CBC requirements, and implementation of project-specific geotechnical recommendations, the proposed Project would not expose people or structures to substantial landslide hazards. Therefore, impacts related to landslides would be less than significant.

4.6.5.2 Significance of Impacts

The proposed Project would not result in any impacts related to seismic hazards (rupture, shaking, liquefaction, and landslides), or result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse, and impacts would be less than significant.

4.6.5.3 Mitigation

No mitigation is required.

4.6.5.4 Significance of Impacts After Mitigation

No mitigation is required.

4.6.6 Threshold 2: Soil Erosion

Would the project result in substantial soil erosion or the loss of topsoil?

4.6.6.1 Impact Analysis

Construction

Construction of the proposed Project would include activities such as excavation, grading, backfilling, and compaction. Ground disturbance and stockpiling of soil and construction materials could result in soil erosion during rain or high-wind events. The extent of erosion that could occur would vary depending on soil type, slope steepness and stability, vegetation and vegetation cover, concentration of runoff, and weather conditions.

Construction activities would be required to comply with SCAQMD Rule 403 for dust control that would ensure the prevention and/or management of wind erosion and subsequent topsoil loss (see Section 4.2, Air Quality, for information about SCAQMD Rule 403). Compliance with SCAQMD Rule 403 would ensure that construction activities generating wind-induced soil erosion are below SCAQMD significance thresholds. Furthermore, the proposed Project would implement best management practices during construction, consistent with the requirements of the NPDES Construction General Permit, that are designed to minimize erosion potential by controlling storm water flows and minimization of topsoil loss. Therefore, compliance with the requirements of the NPDES Construction General Permit and SCAQMD Rule 403 would prevent substantial soil erosion or the loss of topsoil, and impacts would be less than significant.

Operation

During operation, activities that would increase the likelihood of erosion or loss of topsoil, such as excavation and grading, would not take place. Therefore, operational impacts regarding significant soil erosion or topsoil loss are not expected to occur, resulting in no impact.

4.6.6.2 Significance of Impacts

The proposed Project would not result in substantial soil erosion or the loss of topsoil, and impacts would be less than significant.

4.6.6.3 Mitigation

No mitigation is required.

4.6.6.4 Significance of Impacts After Mitigation

No mitigation is required.

4.6.7 Threshold 4: Expansive Soils

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?

4.6.7.1 Impact Analysis

The primary soil type within the Project site has been identified as Lodo rocky loam, 8–25% slopes, eroded (LpE2; see **Figure 4.6-1**), supporting very old alluvium underlain by Mesozoic age metasedimentary bedrock. As part of the geotechnical investigation, expansion index tests were performed on near-surface soil samples to evaluate their susceptibility to expansion in the presence of water. Based on the results of the testing, soils on the Project site have a low to very low potential for expansion (see Appendix F to Appendix B).

4.6.7.2 Significance of Impacts

The proposed Project would not be located on expansive soils, as defined in Table 18-1-B of the Uniform Building Code (1994), and impacts would be less than significant.

4.6.7.3 Mitigation

No mitigation is required.

4.6.7.4 Significance of Impacts After Mitigation

No mitigation is required.

4.6.8 Threshold 5: Septic Tanks

Would the project 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?

4.6.8.1 Impact Analysis

The proposed Project would replace existing private septic systems with a gravity sewer system. Therefore, the proposed Project does not include the use of septic tanks or alternative wastewater disposal systems.

4.6.8.2 Significance of Impacts

The proposed Project would not place septic tanks or alternative wastewater disposal systems on soils incapable of adequately supporting the tanks or system. No impact would occur.

4.6.8.3 Mitigation

No mitigation is required.

4.6.8.4 Significance of Impacts After Mitigation

No mitigation is required.

4.6.9 Threshold 6: Paleontological Resources and Unique Geology

Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

4.6.9.1 Impact Analysis

As described in Section 4.6.1.8 above, the geologic mapping was used to assign paleontological sensitivity levels to the geologic units present at the surface or in the subsurface of the Project site, in accordance with SVP (2010) guidelines. As shown in Table 4.6-2, soils within the Project site that are derived from Mesozoic metamorphic rocks (phyllite and quartz-rich metasedimentary rocks) are considered to have low potential for fossil vertebrates and soils overlying Very Old Alluvium have low potential for fossil occurrence. Artificial fill is not fossiliferous and is considered to have no paleontological sensitivity.

4.6.9.2 Significance of Impacts

The proposed Project would not directly or indirectly destroy a unique paleontological resource or site or unique geologic feature, and impacts would be less than significant.

4.6.9.3 Mitigation

No mitigation is required.

4.6.9.4 Significance of Impacts After Mitigation

No mitigation is required.

4.7 Greenhouse Gas Emissions

This section analyzes impacts related to GHG that could result from implementation of proposed Project. Construction of the proposed Project is planned to be carried out in eight phases implemented over a 20-year period. This evaluation is programmatic, focusing on the environmental impacts that could occur from implementation of all phases of construction (see Chapter 3). As each phase is constructed, an assessment will be made to determine whether this PEIR adequately covers the phase to be implemented or if additional project-level analyses may be required to further assess impacts.

This section includes a setting discussion that describes existing climate conditions and global climate change, existing regulations pertaining to global climate change, and potential GHG emissions resulting from construction and operation of the proposed Project. This section also includes an evaluation of potential impacts of the proposed Project related to GHG emissions. The analysis in this section is based on the findings provided in the GHG Analysis prepared for the proposed Project (Appendix G).

4.7.1 Existing Conditions

4.7.1.1 Greenhouse Gases of Primary Concern

There are numerous GHGs, both naturally occurring and anthropogenic. Each GHG has variable atmospheric lifetime and global warming potential (GWP). The atmospheric lifetime of the gas is the average time a molecule stays stable in the atmosphere. Most GHGs have long atmospheric lifetimes, staying in the atmosphere hundreds or thousands of years. GWP is a measure of the potential for a gas to trap heat and warm the atmosphere. Although GWP is related to its atmospheric lifetime, many other factors including chemical reactivity of the gas also influence GWP. GWP is reported as a unitless factor representing the potential for the gas to affect global climate relative to the potential of carbon dioxide (CO_2). Because CO_2 is the reference gas for establishing GWP, by definition its GWP is 1. Although methane (CH_4) has a shorter atmospheric lifetime than CO_2, it has a 100year GWP of 28; this means that CH_4 has 28 times more effect on global warming than CO_2.

The GWP is officially defined as (U.S. EPA 2010):

> The cumulative radiative forcing—both direct and indirect effects—integrated over a period of time from the emission of a unit mass of gas relative to some reference gas.

GHG emissions estimates are typically represented in terms of equivalent metric tons of CO_2 (MT CO_2E). CO_2E emissions are the product of the amount of each gas by its GWP. The effects of several GHGs may be discussed in terms of MT CO_2E and can be summed to represent the total potential of these gases to warm the global climate. **Table 4.7-1** summarizes some of the most common GHGs.

It should be noted that the U.S. EPA and other organizations update the GWP values they use occasionally. This change can be due to updated scientific estimates of the energy absorption or

lifetime of the gases or to changing atmospheric concentrations of GHGs that result in a change in the energy absorption of one additional ton of a gas relative to another. The GWPs shown in **Table 4.7-1** are the most current. However, it should be noted that in the CalEEMod, which is the model used in this analysis to calculate emission, CH_4 has a GWP of 25 and nitrous oxide (N_2O) has a GWP of 298, consistent with the *2017 Climate Change Scoping Plan Update, the Strategy for Achieving California's 2030 Greenhouse Gas Target* (2017 Scoping Plan; CARB 2017).

All of the gases in **Table 4.7-1** are produced by either biogenic (natural) source or anthropogenic (human) sources or both. These are the GHGs of primary concern in this analysis. CO_2 would be emitted by the proposed Project due to the combustion of fossil fuels in vehicles (including construction), from electricity generation and natural gas consumption, from water use, and from solid waste disposal. Smaller amounts of CH_4 and N_2O would be emitted from the same sources.

Table 4.7-1
Global Warming Potentials and Atmospheric Lifetimes (years)

Gas	Atmospheric Lifetime (years)	100-year GWP	20-year GWP
Carbon dioxide (CO_2)	50–200	1	1
Methane (CH_4)	12.4	25/28*	84
Nitrous oxide (N_2O)	121	298/265*	264
HFC-23	222	12,400	10,800
HFC-32	5.2	677	2,430
HFC-125	28.2	3,170	6,090
HFC-134a	13.4	1,300	3,710
HFC-143a	47.1	4,800	6,940
HFC-152a	1.5	138	506
HFC-227ea	38.9	3,350	5,360
HFC-236fa	242	8,060	6,940
HFC-43-10mee	16.1	1,650	4,310
CF_4	50,000	6,630	4,880
C_2F_6	10,000	11,100	8,210
C_3F_8	2,600	8,900	6,640
C_4F_{10}	2,600	9,200	6,870
c-C_4F_8	3,200	9,540	7,110
C_5F_{12}	4,100	8,550	6,350
C_6F_{14}	3,100	7,910	5,890
SF_6	3,200	23,500	17,500

GWP = global warming potential
SOURCE: Intergovernmental Panel on Climate Change 2007, 2014.
*The CH_4 and N_2O 100-year GWPs included in the California Emissions Estimator Model are 25 and 298, respectively, from the Intergovernmental Panel on Climate Change Fourth Assessment Report. All other values are from the current Fifth Assessment Report.

4.6.1.2 GHG Inventories

a. State

The CARB performs statewide GHG inventories. The inventory is divided into nine broad sectors of economic activity: agriculture, commercial, electricity generation, forestry, high GWP emitters, industrial, recycling and waste, residential, and transportation. Emissions are quantified in million metric tons of CO_2 equivalent (MMT CO_2E). **Table 4.7-2** shows the estimated statewide GHG emissions for the years 1990, 2010, 2017, and 2022. Although annual GHG inventory data is available for years 2000 through 2022, the years 1990, 2010, 2017, and 2022 are highlighted in **Table 4.7-2** because 1990 is the baseline year for established reduction targets, 2010 and 2017 correspond to the same years for which inventory data for western Riverside County and the City of Menifee is available, and 2022 is the most recent data available.

Table 4.7-2
California GHG Emissions by Sector

Sector	1990[1] Emissions in MMT CO_2E (% total)[2]	2010[3] Emissions in MMT CO_2E (% total)[2]	2017[3] Emissions in MMT CO_2E (% total)[2]	2022[3] Emissions in MMT CO_2E (% total)[2]
Electricity Generation	110.5 (25.7%)	90.6 (20.5%)	64.5 (15.7%)	59.8 (16.1%)
Transportation	150.6 (35.0%)	167.7 (37.9%)	170.5 (41.6%)	143.6 (38.7%)
Industrial	105.3 (24.4%)	98.0 (22.1%)	92.8 (22.6%)	83.8 (22.6%)
Commercial	14.4 (3.4%)	20.1 (4.5%)	22.4 (5.5%)	23.4 (6.3%)
Residential	29.7 (6.9%)	32.1 (7.3%)	28.4 (6.9%)	30.7 (8.3%)
Agriculture and Forestry	18.9 (4.4%)	34.0 (7.7%)	31.6 (7.7%)	29.8 (8.0%)
Not Specified	1.3 (0.3%)	-	--	--
TOTAL[4]	**430.7**	**442.5**	**410.2**	**371.1**

GHG = greenhouse gas; MMT CO_2E= million metric tons of carbon dioxide equivalent; % = percent
SOURCE: California Air Resources Board (CARB) 2007 and 2024.
[1]1990 data was obtained from the CARB 2007 source and are based on the Intergovernmental Panel on Climate Change fourth assessment report global warming potentials.
[2]Percentages may not total 100 due to rounding.
[3]2010, 2017, and 2022 data was retrieved from the CARB 2024 source and are based on Intergovernmental Panel on Climate Change fourth assessment report global warming potentials.
[4]Totals may vary due to independent rounding.

b. Western Riverside County

In February 2022, the Western Riverside Council of Governments (WRCOG) adopted the *Subregional Climate Action Plan* (2022 CAP Update; WRCOG 2022). The 2022 CAP Update builds upon the original 2014 *Subregional Climate Action Plan* (2014 CAP; WRCOG 2014). The 2014 CAP and 2022 CAP Update inventoried existing emissions within western Riverside County and outline measures to reduce future emissions. The communitywide GHG emissions were calculated using the International Council for Local Environmental Initiatives U.S. Community Protocol. The results of the community inventory for 2010 and 2017 are summarized in **Table 4.7-3**. Similar to the statewide emissions, transportation-related GHG emissions contributed the most countywide, followed by emissions associated with energy use.

Table 4.7-3 Western Riverside County GHG Emissions in 2010 and 2017				
Source	2010 Inventory		2017 Inventory	
	MT CO_2E	%	MT CO_2E	%
On-Road Transportation	5,468,974	43.4	4,831,298	44.1
Residential Energy	2,740,057	21.7	2,196,196	20.0
Non-Residential Energy	2,839,875	22.5	2,099,759	19.2
Solid Waste	453,701	3.6	586,687	5.4
Off-Road Equipment	417,427	3.3	532,816	4.9
Agriculture	322,410	2.6	251,803	2.3
Large Stationary Sources[1]	15,909	0.1	170,723	1.6
Water	213,224	1.7	162,430	1.5
Wastewater	97,158	0.8	79,485	0.7
Freight Rail	36,658	0.3	36,036	0.3
Commuter Rail	9,262	0.1	13,704	0.1
TOTAL–With Large Stationary Sources[1]	**12,614,655**	**100**	**10,960,936**	**100**
TOTAL–Without Large Stationary Sources[1]	**12,598,746**	**--**	**10,790,213**	**--**

GHG = greenhouse gas; MT CO_2E = metric tons of carbon dioxide equivalent; % = percent
SOURCE: Western Riverside Council of Governments 2022.
[1]Totals may vary due to independent rounding.
[2]In 2017, there were nine facilities within the Western Riverside Council of Governments region that were regulated under Cap and Trade: 3M Corona, All American Asphalt, and Dart Container Corporation of California in Corona; Pacific Clay Products in Lake Elsinore; SDG&E Compressor Station in Moreno Valley; Sierra Aluminum Company and University of California, Riverside in Riverside; and Infineon Technologies Americas Corp and Pechanga Resort and Casino in Temecula. Of these nine facilities, only one was reported in 2010, the Dart Container Corporation of California.

c. City of Menifee

GHG emissions inventories for the City of Menifee were prepared as part of the WRCOG 2022 CAP Update (WRCOG 2022). The inventory is presented in **Table 4.7-4**.

Table 4.7-4 City of Menifee GHG Emissions in 2010 and 2017				
Source	2010 Inventory		2017 Inventory	
	MT CO_2E	%	MT CO_2E	%
Residential Electricity	56,820	13.7	53,098	14.0
Non-Residential Electricity	26,890	6.5	25,433	6.7
Residential Natural Gas	47,890	11.5	50,347	13.3
Non-Residential Natural Gas	6,962	1.7	8,139	2.2
On-Road Transportation	250,645	60.3	206,056	54.5
Water	5,431	1.3	5,268	1.4
Solid Waste	13,319	3.2	16,941	4.5
Wastewater	757	0.2	822	0.2
Off-Road Equipment	5,631	1.4	10,168	2.7
Commuter Rail	1,158	0.3	1,825	0.5
TOTAL[1]	**415,503**	**100.0**	**378,097**	**100.0**

GHG = greenhouse gas; MT CO_2E = metric tons of carbon dioxide equivalent; % = percent
SOURCE: WRCOG 2022.
[1]Total may vary due to independent rounding.

d. Eastern Municipal Water District

The Eastern Municipal Water District (District) prepared its own CAP that outlines strategies, goals, and actions that can reduce the District's GHG emissions. The District has been reporting its annual GHG emissions inventory to The Climate Registry, a nonprofit organization for carbon reporting, since 2006. The inventories reported to The Climate Registry for the years 2006 through 2017 served as the starting point for analyzing the District's emissions over time and informed development of effective strategies and actions to reduce emissions. These annual emissions are summarized in Table 4.7-5. Construction emissions were estimated based on emission factors derived from previously completed projects, infrastructure projects planned over a 10-year period from 2020 through 2030 and divided over 10 years to obtain an estimated annual emission rate.

Table 4.7-5
Eastern Municipal Water District Annual GHG Emissions
(MT CO_2E)

Source	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Purchased Electricity	32,571	38,370	27,623	25,425	27,782	28,639	27,785	29,305	26,241	24,362	24,696	23,279
Stationary Combustion	30,093	31,501	28,050	27,337	21,124	20,693	23,708	24,320	21,160	18,989	20,249	23,710
Mobile Combustion	3,177	3,484	3,616	3,065	3,036	3,269	2,979	2,813	2,829	2,801	2,771	2,755
Biomass Combustion	4,899	4,838	4,873	5,013	5,013	6,621	8,505	7,610	7,567	9,191	9,415	9,620
Process Emissions	1,283	1,283	1,283	1,322	1,283	1,283	1,283	1,283	1,283	1,283	1,283	1,283
Biosolid Hauling	919	968	747	2,212	2,563	2,032	2,298	2,448	2,355	2,200	2,335	1,418
Construction	6,605	6,605	6,605	6,605	6,605	6,605	6,605	6,605	6,605	6,605	6,605	6,605
TOTAL	79,547	87,048	72,797	70,978	67,406	69,143	73,162	74,384	68,040	65,432	67,354	68,670

MT CO_2E = metric tons of carbon dioxide equivalent
SOURCE: Eastern Municipal Water District 2022.
NOTE: Total may vary due to independent rounding.

4.7.2 Applicable Regulatory Requirements

4.7.2.1 Federal Regulations

a. U.S. Environmental Protection Agency

In 2009, the U.S. EPA issued its science-based finding that the buildup of heat-trapping GHGs in the atmosphere endangers public health and welfare. The "Endangerment Finding" reflects the overwhelming scientific evidence on the causes and impacts of climate change. It was made after a thorough rulemaking process considering thousands of public comments and was upheld by the federal courts.

The U.S. EPA has many federal level programs and projects to reduce GHG emissions. The U.S. EPA provides regulatory actions and initiatives to reduce GHGs associated with high global warming

chemicals; transportation/mobile sources; and stationary sources such as oil and gas industries and power plants, and landfills. The GHG Reporting Program collects GHG data from large emission sources across a range of industry sectors, as well as suppliers of products that would emit GHGs if released or combusted. Under the federal CAA (40 Code of Federal Regulations Part 98), facilities that meet reporting thresholds must report GHG emissions to the program annually (U.S. EPA 2025).

In *Massachusetts et al. v. Environmental Protection Agency et al.*, 549 U.S. 497 (2007), the Supreme Court of the United States ruled that carbon dioxide is an air pollutant as defined under the CAA and that the U.S. EPA has the authority to regulate GHG emissions. In 2010, the U.S. EPA started to address GHG emissions from stationary sources through its New Source Review permitting program, including operating permits for "major sources" issued under Title V of the CAA. On July 29, 2025, the U.S. EPA announced a proposal to rescind the Endangerment Finding and repeal all GHG emission standards for light-duty, medium-duty, and heavy-duty vehicles and engines pursuant to CAA section 202(a). As of writing this report, the U.S. EPA has not adopted this proposal.

b. Corporate Average Fuel Economy Standards

The federal Corporate Average Fuel Economy (CAFE) standards determine the fuel efficiency of certain vehicle classes in the U.S. The National Highway Traffic Safety Administration sets CAFE standards for passenger cars and for light trucks (collectively, light-duty vehicles) and separately sets fuel consumption standards for medium- and heavy-duty trucks and engines. With improved gas mileage, fewer gallons of transportation fuel would be combusted to travel the same distance, thereby reducing nationwide GHG emissions associated with vehicle travel. The most recent standards require an industry-wide fleet average of approximately 50.4 miles per gallon for passenger cars and light trucks in model year 2031. The final CAFE standards increase at a rate of 2 percent per year for passenger cars in model years 2027 to 2031 and 2 percent per year for light trucks in model years 2029 to 2031.

c. Public Laws

There have been recent congressional actions that affect California emission standards. They are discussed below.

Public Law No. 119-15

On June 12, 2025, Public Law No. 119-15, enacting House Joint Resolution 87, was signed into law. The law used the Congressional Review Act to nullify U.S. EPA's rule that had granted California a waiver to enforce stricter emissions standards for heavy-duty vehicles under the CAA. The disapproved rule included programs such as the Advanced Clean Trucks regulation and zero-emission requirements for airport shuttles. Passed under the Congressional Review Act, the law prevents U.S. EPA from implementing or reissuing the same or similar rules without new congressional authorization. This effectively blocks California, and other states that follow its standards, from enforcing these specific vehicle emission and warranty regulations.

Public Law No. 119-16

Similarly on June 12, 2025, Public Law No. 119-16, enacting House Joint Resolution 88, became law. The law also relied on the Congressional Review Act to void the U.S. EPA's December 2024 waiver under the CAA that allowed California to implement and enforce the Advanced Clean Cars (ACC) II regulation. ACC II included a ZEV mandate targeting 100 percent new light-duty ZEV sales by 2035. Public Law No. 119-16 marks the first ever occurrence that waivers under the CAA have been revoked under the Congressional Review Act. The implications of this law on the State's capability to enforce its independent fuel economy standards are uncertain at this time, as the California Attorney General is pursuing legal action challenging Public Law No. 119-16. Whether this action will be successful is unknown, as is the possibility that a federal judge will issue a stay to halt the implementation of the ACC II regulation during the legal process.

4.7.2.2 State Regulations

a. Executive Orders and Statewide GHG Emission Targets

Executive Order S-3-05

Executive Order (EO) S-3-05 established the following GHG emission reduction targets for the state of California:

- by 2010, reduce GHG emissions to 2000 levels;
- by 2020, reduce GHG emissions to 1990 levels;
- by 2050, reduce GHG emissions to 80 percent below 1990 levels.

This EO also directs the secretary of the California Environmental Protection Agency to oversee the efforts made to reach these targets, and to prepare biannual reports on the progress made toward meeting the targets and on the impacts to California related to global warming, including impacts to water supply, public health, agriculture, the coastline, and forestry. With regard to impacts, the report shall also prepare and document mitigation and adaptation plans to combat the impacts. The first Climate Action Team Assessment Report was produced in March 2006 and has since been updated every two years.

Executive Order B-30-15

EO B-30-15, issued on April 29, 2015, establishes an interim GHG emission reduction goal for the state of California by 2030 of 40 percent below 1990 levels. This EO also directed all state agencies with jurisdiction over GHG emitting sources to implement measures designed to achieve the new interim 2030 goal, as well as the pre-existing, long-term 2050 goal identified in EO S-3-05. Additionally, this EO directed CARB to update its Climate Change Scoping Plan to address the 2030 goal.

Assembly Bill 1279

AB 1279, approved in September 2022, requires the state to achieve net zero GHG emissions as soon as possible, but no later than 2045, and achieve and maintain net negative GHG emissions thereafter,

and to ensure that by 2045, statewide anthropogenic GHG emissions are reduced to at least 85 percent below 1990 levels. The bill would require the state board to work with relevant state agencies to ensure that updates to the scoping plan identify and recommend measures to achieve these policy goals and to identify and implement a variety of policies and strategies that enable CO_2 removal solutions and carbon capture, utilization, and storage technologies.

b. California Global Warming Solutions Act

In response to EO S-3-05, the California Legislature passed AB 32, the California Global Warming Solutions Act of 2006, and thereby enacted Sections 38500–38599 of the California Health and Safety Code. The heart of AB 32 is its requirement that CARB establish an emissions cap and adopt rules and regulations that would reduce GHG emissions to 1990 levels by 2020. AB 32 also required CARB to adopt a plan by January 1, 2009, indicating how emission reductions would be achieved from significant GHG sources via regulations, market mechanisms, and other actions.

In 2008, CARB estimated that annual statewide GHG emissions were 427 MMT CO_2E in 1990 and would reach 596 MMT CO_2E by 2020 under a business as usual (BAU) condition (CARB 2008). To achieve the mandate of AB 32, CARB determined that a 169 MMT CO_2E (or approximate 28.5 percent) reduction in BAU emissions was needed by 2020. In 2010, CARB prepared an updated 2020 forecast to account for the recession and slower forecasted growth. CARB determined that the economic downturn reduced the 2020 BAU by 55 MMT CO_2E; as a result, achieving the 1990 emissions level by 2020 would require a reduction in GHG emissions of 21.7 (not 28.5) percent from the 2020 BAU. California has achieved its 2020 goal.

Approved in September 2016, SB 32 updates the California Global Warming Solutions Act of 2006 and enacts EO B-30-15. Under SB 32, the state would reduce its GHG emissions to 40 percent below 1990 levels by 2030. This is equivalent to an emissions level of approximately 260 MMT CO_2e for 2030. In implementing the 40 percent reduction goal, CARB is required to prioritize emissions reductions to consider the social costs of the emissions of GHGs; where "social costs" is defined as "an estimate of the economic damages, including, but not limited to, changes in net agricultural productivity; impacts to public health; climate adaptation impacts, such as property damages from increased flood risk; and changes in energy system costs, per metric ton of greenhouse gas emission per year."

c. Climate Change Scoping Plan

As directed by the California Global Warming Solutions Act of 2006, in 2008, CARB adopted the *Climate Change Scoping Plan: A Framework for Change* (Scoping Plan), which identifies the main strategies California will implement to achieve the GHG reductions necessary to reduce forecasted BAU emissions in 2020 to the state's historic 1990 emissions level (CARB 2008). In November 2017, CARB released the 2017 Scoping Plan (CARB 2017). The 2017 Scoping Plan identifies state strategies for achieving the state's 2030 GHG emissions reduction target codified by SB 32. Measures under the 2017 Scoping Plan Scenario build on existing programs such as the Low Carbon Fuel Standard, ACC Program, Renewable Portfolio Standard (RPS), Sustainable Communities Strategy (SCS), Short-Lived Climate Pollutant Reduction Strategy, and the Cap-and-Trade Program. Additionally, the 2017 Scoping Plan proposes new policies to address GHG emissions from natural and working lands.

The *2022 Scoping Plan Update for Achieving Carbon Neutrality* (2022 Scoping Plan; CARB 2022) was adopted in December 2022. The 2022 Scoping Plan assesses the progress towards the 2030 GHG emissions reduction target identified in the 2017 Scoping Plan and lays out a path to achieve targets for carbon neutrality and reduce anthropogenic GHG emissions by 85 percent below 1990 levels no later than 2045, as directed by AB 1279. The 2022 Scoping Plan identifies strategies related to clean technology, energy development, natural and working lands, and others, and is designed to meet the state's long-term climate objectives and support a range of economic, environmental, energy security, environmental justice, and public health priorities.

d. Regional Emissions Targets–Senate Bill 375

SB 375, the 2008 Sustainable Communities and Climate Protection Act, was signed into law in September 2008 and requires CARB to set regional targets for reducing passenger vehicle GHG emissions in accordance with the Scoping Plan. The purpose of SB 375 is to align regional transportation planning efforts, regional GHG reduction targets, and fair-share housing allocations under state housing law. SB 375 requires Metropolitan Planning Organizations (MPOs) to adopt a SCS or Alternative Planning Strategy to address GHG reduction targets from cars and light-duty trucks in the context of that MPO's Regional Transportation Plan (RTP). The Southern California Association of Governments (SCAG) is the region's MPO, and the region's RTP/SCS is Connect SoCal 2024 (see Section 4.7.2.3.b). The current targets for the region are an eight percent reduction in GHG emissions per capita from automobiles and light-duty trucks compared to 2005 levels by 2020 and a 19 percent reduction by 2035. These targets will be reviewed and updated in 2026.

e. Renewables Portfolio Standard

The RPS promotes diversification of the state's electricity supply and decreased reliance on fossil fuel energy sources. Renewable energy includes (but is not limited to) wind, solar, geothermal, small hydroelectric, biomass, anaerobic digestion, and landfill gas. Originally adopted in 2002 with a goal to achieve a 20 percent renewable energy mix by 2020 (referred to as the "Initial RPS"), the goal has been accelerated and increased by EOs S-14-08 and S-21-09 to a goal of 33 percent by 2020. In April 2011, SB 2 (1X) codified California's 33 percent RPS goal. SB 350 (2015) increased California's renewable energy mix goal to 50 percent by the year 2030. SB 100 (2018) further increased the standard set by SB 350 establishing the RPS goal of 44 percent by the end of 2024, 52 percent by the end of 2027, and 60 percent by 2030.

f. Assembly Bill 341–Solid Waste Diversion

The Commercial Recycling Requirements mandate that businesses (including public entities) which generate four cubic yards or more of commercial solid waste per week and multi-family residential with five units or more arrange for recycling services. Businesses can take one or any combination of the following in order to reuse, recycle, compost, or otherwise divert solid waste from disposal. Additionally, AB 341 mandates that 75 percent of the solid waste generated be reduced, recycled, or composted by 2020.

g. California Code of Regulations, Title 24–California Building Code

The California Code of Regulations, Title 24, is referred to as the California Building Code, or CBC. It consists of a compilation of several distinct standards and codes related to building construction, including plumbing, electrical, interior acoustics, energy efficiency, handicap accessibility, and so on. Of particular relevance to GHG reductions are the CBC's energy efficiency and green building standards as outlined below.

Title 24, Part 6–Energy Efficiency Standards

The California Code of Regulations, Title 24, Part 6 is the California Energy Efficiency Standards for Residential and Nonresidential Buildings (also known as the California Energy Code). This code, originally enacted in 1978, establishes energy-efficiency standards for residential and nonresidential buildings in order to reduce California's energy consumption. The Energy Code is updated periodically to incorporate and consider new energy-efficient technologies and methodologies as they become available, and incentives in the form of rebates and tax breaks are provided on a sliding scale for buildings achieving energy efficiency above the minimum standards.

The current 2022 Title 24 Building Energy Efficiency Standards went into effect on January 1, 2023. The 2022 Energy Code increases on-site renewable energy generation from solar, increases electric load flexibility to support grid reliability, reduces emissions from newly constructed buildings, reduces air pollution for improved public health, and encourages adoption of environmentally beneficial efficient electric technologies.

New construction and major renovations must demonstrate their compliance with the current Energy Code through submission and approval of a Title 24 Compliance Report to the local building permit review authority and the CEC. The compliance reports must demonstrate a building's energy performance through use of CEC approved energy performance software that shows iterative increases in energy efficiency given the selection of various heating, ventilation, and air conditioning; sealing; glazing; insulation; and other components related to the building envelope.

Title 24, Part 11–California Green Building Standards

The California Green Building Standards Code, referred to as CALGreen, was added to Title 24 as Part 11 first in 2009 as a voluntary code, which then became mandatory effective January 1, 2011 (as part of the 2010 CBC). The most recent 2022 CALGreen institutes mandatory minimum environmental performance standards for all ground-up new construction of nonresidential and residential structures. Local jurisdictions must enforce the minimum mandatory Green Building Standards and may adopt additional amendments for stricter requirements. The mandatory measures are related to planning and design, energy efficiency, water efficiency and conservation, material conservation and resource efficiency, and environmental quality. 2022 CALGreen also includes two tiers of residential and nonresidential voluntary measures that encourage local jurisdictions to raise the sustainability goals: Tier 1 adds additional requirements beyond the mandatory measures, and Tier 2 further increases the requirements.

Similar to the reporting procedure for demonstrating Energy Code compliance in new buildings and major renovations, compliance with the CALGreen mandatory requirements must be demonstrated through completion of compliance forms and worksheets.

4.7.2.3 Local Regulations

a. South Coast Air Quality Management District

The SCAQMD is the agency responsible for air quality planning and regulation in the South Coast Air Basin. The SCAQMD addresses the impacts to climate change of projects subject to SCAQMD permits as a lead agency if they are the only agency that has discretionary approval for a project. SCAQMD acts as a responsible agency when a land use agency must also approve discretionary permits for a project. In the case of the proposed Project, SCAQMD is considered a responsible agency because permits would be required for the emergency generators. The SCAQMD acts as an expert commenting agency for impacts to air quality. This expertise carries over to GHG emissions, so the agency helps local land use agencies through the development of models and emission thresholds that can be used to address GHG emissions.

In 2008, SCAQMD formed a Working Group to identify GHG emissions thresholds for land use projects that could be used by local lead agencies in the South Coast Air Basin. The Working Group developed several different options that are contained in the SCAQMD Draft Guidance Document–*Interim CEQA GHG Significance Thresholds for Stationary Sources, Rules, and Plans*, which could be applied by lead agencies. The working group met again in 2010 to review the guidance. The SCAQMD Board has not approved the thresholds; however, the Guidance Document provides substantial evidence supporting the approaches to significance of GHG emissions that can be considered by the lead agency in adopting its own threshold. The current interim thresholds consist of the following tiered approach (SCAQMD 2008, 2010):

- Tier 1–The project is exempt from CEQA.
- Tier 2–The project is consistent with an applicable regional GHG emissions reduction plan. If a project is consistent with a qualifying local GHG reduction plan, it does not have significant GHG emissions.
- Tier 3–Project GHG emissions represent an incremental increase below or mitigated to less than Significance Screening Levels, where
    - Residential/Commercial Screening Level
        - Option 1: 3,000 MT CO_2E screening level for all residential/commercial land uses
        - Option 2: Screening level thresholds for land use type acceptable if used consistently by a lead agency:
            - Residential: 3,500 MT CO_2E
            - Commercial: 1,400 MT CO_2E
            - Mixed-Use: 3,000 MT CO_2E
    - 10,000 MT CO_2E is the Permitted Industrial Screening Level

- Tier 4–The project achieves performance standards, where performance standards may include:
    - Option 1: Percent emission reduction target. SCAQMD has no recommendation regarding this approach at this time.
    - Option 2: The project would implement substantial early implementation of measures identified in the CARB's Scoping Plan. This option has been folded into Option 3.
    - Option 3: SCAQMD Efficiency Targets.
        - 2020 Targets: 4.8 MT CO_2E per service population for project-level analyses or 6.6 MT CO_2E per service population for plan level analyses where service population includes residential and employment populations provided by a project.
        - 2035 Targets: 3.0 MT CO_2E per service population for project-level analyses or 4.1 MT CO_2E per service population for plan level analyses.
- Tier 5–Offsets along or in combination with the above target Significance Screening Level. Offsets must be provided for a 30-year project life, unless the project life is limited by permit, lease, or other legally binding condition.

If a project complies with any one of these tiers, its impacts related to GHG emissions would be considered less than significant.

The SCAQMD's interim thresholds used the EO S-3-05 year 2050 goal as the basis for the Tier 3 screening level. Achieving the EO's objective would contribute to worldwide efforts to cap CO_2 concentrations at 450 parts per million, thus stabilizing global climate.

SCAQMD only has authority over GHG emissions from development projects that include air quality permits. The proposed lift stations would include emergency backup generators that would be permitted by the SCAQMD and would be subject to the following SCAQMD regulation:

- *Emergency Backup Generators.* An emergency backup generator is defined by the SCAQMD as standby internal combustion engine or turbine for non-utility power generation that does not operate more than 200 hours a year and is only operated in the event of an emergency power failure or for routine testing and maintenance. All internal combustion engines greater than 50 brake horsepower are required to obtain a permit to construct from the SCAQMD prior to installation of the engines at a site. If a permit is required, the SCAQMD is considered a Responsible Agency under CEQA.

SCAQMD Regulation XXVII, adopted in 2009, includes the following rules:

- Rule 2700 defines terms and post global warming potentials.
- Rule 2701, SoCal Climate Solutions Exchange, establishes a voluntary program to encourage, quantify, and certify voluntary, high quality certified GHG emission reductions in the SCAQMD.

- Rule 2702, GHG Reduction Program created a program to produce GHG emission reductions within the SCAQMD. The SCAQMD will fund projects through contracts in response to requests for proposals or purchase reductions from other parties.

b. Southern California Association of Governments

In April 2024, SCAG adopted Connect SoCal 2024, the RTP/SCS. The horizon year for Connect SoCal 2024 is 2050. The Connect SoCal plan identifies land use strategies that focus on new housing and job growth in areas with a variety of destinations and mobility options that would support and complement the proposed transportation network. The overarching strategy in Connect SoCal is to provide for a plan that allows the southern California region to grow in more compact communities in transit priority areas and priority growth areas; provide neighborhoods with efficient and plentiful public transit; establish abundant and safe opportunities to walk, bike, and pursue other forms of active transportation; and preserve more of the region's remaining natural lands and farmlands (SCAG 2024). The Connect SoCal plan contains transportation projects to help more efficiently distribute population, housing, and employment growth as well as projected development that promotes active transport and reduces GHG emissions.

c. Eastern Municipal Water District Climate Action Plan

The District adopted a CAP that outlines strategies, goals, and actions that can reduce the District's GHG emissions (Eastern Municipal Water District 2022). The CAP includes a GHG emissions inventory, GHG forecast and reduction targets, and reduction measures necessary to meet those targets. Emissions were forecast for the years 2030, 2045, and 2050 to align with three important statewide planning milestones: the 2030 GHG emissions target established by SB 32, the 2045 carbon neutrality goal, and the 2050 target established by EO S-3-05. GHG emissions would be reduced by statewide measures including RPS, Pavley/ACC regulations, and the Low Carbon Fuel Standard. District measures to further reduce GHG emissions include internal combustion engine conversions to electric engines, energy efficiency improvements at regional water reclamation facilities and water filtration plants, water conservation programs, on-site solar generation, electrification of energy infrastructure, use of renewable natural gas, clean energy procurement, ZEV fleet conversion, and construction best practices. Construction best practices are the most relevant to the proposed Project. The following are examples of construction best management practices (BMPs) that can be implemented during construction to achieve GHG emissions reductions (Eastern Municipal Water District 2022):

- BMP 1: Limit idling of equipment to 5 minutes or less. Provide clear signage that posts this requirement and develop a plan for on-site enforcement.

- BMP 2: Provide temporary electric power to the construction site. If generators must be used, use alternative fuels to the maximum extent feasible.

- BMP 3: Use electric, hybrid, or alternative-fueled equipment, as availability allows or as future regulation requires.

- BMP 4: Perform on-site hauling using vehicles with on-road engines, where feasible and efficient.
- BMP 5: Limit material and equipment deliveries and hauling to off-peak traffic hours.
- BMP 6: Use high-efficiency lighting and Energy Star compliant heating and cooling units in temporary construction offices. Require development and implementation of procedures to ensure all office equipment, heating or cooling units, and lighting are turned off at the end of each workday.

4.7.3 Significance Determination Thresholds

Thresholds used to evaluate impacts to GHG emissions are based on applicable criteria in the CEQA Guidelines (CCR Sections 15000–15387), Appendix G. The proposed Project would have a significant impact on the environment if it would:

1) Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment; or
2) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emission of GHGs.

As stated in the State CEQA Guidelines, these questions are "intended to encourage thoughtful assessment of impacts and do not necessarily represent thresholds of significance" (Title 14, Division 6, Chapter 3 Guidelines for Implementation of the CEQA, Appendix G, Environmental Checklist Form). The State CEQA Guidelines encourage lead agencies to adopt regionally specific thresholds of significance. When adopting these thresholds, the amended Guidelines allow lead agencies to consider thresholds of significance adopted or recommended by other public agencies, or recommended by experts, provided that the thresholds are supported by substantial evidence.

The District has not adopted its own GHG thresholds of significance for CEQA. The SCAQMD published its Interim CEQA GHG Significance Thresholds for Stationary Sources, Rules, and Plans in 2008 (SCAQMD 2008). The interim thresholds are a tiered approach: projects may be determined to be less than significant under each tier or require further analysis under subsequent tiers. For the proposed Project, the most appropriate screening threshold for determining GHG emissions is the SCAQMD proposed Tier 3 screening threshold (SCAQMD 2010); therefore, a significant impact would occur if the proposed Project would exceed the SCAQMD proposed Tier 3 screening threshold of 3,000 metric tons carbon dioxide equivalent (MT CO_2E) per year. Based on guidance from the SCAQMD, total construction GHG emissions resulting from a project should be amortized over the lifetime of a project, which is defined as 30 years (SCAQMD 2009).

4.7.4 Methodology

The proposed Project's GHG emissions were calculated using the CalEEMod Version 2022.1.1.30 (California Air Pollution Control Officers Association [CAPCOA] 2022). The CalEEMod program is a tool used to estimate air emissions resulting from land development projects based on California-specific emission factors. CalEEMod can be used to calculate emissions from mobile

(on-road vehicles), energy (electricity and natural gas), area (landscape maintenance equipment), water and wastewater, solid waste sources, stationary sources, and refrigerants. GHG emissions are estimated in terms of total MT CO_2E.

The analysis methodology and input data are described in the following sections. Where project-specific data was not available, model inputs were based on information provided in the CalEEMod User's Guide (CAPCOA 2022).

Inputs to CalEEMod include such items as the air basin containing the proposed Project, land uses, trip generation rates, trip lengths, vehicle fleet mix (percentage of autos, medium truck, etc.), trip destination (i.e., percent of trips from home to work, etc.), duration of construction phases, construction equipment usage, grading areas, season, and ambient temperature, as well as other parameters. The CalEEMod output files presented in Attachment 1 of Appendix G indicate the specific outputs for each model run.

4.7.4.1 Construction Emissions

Construction activities emit GHGs primarily through combustion of fuels (mostly diesel) in the engines of off-road construction equipment and through combustion of diesel and gasoline in on-road construction vehicles and the commute vehicles of the construction workers. Smaller amounts of GHGs are also emitted through the energy use embodied in water use for fugitive dust control.

Every phase of the construction process, including grading, paving, and building, emits GHGs in volumes directly related to the quantity and type of construction equipment used when building the proposed Project. GHG emissions associated with each phase of construction are calculated by multiplying the total fuel consumed by the construction equipment and worker trips by applicable emission factors. Detailed methodology for calculating construction emissions is discussed in Section 4.2 Air Quality (see Section 4.2.4.1).

Based on guidance from the SCAQMD, total construction GHG emissions resulting from a project should be amortized over 30 years and added to operational GHG emissions to account for their contribution to GHG emissions over the lifetime of a project (SCAQMD 2009). Thus, maximum construction emissions for a one-year period calculated using CalEEMod were multiplied by 20 to reflect a 20-year construction duration and amortized over 30 years (i.e., divided by 30) and added to annual operational GHG emissions.

4.7.4.2 Operational Emissions

a. Mobile Emissions

Mobile source emissions would be generated during routine maintenance inspections. Site visits would be routinely conducted to inspect the condition and security of the lift stations. The proposed Project is not anticipated to require additional staffing. In order to provide a conservative assessment of mobile-source emissions, a total of one round trip (two one-way trips) with a one-way distance of 20 miles was modeled for each weekday. No weekend trips were modeled. In actuality, the lift stations would not require maintenance five days per week. Default vehicle emission factors are

based on CARB's 2021 EMissions FACtor model (CARB 2021). Emissions were calculated for the soonest operational year of 2029.

b. Energy Use Emissions

For typical development projects, GHGs are emitted through activities in buildings utilizing electricity and natural gas as energy sources. GHGs are also emitted during the generation of electricity from fossil fuels off-site in power plants. These emissions are considered indirect but are calculated in association with a building's overall operation. Electric power generation accounts for the second largest sector contributing to both inventoried and projected statewide GHG emissions. Combustion of fossil fuel emits criteria pollutants and GHGs directly into the atmosphere. When this occurs in a building, it is considered a direct emissions source associated with the building. CalEEMod estimates emissions from the direct combustion of natural gas for space and water heating. For the proposed Project, energy use would occur at the proposed lift stations. Lift stations were modeled as a light industrial land use using all model defaults. This is conservative since the lift stations would not require the use of natural gas and they would be unmanned.

CalEEMod estimates GHG emissions from energy use by multiplying average rates of residential and nonresidential energy consumption by the quantities of residential units and nonresidential square footage entered in the land use module to obtain total projected energy use. This value is then multiplied by electricity and natural gas GHG emission factors applicable to the proposed Project location and utility provider.

Within Title 24 of the California Code of Regulations (Building Standards Code) is Part 6, the Building Energy Efficiency Standards (Energy Code). The CEC adopted the 2022 Energy Code in August 2021, and it took effect January 1, 2023. The Energy Code contains energy conservation standards applicable to particular end-use categories for all new or altered residential and nonresidential buildings throughout California. Energy consumption values are based on the CEC's 2018–2030 Uncalibrated Commercial Sector Forecast and the 2019 Residential Appliance Saturation Survey. GHG emissions were calculated using the default CalEEMod Version 2022.1 emission factors.

c. Area Source Emissions

Area sources include criteria pollutant and GHG emissions that would occur from the use of landscaping equipment. The use of landscape equipment emits criteria pollutant and GHGs associated with the equipment's fuel combustion. Default statewide emission rates from landscaping equipment were developed using the CARB Small Off-Road Engines Model v1.1. Area sources also include consumer products and architectural coatings. However, only criteria pollutant emissions are associated with these sources and not GHG emissions. Area source emissions were calculated using default CalEEMod emission factors for a light industrial land use.

d. Water and Wastewater Emissions

The amount of water used and wastewater generated by a project has indirect GHG emissions associated with it. These emissions are a result of the energy used to supply, distribute, and treat the

water and wastewater. In addition to the indirect GHG emissions associated with energy use, wastewater treatment can directly emit both CH_4 and N_2O.

CalEEMod Version 2022.1 calculates outdoor water use based the Department of Water Resources Model Water Efficient Landscape Ordinance and calculates nonresidential indoor water used based on the Pacific Institute's *Waste Not, Want Not: The Potential for Urban Water Conservation in California* 2003 (as cited in CAPCOA 2022). Wastewater treatment is based on the region-specific distribution of wastewater treatment methods (CAPCOA 2022). Operation of the proposed Project would not result in the consumption of water or generation of wastewater.

e. Solid Waste Emissions

The disposal of solid waste produces GHG emissions from anaerobic decomposition in landfills, incineration, and transportation of waste. To calculate the GHG emissions generated by disposing of solid waste for the proposed Project, the total volume of solid waste was calculated using waste disposal rates identified by California Department of Resources Recycling and Recovery. The methods for quantifying GHG emissions from solid waste are based on the Intergovernmental Panel on Climate Change method, using the degradable organic content of waste. GHG emissions associated with the proposed Project's waste disposal were calculated using these parameters. Operation of the proposed Project would not result in the generation of solid waste.

f. Refrigerants

Small amounts of GHG emissions are generated by refrigerants used in air conditioning and refrigeration equipment. CalEEMod quantifies refrigerant emissions from leaks during regular operation and routine servicing over the equipment lifetime and then derives average annual emissions from the lifetime estimate. Emissions due to refrigerants were calculated using CalEEMod default values, which are based on industry data from the U.S. EPA. GHG emissions associated with refrigerants were calculated using CalEEMod defaults for a light industrial land use. This is conservative since the lift stations would not likely include the use of refrigerants.

g. Stationary Sources

Stationary source emissions associated with the proposed Project would result from routine testing of the emergency generators located at each of the lift stations. These emergency generators would be permitted by the SCAQMD. The following District and SCAQMD requirements would apply to the emergency generators (William Chen, email to author, September 22, 2025):

> Generator set shall be "pre-certified"/"pre-approved" by the South Coast Air Quality Management District (SCAQMD) for emergency standby power service, and shall meet all current SCAQMD air emission regulations. The Standby Generator Set shall meet the applicable tier standards required by SCAQMD Best Available Control Technology (BACT) requirements and SCAQMD Rule 1470.
>
> A Level 3 diesel particulate filter (DPF) system verified by California Air Resources Board shall be provided at the developer's expense if required to meet the emission requirements of SCAQMD Rule 470. A load bank system shall be supplied with all

generator sets. Load back system shall include an automatic load controller capable of auto-loading at multiple load steps and dropping the generator load. Developer's engineer shall determine whether a passive DPF system is required.

All SCAQMD permits, including payment of fees for the first year of operation shall be furnished by the developer. Permits shall have no less than a 200-hour annual operating limit with no less than 50 hours for maintenance and testing. The SCAQMD permit to construct shall be transferred into a permit to operate prior to acceptance by the District.

Emissions were calculated assuming a 400-horsepower emergency generator would be tested a maximum of one hour in a day and a total of 50 hours per year for each lift station for a total of five hours in a day and 250 hours in a year.

4.7.5 Threshold 1: GHG Emissions

Would the project generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?

4.7.5.1 Impact Analysis

Based on the methodology summarized in Section 4.7.4 above, the primary sources of direct and indirect GHG emissions have been calculated. Table 4.7-6 presents the construction emissions. Table 4.7-7 presents the total GHG emissions associated with the proposed Project. The complete model outputs for the proposed Project are included in Appendix G.

Table 4.7-6
Construction GHG Emissions

	Construction GHG Emissions (MT CO_2E)
One-Year Emissions (Year 2027)	1,605
Total 20-Year Emissions	32,064
Amortized Emissions Over Project Lifetime (30 years)	1,070

MT CO_2E = metric tons of carbon dioxide equivalent
SOURCE: Appendix G.

Table 4.7-7 Project GHG Emissions	
Source	Project GHG Emissions (MT CO_2E)
Mobile	4
Energy	42
Area	<1
Water/Wastewater	0
Solid Waste	0
Refrigerants	<1
Emergency Generator	38
Total Operational Emissions	84
Construction (Amortized over 30 years)	1,070
TOTAL	**1,154**
SCAQMD Screening Threshold	*3,000*
MT CO_2E = metric tons of carbon dioxide equivalent; SCAQMD = South Coast Air Quality Management District SOURCE: Appendix G.	

As shown in **Table 4.7-7**, the proposed Project would generate 1,154 MT CO_2E per year. Post construction there would be minimal GHG emissions. After installation of the underground pipelines, there would be occasional pipeline inspection and associated maintenance trips. There would also be minimal emissions associated with the lift stations. However, lift station inspection and associated maintenance trips would be conducted by existing District employees, and mobile emissions would be minimal. Additionally, the proposed Project would reduce the reliance on septic systems, thereby reducing GHG emissions related to wastewater. Septic systems generally result in greater GHG emissions compared to sewer systems largely due to methane being directly vented into the atmosphere. Overall, GHG emissions generated during construction and operation would not exceed the 3,000 MT CO_2E annual screening threshold.

4.7.5.2 Significance of Impacts

The proposed Project would not generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment, and impacts would be less than significant.

4.7.5.3 Mitigation

No mitigation is required.

4.7.5.4 Significance After Mitigation

No mitigation is required.

4.7.6 Threshold 2: GHG Plans

Would the project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emission of GHGs?

4.7.6.1 Impact Analysis

EOs S-3-05 and B-30-15 established GHG emission reduction targets for the state, and AB 32 launched the CARB Climate Change Scoping Plan that outlined the reduction measures needed to reach the 2020 target, which the state has achieved. As required by SB 32, CARB's 2017 Scoping Plan outlines reduction measures needed to achieve the interim 2030 target, and the 2022 Scoping Plan outlines the path towards carbon neutrality by 2045. As detailed in the response under Threshold 1 above, the proposed Project would result in GHG emissions below the SCAQMD proposed Tier 3 screening threshold of 3,000 MT CO_2E per year. Construction and operation of the proposed Project would not result in emissions that would adversely affect statewide attainment of GHG emission reduction goals as described in AB 32, EOs S-3-05 and B-30-15, and SB 32.

Anaerobic decomposition in septic tanks produces fugitive emissions of methane. The proposed Project would reduce the reliance on septic systems, thereby reducing GHG emissions related to wastewater. The proposed Project would not result in a significant increase in regional vehicle miles traveled since vehicle trips would be limited to occasional maintenance trips that would be performed by existing District employees. The proposed Project would be consistent with land use designations, as it does not include changes to existing land uses, only resulting in the provision of sewer connections to existing residential uses. Because the proposed Project would provide sewer service for existing development, and because proposed Project trips would be limited to occasional maintenance activities, it would not conflict with the transportation-related GHG reduction goals outlined in the RTP. Furthermore, the proposed Project would not conflict with energy efficiency standards or conflict with Southern California Edison's RPS renewable energy goals, as these are not applicable to construction and operational activities associated with the proposed Project. Additionally, the proposed Project would implement construction BMPs in accordance with the District's CAP (see Section 4.6.1.2.d.).

4.7.6.2 Significance of Impacts

The proposed Project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions, and impacts would be less than significant.

4.7.6.3 Mitigation

No mitigation is required.

4.7.6.4 Significance After Mitigation

No mitigation is required.

4.8 Hazards and Hazardous Materials

This section analyzes impacts related to hazards and hazardous materials that could result from implementation of the proposed Project. Construction of the proposed Project is planned to be carried out in eight phases implemented over a 20-year period. This evaluation is programmatic, focusing on the environmental impacts that could occur from implementation of all phases of construction (see Chapter 3). As each phase is constructed, project-level analyses may be required to further quantify any identified significant impacts.

This section includes a setting discussion that describes the existing hazards, hazardous materials, and wildfire conditions in and around the proposed Project site and summarizes applicable regulations related to hazards, hazardous materials, and wildfire. This section also includes an evaluation of potential impacts of the proposed Project related to hazards and hazardous materials.

4.8.1 Existing Conditions

4.8.1.1 Hazardous Materials

Hazardous material sites can include any business or operation that has previously used, or currently uses, hazardous materials on a routine basis. It can also include any site where hazardous materials have been spilled. Developers and builders are obligated to conduct thorough surveys, identification, and, if needed, remediation of their project sites in accordance with federal, state, and local regulations. Retail, commercial, and industrial sites involved in handling hazardous materials are also subject to regulation by local, state, and federal laws.

The Hazardous Waste and Substances Sites (Cortese) List is a planning document that provides information about the location of hazardous materials release sites in the state. California Government Code Section 65962.5 requires the California Environmental Protection Agency to develop, at least annually, an updated Cortese List. The California Department of Toxic Substances Control (DTSC) is responsible for a portion of the information contained in the Cortese List that is contained in their Envirostor database (DTSC 2025).

The other main source of information for sites in the Cortese List is the SWRCB's Geotracker Database (Geotracker). Geotracker is SWRCB's internet-accessible database system used by the state board, regional boards, and local agencies to track and archive compliance data from authorized or unauthorized discharges of waste to land, or unauthorized releases of hazardous substances from underground storage tanks. This system consists of a relational database, online compliance reporting features, a geographical information system interface, and other features that are utilized by the state board, regional boards, local agencies, regulated industry, and the public to input, manage, or access compliance and regulatory tracking data (SWRCB 2025).

Figure 4.8-1 presents the location of active Envirostor and Geotracker hazardous materials sites. As shown on Figure 4.8-1, there are no active Envirostor or Geotracker hazardous materials sites within the proposed Project site.

Image Source: Nearmap (flown May 2025)

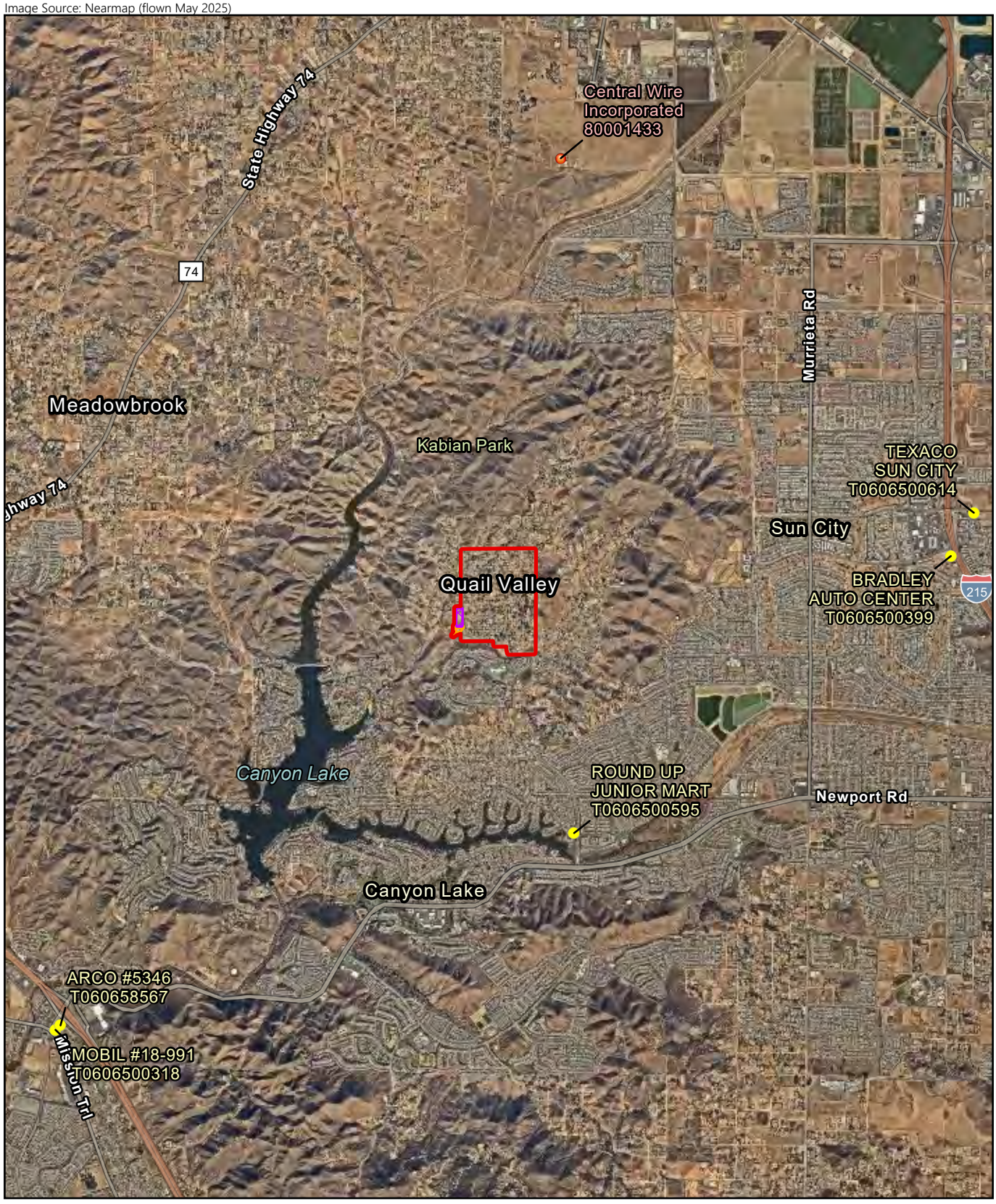

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FIGURE 4.8-1
Hazardous Materials

4.8.1.2 Airport Hazards

The Riverside County Airport Land Use Compatibility Plan establishes policies applicable to land use compatibility planning in the vicinity of airports throughout the County. Review of the Airport Land Use Compatibility Plan (Riverside County Airport Land Use Commission 2025) and Exhibits LU-5a through LU-5c in the City's General Plan (City of Menifee 2013) show that the proposed Project site is not located within an airport land use plan or within two miles of a public airport. Additionally, the proposed Project site is not located within the vicinity of a private airstrip. The nearest airport is the Perris Valley Airport, located approximately 3.9 miles northeast of the proposed Project site.

4.8.1.3 Wildfire

All of California is subject to some degree of fire hazard, but specific features make some areas more hazardous. The California Department of Forestry and Fire Protection (CAL FIRE) establishes fire hazard severity zones (FHSZs) throughout the State that are determined based on factors that influence fire likelihood and fire behavior. Many factors are considered, including fire history, existing and potential fuel (natural vegetation), flame length, blowing embers, terrain, and typical weather.

Wildland fire protection in California is the responsibility of either the state, local, or the federal government. State responsibility area is a legal term defining the area where the state has financial responsibility for wildland fire protection. Local responsibility areas (LRAs) include incorporated cities, cultivated agriculture lands, and portions of the desert. LRA fire protection is typically provided by city fire departments, fire protection districts, counties, and by CAL FIRE under contract to local government.

To assist each fire agency in addressing its LRA, CAL FIRE has developed a Fire Hazard Severity Scale that utilizes three criteria to evaluate and designate potential fire hazards in wildland areas. The criteria are fuel loading, fire weather, and topography. CAL FIRE presents the results of this evaluation through mapping of FHSZs, which include moderate, high, and very high. **Figure 4.14-1** presents the distribution of FHSZ mapping within the proposed Project site. As shown in **Figure 4.14-1**, the proposed Project site is mapped as a high FHSZ (CAL FIRE 2025).

4.8.1.4 Fire Protection

The City contracts the County Fire Department (RCFD) and CAL FIRE for fire suppression services. The RCFD assists the City in its urban areas while outlying wildland areas are managed by CAL FIRE. The RCFD responds to fires, rescue situations, traffic accidents, medical emergencies, and general public requests. The RCFD includes the following divisions that prioritize and specialize in a variety of services for the region:

- The Fire Planning Division assesses proposed developments within the County's unincorporated areas and partner cities, and reviews for compliance with the relevant departmental standards, applicable codes, and regulations.

- The Hazard Reduction Office handles the abatement of hazardous vegetation, abandoned or neglected orchards, groves and vineyards which pose a danger to the welfare of residents.

- The Fire Investigation/Prevention Bureau consists of law enforcement and investigator personnel that enforce state forest and fire laws. This division also investigates fires. Enforcement responsibilities within the prevention program include fire investigations, and criminal and civil case management citations.

There are four County Fire Stations located within the City. The station closest to the Project site is Station 5, located at 29745 Goetz Road, approximately one mile (driving) north of the site.

4.8.2 Applicable Regulatory Requirements

4.8.2.1 Federal Regulations

a. Comprehensive Environmental Response, Compensation, and Liability Act

The discovery of environmental health damage from disposal sites prompted the U.S. Congress to pass the Comprehensive Environmental Response, Compensation, and Liability Act (or Superfund). The purpose of the Superfund is to identify and clean up chemically contaminated sites that pose a significant environmental health threat. The Hazard Ranking System is used to determine whether a site should be placed on the National Priorities List for cleanup activities.

b. Superfund Amendments and Reauthorization Act

The Superfund Amendments and Reauthorization Act pertain primarily to emergency management of accidental releases. It requires formation of state and local emergency planning committees, which are responsible for collecting, material handling, and transporting data for use as a basis for planning. Chemical inventory data are made available to the community at large under the "right-to-know" provision of the law. In addition, the Superfund Amendments and Reauthorization Act also require annual reporting of continuous emissions and accidental releases of specified compounds. These annual submissions are compiled into a nationwide Toxics Release Inventory.

c. Resource Conservation and Recovery Act

The Resource Conservation and Recovery Act (RCRA) Subtitle C addresses hazardous waste generation, handling, transportation, storage, treatment, and disposal. It includes requirements for a system that uses hazardous waste manifests to track the movement of waste from its site of generation to its ultimate disposition. The 1984 amendments to the RCRA created a national priority for waste minimization. Subtitle D establishes national minimum requirements for solid waste disposal sites and practices. It requires states to develop plans for the management of waste within their jurisdictions. Subtitle I requires monitoring and containment systems for underground storage tanks that hold hazardous materials. Owners of tanks must demonstrate financial assurance for the cleanup of a potential leaking tank.

d. Hazardous Materials Transportation Act

The Hazardous Materials Transportation Act is the statutory basis for the extensive body of regulations aimed at ensuring the safe transport of hazardous materials on water, rail, highways, in

the sky, or in pipelines. It includes provisions for materials classification, packaging, marking, labeling, placarding, and shipping documentation.

e. Rule 29 of the Code of Federal Regulations Part 1926

Federal law requires compliance with Rule 29 CFR Part 1926. Prior to site demolition activities, building materials shall be carefully assessed for the presence of lead-based paint, and its removal, where necessary, must comply with state and federal regulations, including Occupational Safety and Health Administration 29 CFR Part 1926. The Occupational Safety and Health Administration rule establishes standards for occupational health and environmental controls for lead exposure. The standard also includes requirements addressing exposure assessment, methods of compliance, respiratory protection, protective clothing and equipment, hygiene facilities and practices, medical surveillance, medical removal protection, employee information and training, signs, recordkeeping, and observation of monitoring. Furthermore, the requirements of CCR Title 17, Division 1, Chapter 8, identify procedures that must be followed for accreditation, certification, and work practices for lead-based paint and lead hazards. Section 36100 thereof specifically sets forth requirements for lead-based paint abatement in public and residential buildings.

f. Federal Air Regulations, Part 77

The Federal Aviation Administration is charged with the review of construction activities that occur in the vicinity of airports. Their role in reviewing these activities is to ensure that new structures do not result in a hazard to navigation and thus derogate the safety of the National Airspace System. The regulations contained in Federal Air Regulations (FAR) Part 77 are designed to ensure that no hazards are allowed to exist that would endanger the public. The Federal Aviation Administration, through FAR Part 77, established a method of identifying surfaces that should be free from obstructions in order to maintain sufficient airspace around airports. FAR Part 77, in effect, identifies the maximum height at which a structure would be considered an obstacle at any given point around an airport. In addition, Part 77 establishes standards for determining whether objects constructed near airports would be considered obstructions in navigable airspace, sets forth notice requirements of certain types of proposed construction or alterations, and provides for aeronautical studies to determine the potential impacts of a structure on the flight of aircraft through navigable airspace.

4.8.2.2 State Regulations

a. California Code of Regulations

Most state and federal regulations and requirements that apply to generators of hazardous waste are spelled out in CCR Title 22, Division 4.5. Title 22 contains the detailed compliance requirements for hazardous waste generators, transporters, treatment, storage, and disposal facilities. Because California is a fully authorized state according to RCRA, most RCRA regulations (those contained in 40 CFR 260, et seq.) have been duplicated and integrated into Title 22. However, because the DTSC regulates hazardous waste more stringently than the U.S. EPA, the integration of California and federal hazardous waste regulations that make up Title 22 do not contain as many exemptions or exclusions as does 40 CFR 260. As with the HSC, Title 22 also regulates a wider range of waste types and waste management activities than do the RCRA regulations in 40 CFR 260. To aid the regulated

community, California compiled the hazardous materials, waste and toxics-related regulations contained in CCR, Titles 3, 8, 13, 17, 19, 22, 23, 24, and 27 into one consolidated CCR, Title 26 "Toxics." However, the California hazardous waste regulations are still commonly referred to as Title 22. For the purposes of clarity, because of the extensive reach of Title 22 and Title 26, many common household products sold in grocery stores and home improvement warehouses qualify as hazardous materials. These items include household cleaners, detergents, paint, motor oil, lubricants, glues, pesticides, etc. The term "hazardous materials" is also defined to include many on-site materials as well, such as lubricants, fuel, etc.

b. Cortese List: California Government Code Section 65962.5(a)

Government Code Section 65962.5 requires the California Environmental Protection Agency to develop, at least annually, an updated Cortese List. The Cortese List is a planning document used by the state, local agencies, and developers to comply with CEQA requirements in providing information about the location of hazardous materials release sites. Release sites include or hazardous materials release sites may include the following:

- All hazardous waste facilities subject to corrective action pursuant to Section 25187.5 of the HSC.
- All land designated as hazardous waste property or border zone property pursuant to Article 11 (commencing with Section 25220) of Chapter 6.5 of Division 20 of the HSC.
- All information received by the DTSC pursuant to Section 25242 of the HSC on hazardous waste disposals on public land.
- All sites listed pursuant to Section 25356 of the HSC.
- All sites included in the Abandoned Site Assessment Program.

The DTSC is responsible for a portion of the information contained in the Cortese List. Other state and local government agencies are required to provide additional hazardous material release information for the Cortese List. As shown on **Figure 4.8-1**, there are no active Cortese List hazardous materials within the proposed Project site.

c. The California Hazardous Material Management Act

The Hazardous Materials Management Act requires that businesses handling or storing certain amounts of hazardous materials prepare a Hazardous Materials Business Emergency Plan (HMBEP), which includes an inventory of hazardous materials stored on-site (above specified quantities), an emergency response plan, and an employee training program. An HMBEP is a written set of procedures and information created to help minimize the effects and extent of a release or threatened release of a hazardous material. The intent of the HMBEP is to satisfy federal and state community right-to-know laws and to provide detailed information for use by emergency responders.

d. The California Hazardous Waste Control Law

The Hazardous Waste Control Law (HWCL) is the primary hazardous waste statute in the state of California. The HWCL requires a hazardous waste generator that stores or accumulates hazardous waste for periods greater than 90 days at an on-site facility, or for periods greater than 144 hours at an off-site or transfer facility, which treats or transports hazardous waste to obtain a permit to conduct such activities. The HWCL implements RCRA as a "cradle-to-grave" waste management system in the state of California. The HWCL specifies that generators have the primary duty to determine whether their waste is hazardous and to ensure their proper management. The HWCL also establishes criteria for the reuse and recycling of hazardous waste used or reused as raw materials. The HWCL exceeds federal requirements by mandating source reduction planning and a much broader requirement for permitting facilities that treat hazardous waste. It also regulates the number of types of waste and waste management activities that are not covered by federal law with the RCRA.

e. State Aeronautics Act (Public Utilities Code Section 21670, et seq.)

The Public Utilities Code establishes the requirement for the creation of Airport Land Use Commissions for every county in which there is located an airport that is served by a scheduled airline. Additionally, these sections of the Public Utilities Code mandate the preparation of Comprehensive Land Use Plans to provide for the orderly growth of each public airport and the area surrounding the airport. The purpose of Comprehensive Land Use Plans includes the protection of the general welfare of inhabitants within the vicinity of the airport and the general public.

f. California Emergency Services Act

Government Code 8550–8692 provides for the assignment of functions to be performed by various agencies during an emergency so that the most effective use may be made of all manpower, resources, and facilities for dealing with any emergency that may occur. The coordination of all emergency services is recognized by the state of California to mitigate the effects of natural, human-made, or war-caused emergencies that result in conditions of disaster or extreme peril to life, property, and the resources of the state, and generally, to protect the health and safety and preserve the lives and property of the people of the state.

g. Title 22, Division 4.5 of the California Code of Regulations

During site decommissioning and demolition activities, hazardous waste must be managed in accordance with the requirements of Title 22, Division 4.5 of the CCR. Title 22 sets forth the requirements with which hazardous waste generators, transporters, and owners or operators of treatment, storage, or disposal facilities must comply. These regulations include the requirements for packaging, storing, labeling, reporting, and general management of hazardous waste prior to shipment. In addition, the regulations identify standards applicable to transporters of hazardous waste such as the requirements for transporting shipments of hazardous waste, manifesting, vehicle registration, and emergency accidental discharges during transportation.

h. Title 8 of the California Code of Regulations, Section 1529

During demolition, grading, and excavation, workers shall comply with the requirements of Title 8 of the CCR, Section 1529, which provides for exposure limits, exposure monitoring, respiratory protection, and good working practices by workers exposed to asbestos. Asbestos-contaminated debris and other waste shall be managed and disposed of in accordance with the applicable provision of the HSC.

4.8.2.3 Local Regulations

a. City of Menifee Local Hazard Mitigation Plan

The City's LHMP was created in 2015 as a result of the adoption of The Disaster Mitigation Act of 2000, commonly known as the 2000 Stafford Act amendment. The LHMP is largely used to assess the environmental hazards that are present in the City, the identified risks are contextualized within the City, as well as potential effects to the City's critical infrastructure. In order to minimize potential risks identified within the LHMP, mitigation measures include preventive actions, property protection techniques, structural projects, natural resource protection strategies, emergency services and public education and awareness activities.

b. City of Menifee Emergency Operations Plan

This plan is designed as a reference and guidance document for the foundation of response and recovery operations for the City. The Emergency Operations Plan (EOP) is meant to coordinate with the County Operational Area EOP and the City Emergency Operations Center to facilitate effective response to any emergency. This plan establishes the emergency organization, assigns tasks, as well as specifies policies and general procedures during both response and recovery. It also provides for coordination with the County as the Operational Area Lead Agency. This plan includes the critical elements of California's Standardized Emergency Management System, the National Incident Management System, the Incident Command System, and the National Response Framework.

c. City of Menifee Municipal Code

Chapter 8.20, Section 010 of the City's Municipal Code relates to the adoption of the California Fire Code (CFC). This section states,

> Except as otherwise provided in this Chapter, the California Fire Code, Title 24, California Code of Regulations, Part 9, including Chapter 1, Division II - Scope and Administration, except that Section 103.2 and 109.3 are not adopted, and Chapters 3, 25, and Section 403.12, 503, 510.2, and 1103.2 are adopted, including any and all amendments set forth in this Chapter, and including any and all amendments thereto that may hereafter be made and adopted by the State of California, is hereby adopted as the City Fire Code.

More specifically, subsection CC of the City's Municipal Code recognizes that FHSZs and maps as defined in the CFC include Section 4904 and the revision related to Government Code Section 51175

through 51189 for Very High FHSZs, and that these resources are retained on file at the office of the Fire Chief.

d. City of Menifee General Plan

The City's General Plan, adopted in 2013, includes eight General Plan elements that contain specific long-range planning goals and policies designed to guide growth and development in the City. The General Plan's relevant goals, objectives, and policies are described below.

Safety Element

Goal S-4: A community that has effective fire mitigation and response measures in place, and as a result is minimally impacted by wildland and structure fires.

- Policy S-4.1: Require fire-resistant building construction materials, the use of vegetation control methods, and other construction and fire prevention features to reduce the hazard of wildland fire. Ensure all new development and/or redevelopment in the LRA and very high FHSZ will comply with the CFC and California Building Code. All new development within the LRA very high fire zone will comply with Chapter 49 of the CFC and Chapter 7A of the California Building Code.

- Policy S-4.2: Ensure, to the maximum extent possible, that fire services, such as firefighting equipment and personnel, infrastructure, and response times, are adequate for all sections of the City. The City will continue to coordinate with the Riverside County Fire Department, for Interagency coordination, to respond to emergency calls in Menifee and to provide training and ongoing programs for public education.

4.8.3 Significance Determination Thresholds

Thresholds used to evaluate impacts to hazards and hazardous materials are based on applicable criteria in the CEQA Guidelines (CCR Sections 15000–15387), Appendix G. The proposed Project would have a significant impact on the environment if it would:

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

2) 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;

3) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school;

4) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, create a significant hazard to the public or the environment;

5) 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, the project would result in a safety hazard for people residing or working in the project area;

6) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan;

7) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.

4.8.4 Methodology

The potential for significant impacts related to hazards and hazardous materials has been evaluated based upon review of existing secondary source information and data relative to hazardous or potentially hazardous materials.

4.8.5 Thresholds 1 and 2: Transport, Use, or Disposal of Hazardous Materials and Accidental Release

Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Would the project 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?

4.8.5.1 Impact Analysis

a. Construction

Construction of sewer infrastructure could require transport, temporary storage, and use of asphalt fuels, oils, paints, and solvents during construction. However, these materials are not acutely hazardous, and use of these common hazardous materials in small quantities would not represent a significant hazard to the public or environment. Project construction would adhere to typical best management practices regarding the use of hazardous materials, such as proper labeling and storage, removal of materials once completed, and offsite vehicle maintenance. Additionally, construction of the proposed Project would be required to comply with applicable federal, state, and local regulations as listed under Section 4.8.2 above, governing the proper use of common hazardous materials. Overall, compliance with existing regulations would minimize the risk of release of hazardous materials during transport, use, or disposal.

b. Operation

The proposed Project is limited to construction of sewer and would not introduce any uses that would require regular use or storage of hazardous materials. Operation of the proposed lift stations

would require periodic maintenance and inspection, and maintenance equipment and worker vehicles would periodically transport and use small quantities of fuels and chemicals. However, these materials are not acutely hazardous, and use would be subject to existing federal, state, and local health and safety requirements for the handling, storage, transportation, and disposal of hazardous materials, as summarized above in Section 4.8.2 above.

4.8.5.2 Significance of Impacts

The proposed Project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials, and impacts would be less than significant.

4.8.5.3 Mitigation

No mitigation is required.

4.8.5.4 Significance of Impacts After Mitigation

No mitigation is required.

4.8.6 Threshold 3: Within One-Quarter Mile of a School

Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

4.8.6.1 Impact Analysis

Quail Valley Elementary School is located approximately 0.08 miles south of the Project site. However, construction of the proposed Project would not require the use of acutely hazardous materials and would be limited to the use of small amounts of lubricants, cleaners, paint, oils, adhesives, solvents, asphalt, and fuel for equipment. Use of these common hazardous materials in small quantities would not represent a significant hazard to the public or environment, and the use and handling of hazardous materials during construction would be conducted consistent with all applicable regulations, as summarized above in Section 4.8.2 above. As described in Section 4.2.7 above, implementation of mitigation measure AQ-1 during construction would ensure that the proposed Project would not expose sensitive receptors to substantial pollutant concentrations associated with DPM during construction that could result in excess cancer risks, and impacts would be less than significant. Operation of the proposed lift stations would require periodic maintenance and inspection, and maintenance equipment and worker vehicles would periodically transport and use small quantities of fuels and chemicals. However, these materials are not acutely hazardous, and use would be subject to existing federal, state, and local health and safety requirements for the handling, storage, transportation, and disposal of hazardous materials, as summarized above in Section 4.8.2 above.

4.8.6.2 Significance of Impacts

The proposed Project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 miles of an existing or proposed school, and impacts would be less than significant.

4.8.6.3 Mitigation

No mitigation is required.

4.8.6.4 Significance of Impacts After Mitigation

No mitigation is required.

4.8.7 Threshold 4: Hazardous Materials Sites

Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, create a significant hazard to the public or the environment?

4.8.7.1 Impact Analysis

As described above in Section 4.8.1.1, and shown in **Figure 4.8-1** above, there are no active Envirostor or Geotracker hazardous materials sites located within the Project site. In accordance with federal, state, regional, and local requirements, any new development or redevelopment that involves contaminated property would necessitate the clean-up and/or remediation of the property in accordance with applicable requirements and regulations. This would include compliance with requirements of SCAQMD Rule 1403 for the assessment and removal of asbestos-containing material, compliance with Title 22, Division 4.5 of the CCR for the removal of hazardous materials during demolition activities, and compliance with Title 8 of the CCR, regarding limits, exposure monitoring, respiratory protection, and good working practices during demolition, grading, and excavation, as well management and disposal in accordance with the applicable provision of the HSC.

4.8.7.2 Significance of Impacts

The proposed Project would not create a significant hazard to the public or the environment, and impacts would be less than significant.

4.8.7.3 Mitigation

No mitigation is required.

4.8.7.4 Significance of Impacts After Mitigation

No mitigation is required.

4.8.8 Threshold 5: Airport Hazards

Would the project be located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, result in a safety hazard or excessive noise for people residing or working in the project area?

4.8.8.1 Impact Analysis

As described above in Section 4.8.1.2 above, the Project site is not located within an airport land use plan or within two miles of a public airport. Additionally, the Project site is not located within the vicinity of a private airstrip. The nearest airport is the Perris Valley Airport, located approximately 3.9 miles northeast of the Project site.

4.8.8.2 Significance of Impacts

The Project site is not located within an airport land use plan or within two miles of a public airport. Additionally, the Project site is not located within the vicinity of a private airstrip. No impact would occur.

4.8.8.3 Mitigation

No mitigation is required.

4.8.8.4 Significance of Impacts After Mitigation

No mitigation is required.

4.8.9 Threshold 6: Emergency Response

Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

4.8.9.1 Impact Analysis

Project construction would result in temporary work within existing roadways, and possibly road closures in some instances that could disrupt vehicle travel. However, each of the proposed Project's eight phases would be required to prepare a Traffic Control Plan (TCP) for all construction work within public roadways. TCPs would be subject to review and approval by the City to ensure compliance with local requirements. The TCPs would utilize typical traffic control devices (e.g., traffic cones, K-rails, signs, message boards) as well as flaggers to guide vehicles.

Although traffic may be closed to through traffic in some instances, ingress and egress would be maintained at all times for residents. In addition, construction activities would be coordinated to maintain access along designated emergency evacuation routes identified in the City's General Plan. As shown in Exhibit S-9, Emergency Evacuation Routes, in the City's General Plan, the nearest designated evacuation route to the Project site is Goetz Road. The proposed Project would connect to the pipeline within Goetz Road but otherwise would not require work within Goetz Road. TCPs would be reviewed to ensure that construction staging, lane closures, and detours do not obstruct emergency evacuation routes or otherwise impair emergency response capabilities. Where work occurs along or adjacent to an emergency evacuation route, temporary traffic control measures would be implemented to maintain adequate capacity and access at all times.

In the event of an emergency, construction work would cease and trenches would be covered with an appropriate cover to restore normal traffic flow. These measures would ensure that emergency vehicles can access construction areas and that roadways remain open, thereby preventing interference with emergency response or evacuation. Roadways would be restored to preexisting conditions once construction is completed.

4.8.9.2 Significance of Impacts

The project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan, and impacts would be less than significant.

4.8.9.3 Mitigation

No mitigation is required.

4.8.9.4 Significance of Impacts After Mitigation

No mitigation is required.

4.8.10 Threshold 7: Wildland Fires

Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

4.8.10.1 Impact Analysis

As shown in **Figure 4.14-1** in Section 4.14 of this Program Environmental Impact Report, the entire proposed Project site is mapped as a high FHSZ (CAL FIRE 2025). However, the proposed Project is limited to construction of sewer infrastructure and would not introduce any new habitable structures that could expose people to wildfire risk.

During construction, equipment and on-site diesel fuel could pose a risk to wildfire with possible ignition sources such as internal combustion engines, gasoline-powered tools, blasting equipment, and equipment that could produce a spark, fire, or flame. The use of spark-producing construction machinery within fire risk areas could expose temporary project workers and contractors to pollutant

concentrations from wildfire or the uncontrolled spread of wildfire, resulting in a potentially significant impact. All personnel would be required to comply with PRC Sections 4427, 4428, 4431, and 4442, which include regulations relating to the handling of combustible fuels and equipment that can exacerbate fire risks. During construction, strict adherence to these PRC sections would ensure that contractors are responsible for all monitoring and safety measures ensuring that any risk to exacerbate wildfire would be reduced. Additionally, all construction must comply with fire protection and prevention requirements specified by the CCR and the California Occupational Safety and Health Administration (Cal/OSHA). This includes various measures such as easy accessibility of firefighting equipment, proper storage of combustible liquids, no smoking in service and refueling areas, operation of a blaster and handling of explosive materials during blasting activities, and worker training for firefighter extinguisher use. Compliance with PRC Sections 4427, 4428, 4431, and 4442, as well as fire protection and prevention requirements specified in the CCR and Cal/OSHA, would ensure that construction activities comply with applicable City Municipal Code regulations and General Plan policies discussed in Section 4.8.2.3 above.

Once construction is complete, risk associated with wildfire would remain unchanged compared to the existing condition. The proposed pipelines would be installed completely underground, and the proposed lift stations would be primarily subterranean, with above-ground features including access hatches, electrical control panels, an emergency generator within an enclosure, and other associated equipment. These above-ground facilities would not exacerbate fire risk because they would include minimal or no vegetation and would not involve the use or storage of flammable materials beyond those typical of standard utility operations. Furthermore, operation of the proposed Project would adhere to the District's standard operating procedures for facility maintenance and fire prevention, which include regular inspection of electrical equipment, vegetation management within and around the facilities, and compliance with fire code requirements established by the local fire authority.

4.8.10.2 Significance of Impacts

The proposed Project would not expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires and impacts would be less than significant.

4.8.10.3 Mitigation

No mitigation is required.

4.8.10.4 Significance of Impacts After Mitigation

No mitigation is required.

4.9 Hydrology/Water Quality

This section analyzes impacts related to hydrology and water quality that could result from implementation of the proposed Project. Construction of the proposed Project is planned to be carried out in eight phases implemented over a 20-year period. This evaluation is programmatic, focusing on the environmental impacts that could occur from implementation of all phases of construction (see Chapter 3). As each phase is constructed, project-level analyses may be required to further qualify any identified significant impacts.

This section includes a setting discussion that describes the existing hydrologic conditions in and around the Project site and summarizes applicable regulations related to hydrology and water quality. This section also includes an evaluation of potential impacts of the proposed Project related to hydrology and water quality. The analysis in this section is partially based on the Preliminary Design Report (Appendix B). The report describes the existing site conditions and provides hydraulic analysis for the proposed Project, provides preliminary geotechnical and hydrological design criteria, and identifies environmental, geotechnical, and construction constraints.

4.9.1 Existing Conditions

4.9.1.1 Local Watershed and Drainage Conditions

According to Figure 5.9-1 of the City General Plan EIR (City of Menifee 2013), the Project site is located within the San Jacinto Valley HU (or watershed) of the larger Santa Ana River Watershed. The San Jacinto HU is approximately 480 square miles and extends from the San Jacinto Mountains from the east towards Lake Elsinore and into Temescal Creek, which flows northwest and discharges into the Santa Ana River. The San Jacinto watershed is regulated by several lakes and reservoirs that include Lake Elsinore, Canyon Lake, Lake Perris, and Mystic Lake. Major tributaries include Bautista Creek, Poppet Creek, Potrero Creek, Perris Valley Drain and Salt Creek.

The Project site consists of a series of small hills, with elevations ranging from approximately 1,400 feet above mean sea level in a stream in the southwest corner, to 1,700 feet above mean sea level on a hill in the eastern portion. There are several small drainages generally flowing northeast to southwest in low areas through the main portion of the Project site. A larger unnamed stream flows east to west along the southern edge of the Project site, which drains into Canyon Lake, approximately 0.8 miles to the southwest.

4.9.1.2 Water Quality and Surface Water Runoff

Water quality refers to the effect of natural and human activities on water composition. Water quality is expressed by the physical and chemical quantity of a material in the environment related to water use. Stormwater can potentially contain various pollutants that include, but are not limited to, bacteria and viruses, oil and grease, sediments, nutrients, metals, and toxic chemicals. In an urban environment, the quantity of certain pollutants in the stormwater systems is generally associated with the intensity of land use. Within the San Jacinto watershed, nutrients, pathogens, and organic

enrichment/low dissolved oxygen are of concern (Santa Ana RWQCB 2025). Surface water within the proposed Project boundary may be prone to runoff during storm events, including flows from on-site sources, such as landscaped areas, rooftops, and roads within the Project site, and off-site sources, such as upstream developments, roadways, and agricultural lands.

4.9.1.3 Flood Hazards

As shown in **Figure 4.9-1**, the proposed Project is mapped as a minimal flooding area by FEMA. Areas mapped as minimal flood hazards are outside the 0.2-percent-annual-chance floodplain, also known as the "500-year floodplain," which means there is only a 0.2-percent chance of flooding in any given year. Because the Project site is outside this floodplain, it is considered to have a very low likelihood of flooding.

4.9.1.4 Dam Inundation

Dam failure can result from several causes, such as earthquakes, rapidly rising floodwaters, and structural design flaws. These hazards can occur instantaneously or gradually depending on the source of the failure. Inundation associated with these events has the potential to cause loss of life, damage property, and other ensuing hazards, as well as the displacement of persons residing in the inundation path. As shown in **Figure 4.9-2**, the proposed Project is not located within a dam inundation zone.

4.9.1.5 Groundwater

The San Jacinto Groundwater Basin is the source of groundwater production for the District and several other water purveyors. The Sustainable Groundwater Management Act (SGMA), described below in Section 4.9.2.2.b, State Regulations, was adopted in 2014 and became effective January 1, 2015. In 2017, the District became the Groundwater Sustainability Agency for the western portion of the San Jacinto Groundwater Basin under the SGMA program (Eastern Municipal Water District 2025). The San Jacinto Groundwater Basin is designated as a high-priority basin, meaning that the volume of current groundwater use is not sustainable. The area encompasses portions of the Cities of Moreno Valley, Perris, Menifee, and the surrounding unincorporated communities. The proposed Project is not located within the San Jacinto Groundwater Basin (Eastern Municipal Water District 2024) and is not located within a California Department of Water Resources designated groundwater basin.

The geotechnical exploration (see Appendix B) encountered groundwater at depths ranging from approximately 3 feet to 23 feet below ground surface (see Appendix B). The proposed Project would not extract groundwater and would not inject water into a subsurface aquifer. Therefore, given that there would be no impacts on groundwater, no description of groundwater conditions is provided.

Image Source: Nearmap (flown May 2025)

Project Boundary
LS-1 Option 1
LS-1 Option 2

Riverside County FEMA Flood Zone

100-Year Floodplain
100- to 500-Year Floodplain
Minimal Flooding

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FIGURE 4.9-1
FEMA Floodplains and Floodways

Image Source: Nearmap (flown May 2025)

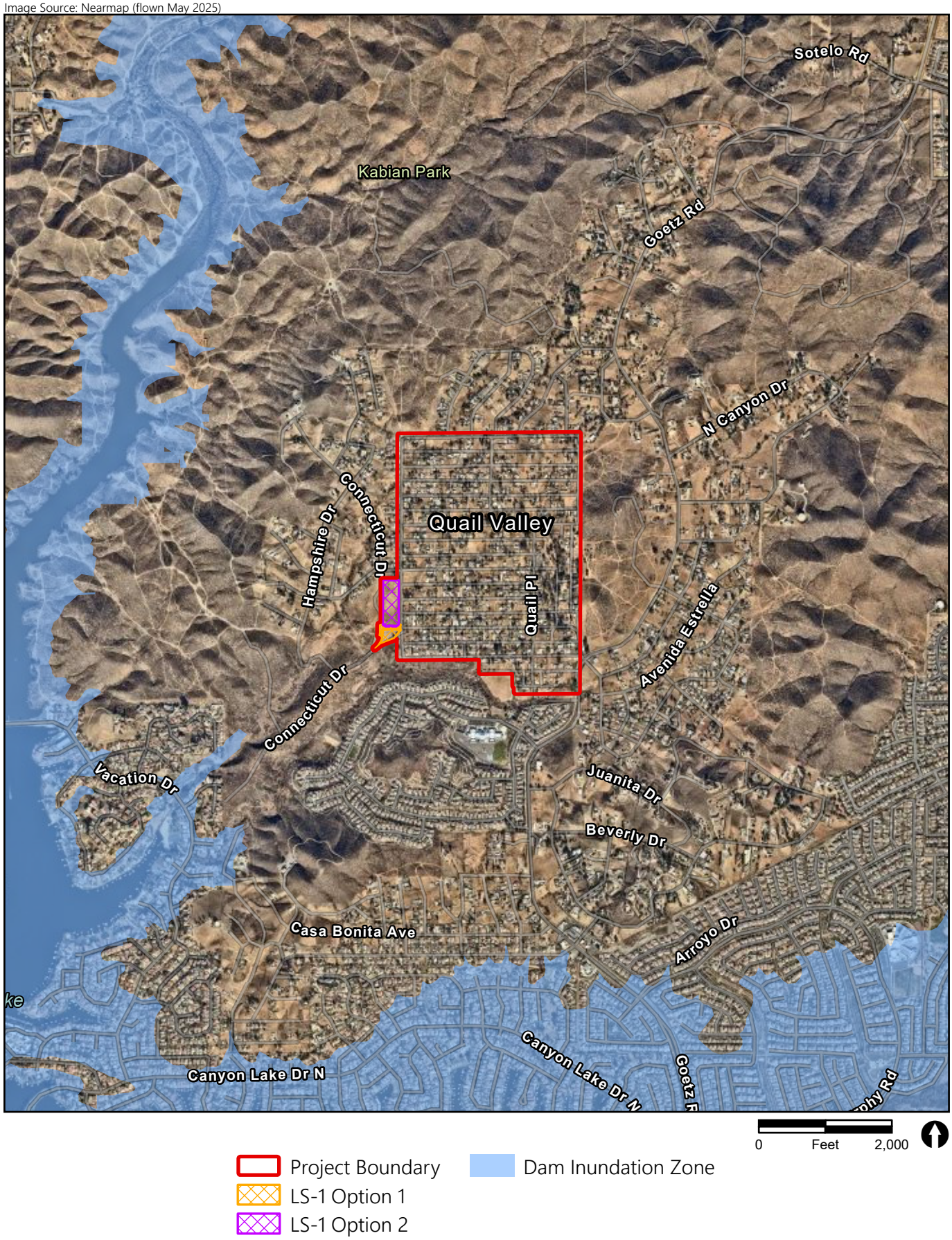

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FIGURE 4.9-2
Dam Inundation Zones

4.9.2 Applicable Regulatory Requirements

4.9.2.1 Federal Regulations

a. Federal Water Pollution Control Act (also known as Clean Water Act)

Originally enacted in 1948 and amended in 1972 and 1987, the CWA establishes two national goals: eliminate the discharge of pollutants into the nation's waters and achieve water quality that is both "fishable" and "swimmable." The discharge of pollutants into waters of the U.S. from any "point source" (i.e., a discharge pipe) is prohibited, unless authorized by an NPDES permit. The SWRCB is responsible for implementing the CWA and does so by issuing NPDES permits to cities and counties through RWQCBs. In California, the NPDES Program is administered by the state. See a discussion of the NPDES in Section 4.9.2.2.c below.

The fundamental purpose of the CWA is to protect the designated beneficial uses of water resources. Section 303(d) of the CWA defines water quality standards as consisting of both the uses of surface waters (beneficial uses) and the water quality criteria applied to protect those uses (water quality objectives). State and regional water quality control boards have been charged with ensuring that beneficial uses and water quality objectives are established for all waters of the state.

Section 303(d) of the CWA requires states to identify and establish a list of water bodies for which technology-based effluent limitations required by Section 301 of the CWA are not stringent enough to attain and maintain water quality standards. The list must be submitted by the SWRCB to the U.S. EPA every two years for review and approval. The water bodies on the Section 303(d) list are termed "impaired water bodies." For each water-quality-limited segment of water bodies identified in the Section 303(d) list, each respective RWQCB must develop a plan to determine the Total Maximum Daily Load—the maximum amount of a pollutant that a water body can receive per day and still attain water quality standards—or take other action to address the impairment. The goal of implementing a Total Maximum Daily Load is to reduce pollutant loads to an impaired water body so as to regain the beneficial uses of the water body.

Section 401 of the CWA gives states and authorized tribes the authority to grant, deny, or waive certification of proposed federal licenses or permits that may discharge into waters of the U.S. In California, the SWRQB and the RWQCBs have the authority to regulate these discharges. Wetlands and non-wetland waters (e.g., rivers, streams, and natural ponds) are a subset of waters of the U.S. and receive protection under Section 404 of the CWA. Additionally, the regulations and policies of various federal agencies mandate that the filling of wetlands be avoided to the maximum extent feasible. Section 402 of the CWA prohibits the discharge of pollutants in waters of the U.S. from any point source without an NPDES permit. Results of the Nationwide Urban Runoff Program also identified contaminated stormwater (a non-point source) as a primary cause of water quality impairment. To regulate stormwater discharges, the U.S. EPA developed a two-phased NPDES permit program. Phase one of the program requires municipalities that own and operate separate storm drains systems serving populations of 100,000 or more to obtain municipal stormwater NPDES permits. Phase two of the program requires the same for municipalities for populations of less than 100,000. Municipalities must have a stormwater management program to obtain a permit.

b. Federal Emergency Management Agency

FEMA is the primary agency in charge of administering programs and coordinating with communities to establish effective floodplain management standards. FEMA is also responsible for delineating areas of flood hazards. It is then the responsibility of state and local agencies to implement the means of carrying out FEMA requirements. Flood zones are geographic areas that FEMA has defined according to varying levels of flood risk. These zones are depicted on a community's Flood Insurance Rate Map or Flood Hazard Boundary Map. Each zone reflects the severity or type of flooding in the area. The National Flood Insurance Act (1968) established the National Flood Insurance Program (NFIP), which is based on the minimal requirements for flood plain management and is designed to minimize flood damage within Special Flood Hazard Areas. FEMA is the agency that administrates the NFIP. The City entered the regular phase of the NFIP on June 30, 1976. As a participant in the NFIP, the City is dedicated to regulating development in the FEMA regulated floodplain areas in accordance with NFIP criteria.

4.9.2.2 State Regulations

a. Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act is a portion of the State Water Code and establishes the responsibilities and authorities of the SWRCB and its nine RWQCBs. Each RWQCB is directed to adopt water quality control plans for the waters of an area to include identification of beneficial uses, objectives to protect those uses, and an implementation plan to accomplish the objectives. The Project site lies within the jurisdiction of the Santa Ana RWQCB.

b. Sustainable Groundwater Management Act

In 2014, California lawmakers passed the SGMA, which mandates that all groundwater basins within the state be managed to ensure long-term water supply reliability. Under the SGMA, each high- and medium-priority basin (as identified by the California Department of Water Resources) must have a groundwater sustainability agency that will be responsible for groundwater monitoring and developing a groundwater sustainability plan to ensure long-term groundwater sustainability and prevent overdraft. However, the SGMA exempts adjudicated groundwater basins—those that already operate under a court-ordered water management plan—from the requirements of designating a groundwater sustainability agency and developing a Groundwater Sustainability Plan.

c. National Pollutant Discharge Elimination System

Created in 1972 by the CWA, the NPDES permit program is authorized to state governments by the U.S. EPA to perform many permitting, administrative, and enforcement aspects of the program. The CWA prohibits the discharge of pollutants through a point source into a water of the U.S., unless allowed by a NPDES permit. The NPDES permit translates the general requirements of the CWA into specific provisions tailored to the operations of each operator discharging pollutants. An NPDES permit generally specifies an acceptable level of a pollutant or pollutant parameter in a discharge (e.g., a certain level of bacteria). The permittee may choose which technologies to use to achieve that level. NPDES permits make sure that a state's mandatory standards for clean water and the

federal minimums are being met (U.S. EPA 2024). Development of wastewater infrastructure within the Project site would be subject to the NPDES program to protect water resources and control pollutants in runoff.

State Water Resources Control Board General Construction Permit 2022

The SWRCB adopted the 2022 Construction Stormwater General Permit, Order 2022-0057-DWQ, on September 8, 2022, and it went into effect on September 1, 2023 (SWRCB 2022). State and regional water quality control boards have been charged with ensuring that beneficial uses and water quality objectives are established for all waters of the state. The development of wastewater infrastructure within the Project site would be subject to the NPDES to protect water resources and control pollutants in runoff. The General Construction Permit is administered at the local level by the Santa Ana RWQCB.

d. Urban Water Management Planning Act

The Urban Water Management Planning Act of 1983, California Water Code Sections 10610 et seq., requires preparation of a plan that meets the following criteria:

- Plans for water supply and assesses the reliability of each source of water, over a 20-year period, in five-year increments.
- Identifies and quantifies adequate water supplies, including recycled water, for existing and future demands, in normal, single-dry, and multiple-dry years.
- Implements conservation and the efficient use of urban water supplies. Significant new requirements for quantified demand reductions have been added by the Water Conservation Act of 2009 (SB 7 of Special Extended Session 7), which amends the act and adds new water conservation provisions to the California Water Code.

4.8.2.3 Regional Regulations

a. Santa Ana Regional Water Quality Control Plan

In California, regulation, protection, and administration of water quality are carried out by the SWRCB, which is implemented through nine RWQCB regional boards. Each regional board is required to adopt a Water Quality Control Plan, or Basin Plan, which recognizes and reflects regional differences in existing water quality, the beneficial uses of ground and surface waters, and local water quality conditions and problems. The Project site is located within the Santa Ana Region (Region 8) River Basin (HU Code 18070203), which spans 2,650 square miles, encompassing portions of Los Angeles, Orange, Riverside, and San Bernardino Counties. The Water Quality Control Plan for the Santa Ana River Basin includes the water quality standards for ground and surface waters (water quality objectives, beneficial uses, and anti-degradation policy), regionally important water quality management and improvement initiatives, policies, and practices for implementing water quality standards, and implementation plans. It was recently updated in October 2025 to comply with current regulations and to improve accessibility in accordance with the Americans with Disabilities

Act. In addition, Chapters 3, 4, 5, and 6 were updated to incorporate recent amendments effective on or before July 27, 2023. (Santa Ana RWQCB 2025).

b. RWQCB Order No. R8-2015-0004, NPDES No. CAG998001–General Waste Discharge Requirements for Discharges to Surface Waters That Pose an Insignificant (De Minimis) Threat to Water Quality (supersedes Order R8-2009-0003)

RWQCB Order No. R8-2015-0004, NPDES No. CAG998001, was adopted by the Santa Ana RWQCB on June 19, 2015, for discharges to surface waters of various types of wastes that pose an insignificant threat to water quality. This order supersedes Order No. RS-2009-0003, which expired on March 1, 2014. This order regulates discharges to surface waters within the Santa Ana region that pose an insignificant threat to water quality, as listed below:

- Construction dewatering wastes, except for stormwater discharges regulated under a statewide general construction stormwater permit or a municipal separate storm sewer systems permit;
- Wastes associated with well installation, development, test pumping and purging, and aquifer testing;
- Dewatering wastes from subterranean seepage (except for discharges from utility vaults);
- Discharges resulting from hydrostatic testing of vessels, pipelines, tanks, etc.;
- Maintenance and disinfection of potable water supply pipelines, tanks, reservoirs, etc.;
- Discharges from potable water supply systems resulting from initial system startup, routine startup, sampling of influent flow, system failures, pressure releases, etc.;
- Discharges from fire hydrant testing or flushing, air conditioning condensate, or swimming pool discharge;
- Discharges resulting from diverted stream flows;
- Decanted filter backwash wastewater and/or sludge dewatering filtrate water from water treatment facilities; and
- Other similar types of wastes as determined by the RWQCB Executive Officer, which pose a de minimis threat to water quality yet must be regulated under waste discharge requirements.

RWQCB Order No. R8-2015-0004 prohibits the following:

- The discharge of oil, trash, industrial waste sludge, or other solids directly to the surface waters or in any manner that will ultimately affect surface waters;
- The discharge of any substances in concentrations toxic to aquatic life, animal life, or plant life;

- The discharge of wastes to property not owned or controlled by the Discharger is prohibited, except to surface waters as authorized under this order;

- Odors, vectors, and other nuisances of waste origin are prohibited beyond the limits of each Discharger's facility;

- The addition of chemicals to the extracted groundwater, exclusive of chlorine to control biofouling in treatment systems, is prohibited except when approved in writing by the RWQCB.

RWQCB Order No. R8-2015-0004 provides the effluent limitations listed in Table 4.9-1.

Table 4.9 1
Effluent Limitations

Constituent	Maximum Daily Concentration Limit (mg/L)
Total petroleum hydrocarbons	0.1
Total residual chlorine	0.1
Suspended Solids	75
Sulfides	0.4

mg/L = milligrams per liter
SOURCE: Regional Water Quality Control Board Order No. R8-2015-0004, National Pollutant Discharge Elimination System No. CAG99801

RWQCB Order No. R8-2015-0004 requires that the pH of discharges shall be 6.5 to 8.5 pH units. There shall be no visible oil or grease in the discharge. The discharge of decanted filter backwash wastewater and/or sludge dewatering filtrate water from water treatment facilities shall not contain a total suspended solids maximum daily concentration in excess of 30 milligrams per liter. Additional requirements and provisions are discussed in the order. To obtain coverage under this order, the discharger shall submit a complete Notice of Intent and application to the RWQCB least 45 days before the start of a new discharge.

4.9.2.4 Local Regulations

a. City of Menifee General Plan

The City's General Plan includes the following goals and policies related to hydrology and water quality.

Open Space and Conservation Element

Goal OSC-7: A reliable and safe water supply that effectively meets current and future user demands.

- Policy OSC-7.9: Ensure that high quality potable water resources continue to be available by managing stormwater runoff, wellhead protection, and other sources of pollutants.

Safety Element

Goal S-3: A community that is minimally disrupted by flooding and inundation hazards.

- Policy S-3.1: Require that all new developments and redevelopments in areas susceptible to flooding (such as the 100-year floodplain and areas known to the city to flood during intense or prolonged rainfall events) incorporate mitigation measures designed to mitigate flood hazards.

4.9.3 Significance Determination Thresholds

Thresholds used to evaluate impacts to hydrology and water quality are based on applicable criteria in the CEQA Guidelines (CCR Sections 15000–15387), Appendix G. The proposed Project would have a significant impact on the environment if it would:

1) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality;

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

3) 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 a 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;

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

5) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.

4.9.4 Methodology

The potential for significant impacts associated with the proposed Project has been determined based upon review of existing information and data relative to hydrology and water quality resources.

4.9.5 Threshold 1: Violate Water Quality Standards/Degrade Water Quality

Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

4.9.5.1 Impact Analysis

Construction activities associated with future phased development of the sewer system involve grading, paving, utility installation, and lift station construction, which could result in the generation of potential water quality pollutants such as silt, debris, chemicals, paints, and other pollutants. In addition, refueling and parking of construction vehicles and other construction equipment may result in oil, grease, or other related pollutant leaks and/or spills that may discharge into the storm drain system.

To minimize potential water quality impacts during construction, future phased development would be required to comply with the Water Quality Control Plan for the Santa Ana River Basin, which contains the RWQCB's policies for managing the region's water quality and required preparation of a Storm Water Pollution Prevention Plan (SWPPP) for construction-related activities. Since the proposed Project would disturb over one acre of land, a SWPPP would be required for all future phased development. A SWPPP requires the identification and implementation of BMPs to control sediment, erosion, tracking, non-stormwater, and waste management during construction and prevent such contaminants and materials from entering receiving water bodies. Adherence to these requirements during construction would ensure that all potential pollutants of concern are prevented, minimized, and/or otherwise appropriately treated prior to being discharged.
Post-construction, the footprints of the wastewater pipelines would be restored to the pre-project condition, thereby eliminating exposed soils and reducing the potential for erosion or sediment-laden runoff. As a result, long-term discharges of pollutants associated with construction activities would not occur. The proposed lift station sites would retain existing drainage patterns and would not create new discharge points or alter surface runoff in a manner that could affect downstream water quality. Lift station facilities are fully enclosed and designed to convey wastewater through a closed system and therefore would not discharge wastewater or associated pollutants to surface waters or groundwater. Accordingly, operation of the proposed Project would not violate applicable water quality standards or waste discharge requirements.

4.9.5.2 Significance of Impacts

The proposed Project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality, and impacts would be less than significant.

4.9.5.3 Mitigation

No mitigation is required.

4.9.5.4 Significance of Impacts After Mitigation

No mitigation is required.

4.9.6 Threshold 2: Deplete Groundwater Supplies

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

4.9.6.1 Impact Analysis

The proposed Project would not introduce any residential, commercial, or other uses that would consume groundwater. The Project site is located outside of the San Jacinto Groundwater Basin, and therefore would not affect the source of groundwater production for the District and other water purveyors. Once constructed, the footprints of the wastewater pipelines would be restored to the pre-project condition. New impervious surfaces would be limited to the proposed lift stations, and substantial amount of open space would remain both within and surrounding Subarea 4 that would allow for continued groundwater recharge.

4.9.6.2 Significance of Impacts

The proposed Project would not significantly decrease groundwater supplies or interfere with groundwater recharge or obstruct sustainable groundwater management, and impacts would be less than significant.

4.9.6.3 Mitigation

No mitigation is required.

4.9.6.4 Significance of Impacts After Mitigation

No mitigation is required.

4.9.7 Threshold 3: Drainage Patterns

Would the project 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 a 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 offsite; (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?

4.9.7.1 Impact Analysis

As described in Section 4.9.5 above, future phased development would be required to comply with the Water Quality Control Plan for the Santa Ana River Basin, which contains the RWQCB's policies for managing the region's water quality and requires preparation of a SWPPP for construction-related activities. Since the proposed Project would disturb over one acre of land, a SWPPP would be required for all future phased development. A SWPPP requires the identification and implementation of BMPs to control sediment, erosion, tracking, non-stormwater, and waste management during construction and prevent such contaminants and materials from entering receiving water bodies. Future phased development would implement BMPs consistent with the requirements of the SWPPP to control stormwater flows, and thereby minimize erosion and siltation, control the rate or amount of surface runoff, prevent pollution from affecting water quality, and prevent the impediment or redirection of flood flows. During construction, adherence to the statewide Construction General Permit requirements would ensure that the existing drainage patterns would not be impacted.

Post-construction, the footprints of the wastewater pipelines would be restored to the pre-project condition, including recontouring, compaction, and revegetation as appropriate to maintain the original drainage patterns. Any new impervious surfaces would be limited to the proposed lift stations, which would be designed in a manner that would maintain existing drainage patterns. This would ensure that post-construction conditions maintain existing flow paths, prevent erosion, and avoid overloading stormwater drainage systems, and minimize the potential for polluted runoff. As a result, the proposed Project would not substantially alter drainage patterns or impede or redirect flood flows.

4.9.7.2 Significance of Impacts

The proposed Project would not result in substantial erosion or siltation, surface runoff, pollution that would affect water quality, or the impediment or redirection of flood flows, and impacts would be less than significant.

4.9.7.3 Mitigation

No mitigation is required.

4.9.7.4 Significance of Impacts After Mitigation

No mitigation is required.

4.9.8 Threshold 4: Flood Hazard, Tsunami, or Seiche

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

4.9.8.1 Impact Analysis

As shown in Figure 4.9-1, the Project site is mapped as a minimal flooding area by FEMA. Areas mapped as minimal flood hazards are outside the 0.2-percent-annual-chance floodplain. The proposed Project is limited to construction of sewer infrastructure and would not introduce any new habitable structures that could expose people to flood hazards. Human presence would be limited to temporary construction and periodic maintenance. The Project site is located approximately 29 miles northeast of the Pacific Ocean and is at a significantly higher elevation than the nearest coastal areas. Given the Project site's distance from the ocean and topographic position, it would not be subject to risk associated with tsunami. As shown in Figure 4.9-2 above, the proposed Project is not located within a dam inundation zone.

4.9.8.2 Significance of Impacts

No impacts would occur.

4.9.8.3 Mitigation

No mitigation is required.

4.9.8.4 Significance of Impacts After Mitigation

No mitigation is required.

4.9.9 Threshold 5: Water Quality Plans

Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

4.9.9.1 Impact Analysis

As described in Section 4.9.5.1 above, the proposed Project would be required to comply with the Water Quality Control Plan for the Santa Ana River Basin, which contains the RWQCB's policies for managing the region's water quality and requires preparation of a SWPPP for construction-related activities. Post-construction, the footprints of the wastewater pipelines would be restored to the pre-project condition, and the proposed lift station sites would be designed to maintain existing drainage

patterns and prevent concentrated runoff. Therefore, the proposed Project would not conflict with or obstruct a water quality control plan.

As described in 4.9.6.1 above, the Project site is not located within the San Jacinto Groundwater Basin, and therefore would not affect the source of groundwater production for the District and other water purveyors. The proposed Project would not introduce any residential, commercial, or other uses that would consume groundwater. Once constructed, the footprints of the wastewater pipelines would be restored to the pre-project condition. New impervious surfaces would be limited to the proposed lift stations, and substantial amount of open space would remain both within and surrounding Subarea 4 that would allow for continued groundwater recharge.

4.9.9.2 Significance of Impacts

The proposed Project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan, and impacts would be less than significant.

4.9.9.3 Mitigation

No mitigation is required.

4.9.9.4 Significance of Impacts After Mitigation

No mitigation is required.

4.10 Land Use/Planning

This section analyzes impacts related to land use and planning that could result from implementation of the proposed Project. Construction of the proposed Project is planned to be carried out in eight phases implemented over a 20-year period. This evaluation is programmatic, focusing on the environmental impacts that could occur from implementation of all phases of construction (see Chapter 3). As each phase is constructed project-level analyses may be required to further quantify any identified significant impacts.

This section includes a setting discussion that describes the existing land use designations in and around the Project site and summarizes applicable regulations related to land use and planning. This section also includes an evaluation of potential impacts of the proposed Project related to land use and planning.

4.10.1 Existing Conditions

The Project site encompasses Subarea 4 of the Quail Valley community, as well as two site options for the regional lift station that are located outside but contiguous with the west side of Subarea 4 (assessor parcel numbers 351-200-006 and 350-020-025). Subarea 4 consists of a mix of developed and undeveloped land, with predominately one-story, single-family residences located within a grid of neighborhood roads. Existing development reflects a low-density residential pattern that gives the area a generally rural appearance. A small portion of the southeastern area of Subarea 4 includes limited commercial uses, such as the Quail Valley Liquor Market. The two regional lift station site options consist of vacant land. The Project site topography consists of a series of small hills. Elevations range from approximately 1,400 feet above mean sea level at a stream located in the southwestern portion of the site to approximately 1,700 feet above mean sea level on a hill in the eastern portion. Undeveloped land with natural hills is located directly east of Subarea 4.

Subarea 4 contains 1,368 lots, approximately 525 of which are currently served by septic systems. To maximize use of a gravity system and minimize the need for lift stations, pipelines would be routed between parallel streets via undeveloped parcels. The 24 connector pipes would cross undeveloped parcels that the District intends to acquire or gain access to by acquiring ownership or obtaining sewer easements. Additionally, the District would need to acquire properties for development of the five proposed lift stations. Table 3-2 lists parcels needed for the proposed lift stations. Final lift station locations ultimately depend on successful property acquisition and would be finalized during each phase.

4.10.1.1 Existing Land Use Designations

Existing Project site land use designations, which identify the planned type and intensity of development for each parcel, as defined by the City's General Plan Land Use Element and presented in **Figure 4.10-1** include the following:

- **Rural Mountainous (RM).** The Rural Mountainous land use designation allows for single-family residential uses with a minimum lot size of 10 acres, limited animal keeping, agriculture, recreational uses, governmental uses, and compatible resource development (which may include the commercial extraction of mineral resources with approval of a surface mine permit and associated uses).

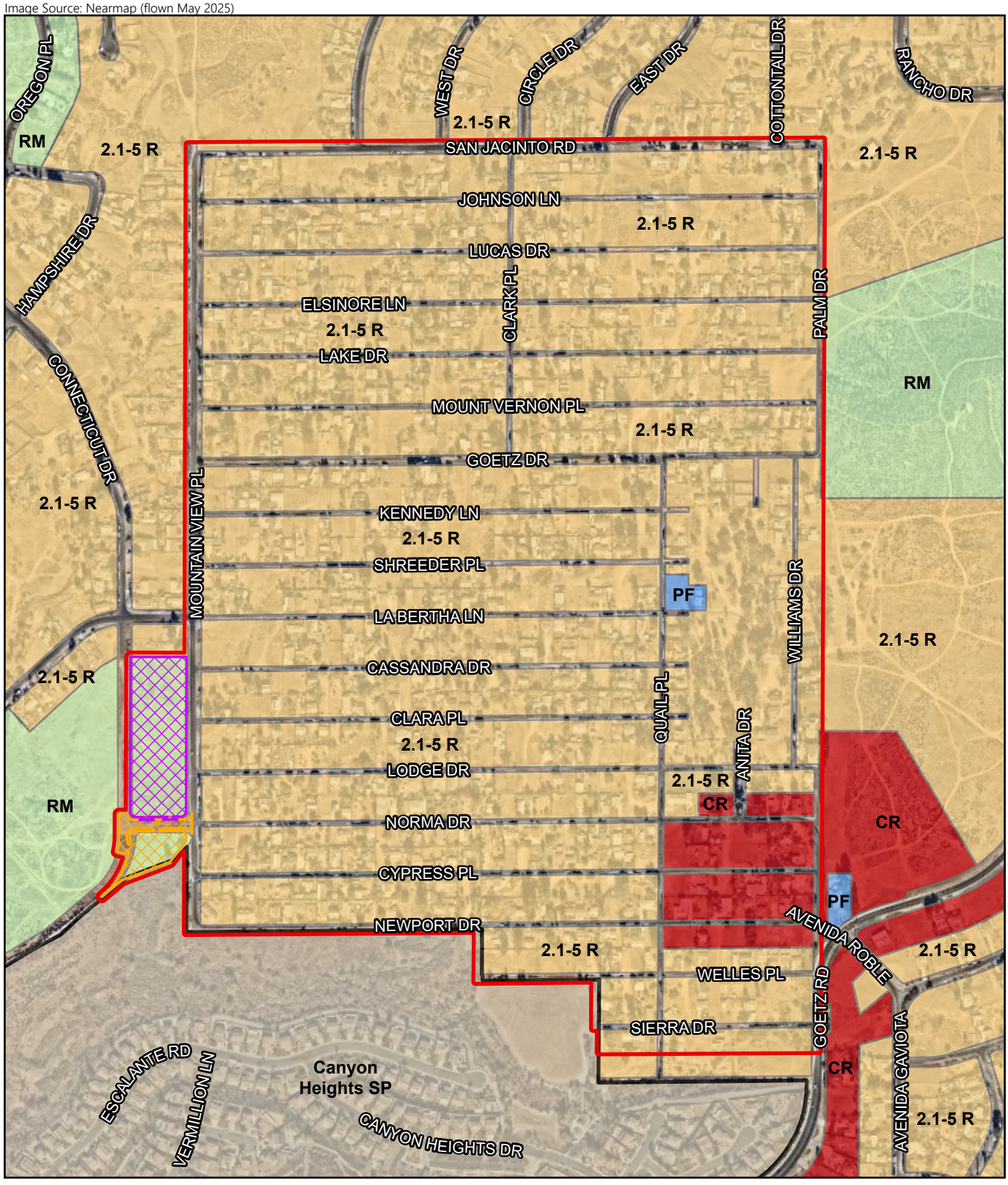
- **2.1-5 du/ac Residential (2.1-5 R).** The 2.1-5 du/ac Residential land use designation allows for single-family detached and attached residences with a density range of two to five dwelling units per acre. Limited agriculture and animal keeping are permitted; however, intensive animal keeping is discouraged.

- **Commercial Retail (CR).** The Commercial Retail land use designation allows for neighborhood-, local-, and regional-serving retail and service uses. Hotels are also permitted in this designation. Development intensity is guided by a Floor Area Ratio of 0.20–0.35.

- **Public/Quasi Public Facilities (PF).** The Public/Quasi Public Facilities land use allows for civic uses such as City administrative buildings (City Hall, fire stations, police stations, community centers), government offices, corporation yards (areas for the City or other public agencies to store equipment or vehicles), cemeteries, libraries. This designation applies to existing public and private schools at the elementary, junior high, and high school levels. It also includes institutions of higher learning.

- **Specific Plan (SP).** The purpose of a specific plan is to provide detailed policies, standards, and criteria for the development or redevelopment of an area. As required by state law, specific plans generally consist of a land plan, circulation plan, development standards, design guidelines, and phasing plan and set forth detailed implementation programs necessary to serve the development. A small portion of the Project site, as well as the area immediately south of it, is designated under the Canyon Heights Specific Plan.

Image Source: Nearmap (flown May 2025)



Project Boundary
LS-1 Option 1
LS-1 Option 2

General Plan Land Use

- Rural Mountainous 10 ac min (RM)
- 2.1-5 du/ac Residential (2.1-5 R)
- Commercial Retail (CR) 0.20 - 0.35 FAR
- Public/Quasi Public Facilities (PF)
- Specific Plan (SP)

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FIGURE 4.10-1
Land Use Designation

4.10.1.2 Existing Zoning Designations

Existing Project site zoning designations, which specify how land may be used and what types of development are allowed, as defined by the City's Municipal Code and Zoning Ordinance are shown on Figure 4.10-2. The existing zoning designations include the following:

- **Rural Mountainous (RM).** The Rural Mountainous zoning designation allows for single-family detached residences with a minimum lot size of 10 acres. It is generally characterized as areas of at least 10 acres where there are extensive areas of steep slopes of 25 percent or greater. It also allows limited animal keeping, agriculture, recreational uses, and governmental uses.

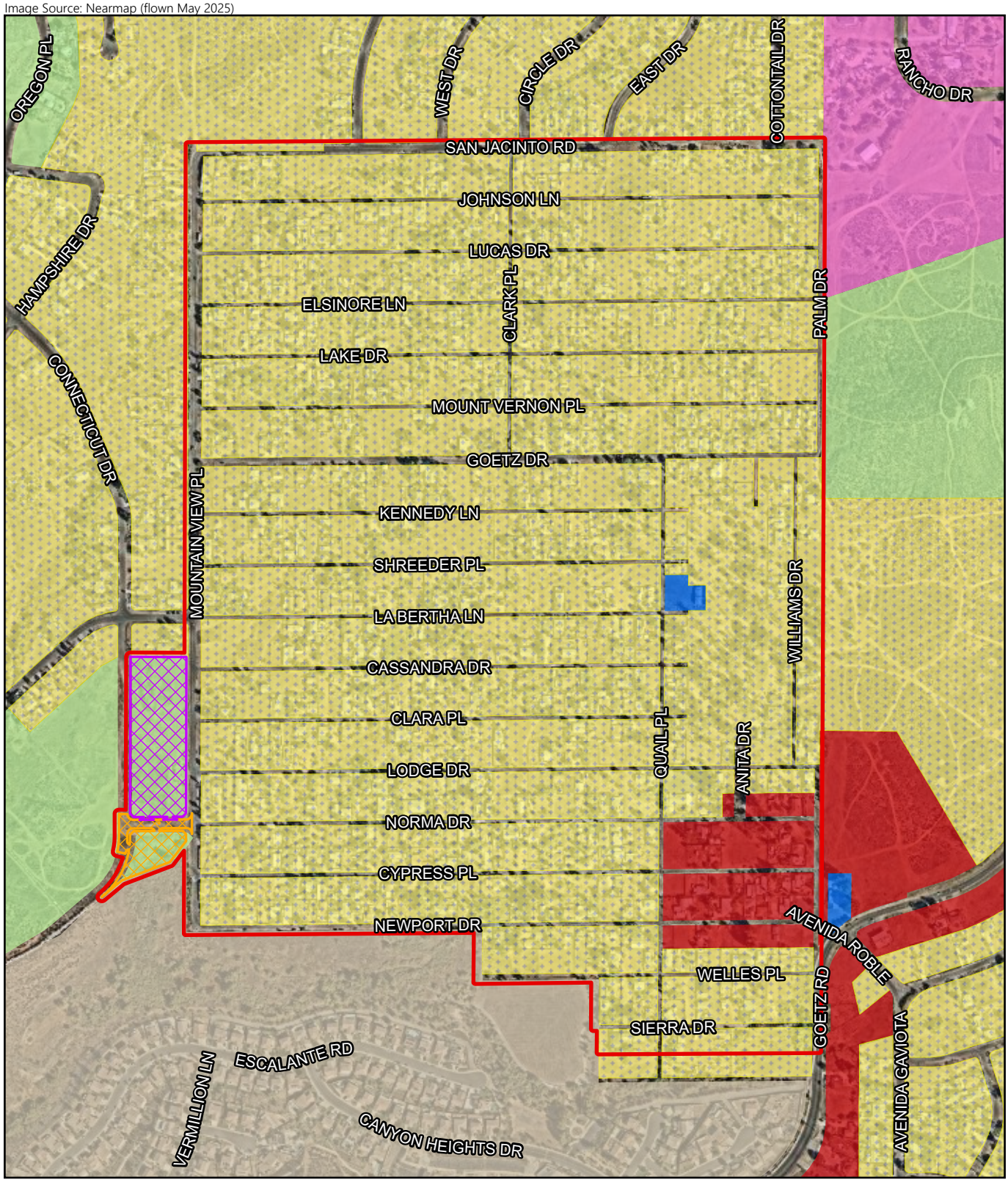
- **Low Density Residential-2 (LDR-2).** The Low Density Residential-2 zoning designation allows for single-family detached and attached residences with a with a minimum parcel size of 7,200 square feet. Limited agriculture and animal keeping are permitted.

- **Commercial Retail (CR).** The Commercial Retail zoning designation allows for neighborhood-, local-, and regional-serving retail and service uses. Hotels are also permitted in this designation. The permissible development density is between the minimum and maximum floor area ratio of 0.20 to 0.35.

- **Public/Quasi-Public Facilities (PF).** The Public/Quasi-Public Facilities zoning designation allows for civic uses such as City administrative buildings (City Hall, fire stations, police stations, community centers), government offices, corporation yards (areas for the City or other public agencies to store equipment or vehicles), cemeteries, libraries. This designation applies to existing public and private schools at the elementary, junior high, and high school levels. It also includes institutions of higher learning.

- **Canyon Heights Specific Plan (SP).** The Canyon Heights Specific Plan establishes detailed policies, standards, and criteria for development within this zoning designation. A small portion of the Project site, as well as the area immediately south of it, is designated under the Canyon Heights Specific Plan.

Image Source: Nearmap (flown May 2025)



Project Boundary
LS-1 Option 1
LS-1 Option 2

Zoning

- Rural Mountainous (RM)
- Low Density Residential-1 (LDR-1) [10,000 SF]
- Low Density Residential-2 (LDR-2) [7,200 SF]
- Commercial Retail (CR)
- Public/Quasi-Public Facilities (PF)
- Canyon Heights SP

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FIGURE 4.10-2
Zoning Designation

4.10.2 Applicable Regulatory Requirements

This section describes the various planning documents and local planning initiatives that affect the Project site.

4.10.2.1 Local Regulations

a. City of Menifee General Plan

The City's General Plan includes the following policies related to land use and planning.

Land Use Element

- Policy LU-1.8: Ensure new development is carefully designed to avoid or incorporate natural features, including washes, creeks, and hillsides.
- Policy LU-3.1: Work with utility providers in the planning, designing, and siting of distribution and support facilities to comply with the standards of the General Plan and Development Code.
- Policy LU-3.2: Work with utility providers to increase service capacity as demand increases.
- Policy LU-3.5: Facilitate the shared use of right-of-way, transmission corridors, and other appropriate measures to minimize the visual impact of utilities infrastructure throughout Menifee.

b. City of Menifee Municipal Code

Title 9–Planning and Zoning

The City's zoning designations are provided in Title 9 of the City's Municipal Code and is referred to as the Development Code. The City's Development Code defines the residential, commercial, and industrial zoning categories within the City and provides their allowed uses. Each zoning designation within the Development Code contains allowable uses and design standards for each use. This can include standards such as building height limits, landscaping requirements, and lot surface coverage limitations. The Development Code is adopted to regulate the use of real property and the buildings, structures, and improvements located thereon to implement the provisions of the City's General Plan and carry out its objectives.

4.10.3 Significance Determination Thresholds

Thresholds used to evaluate impacts to land use and planning are based on applicable criteria in the CEQA Guidelines (CCR Sections 15000–15387), Appendix G. The proposed Project would have a significant impact on the environment if it would:

1) Physically divide an established community.

2) 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.

4.10.4 Methodology

Preparation of this section was based on analysis of consistency with existing land use and zoning, as well as consistency with relevant policies within the City's General Plan as they relate to the proposed Project.

4.10.5 Threshold 1: Physically Divide an Established Community

Would the project physically divide an established community?

4.10.5.1 Impact Analysis

The proposed Project is limited to construction and operation of sewer infrastructure needed to replace the existing septic systems within the Project site. Phased development of the proposed Project would occur within public ROWs, on properties for the proposed five lift stations, and parcels for 24 connector pipe crossings. All parcels that would be acquired and parcels affected by the connector pipe crossings are currently vacant and do not contain residences. Furthermore, all pipelines would be located underground, and therefore would not affect existing above ground land uses or disrupt access or movement within the Project site. Additionally, the lift stations would primarily be located underground, and the above-ground features would be confined to individual parcels and would not affect existing above-ground land uses. Because construction would be confined to existing ROWs and vacant parcels, the proposed Project would not alter the surrounding land use pattern or the existing circulation network. Each of the proposed Project's eight phases would be required to prepare a TCP to maintain continuous vehicular and pedestrian access along public roadways during construction, including detours and access controls as needed, thereby avoiding the creation of physical barriers or interruptions to neighborhood circulation. Periodic maintenance during operation would be infrequent, and short in duration. Maintenance activities would not require extended lane closures, relocation of residents, or long-term restrictions on property access. As such, periodic maintenance would not result in a disruption to the surrounding properties. Therefore, construction and operation of the proposed Project would not physically divide an established community.

4.10.5.2 Significance of Impacts

The proposed Project would not physically divide an established community, and impacts would be less than significant.

4.10.5.3 Mitigation

No mitigation is required.

4.10.5.4 Significance of Impacts After Mitigation

No mitigation is required.

4.10.6 Threshold 2: Conflicts with Applicable Plans and Policies

Would the project cause a significant environmental impact due to a conflict with any applicable land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

4.10.6.1 Impact Analysis

The proposed Project would be located within various land uses as described under Section 4.10.1 above and shown in **Figure 4.10-1**. Per Government Code Section 53091, building ordinances of local cities or counties do not apply to the location or construction of facilities for the projection, generation, storage, treatment, or transmission of water or wastewater. Specifically, Section 53091 states (State of California Legislative Council 2003):

> (d) Building ordinances of a county or city shall not apply to the location or construction of facilities for the production, generation, storage, treatment, or transmission of water, wastewater, or electrical energy by a local agency

As a result, implementation of the proposed Project would not conflict with the City's land use or zoning designations applicable to the Project site. Therefore, any facilities that conflict with land use or zoning designations would not be subject to a Conditional Use Permit or General Plan Amendment. Nonetheless, an analysis of the consistency with the relevant land use and planning policies of the City's General Plan is provided below in **Table 4.10-1**. As shown, the proposed Project would be consistent with all applicable land use policies. Furthermore, as discussed in Section 4.3.9 above, the proposed Project would not conflict with the MSHCP. As described in Section 4.3.5 above, the proposed Project would pay the Stephens' Kangaroo Rat Mitigation fee of $500 per acre of impact to the RCHCA, which implements the Stephens' Kangaroo Rat HCP.

Table 4.10-1
City of Menifee General Plan Consistency Analysis

Section	Goal, Policy, or Implementation	Determination of Consistency
Chapter 2: Land Use Element		
Policy LU-1.8	Ensure new development is carefully designed to avoid or incorporate natural features, including washes, creeks, and hillsides.	**Consistent.** The proposed Project is designed to accommodate natural features (see Section 4.9, Hydrology and Water Quality). In addition, it is expected that direct impacts to aquatic resources would be avoided through construction methods such as jack and bore and micro-drilling. Since the proposed Project would disturb over one acre of land, a SWPPP identifying BMPs would be required for all future development. Specific BMPs may include, but would not necessarily be limited to, maintaining the proposed Project work areas free of trash and debris; employing appropriate standard spill prevention practices and clean-up materials; installing and maintaining sediment and erosion control measures; maintaining effective control of fugitive dust; and

Table 4.10-1 (cont.) City of Menifee General Plan Consistency Analysis		
Section	Goal, Policy, or Implementation	Determination of Consistency
		properly storing, handling, and disposing of toxins and pollutants, including waste materials (see Section 4.3, Biological Resources). As such, the proposed Project would be consistent with this policy.
Policy LU-3.1	Work with utility providers in the planning, designing, and siting of distribution and support facilities to comply with the standards of the General Plan and Development Code.	**Consistent.** The proposed Project would be implemented by the District, which is a water utility provider in Riverside County. The District would ensure that construction and operation of the proposed Project would comply with the standards of the General Plan and Development Code. As such, the proposed Project would be consistent with this policy.
Policy LU-3.2	Work with utility providers to increase service capacity as demand increases.	**Consistent.** The proposed Project would be implemented by the District, which is a water utility provider in Riverside County. The proposed sewer infrastructure improvements within Subarea 4 represents the second phase of the District's overall sewer system expansion within Quail Valley, following upgrades completed in Subarea 9 that began in 2019. Therefore, the proposed Project would support the District's regional long-range planning to provide adequate wastewater treatment capacity to the Project site. As such, the proposed Project would be consistent with this policy.
Policy LU-3.5	Facilitate the shared use of right-of-way, transmission corridors, and other appropriate measures to minimize the visual impact of utilities infrastructure throughout Menifee.	**Consistent.** The proposed wastewater pipelines would be constructed within public rights-of-way. Each of the proposed Project's eight phases would be required to prepare a TCP to facilitate the continuous vehicular and pedestrian access along public roadways during construction. The wastewater pipelines would be located underground, and footprints would be restored to pre-project conditions once construction is complete. The lift stations would be primarily subterranean, with visible aboveground features including access hatches, electrical control panels, and an emergency generator within an enclosure. The four smaller lift stations (LS-2, LS-3, LS-4, and LS-5) and associated equipment would be enclosed within six-foot-tall concrete masonry unit walls. These enclosures would be comparable in height and scale to walls and fences commonly associated with surrounding residential development and would not substantially alter the existing visual character of the

Table 4.10-1 (cont.)
City of Menifee General Plan Consistency Analysis

Section	Goal, Policy, or Implementation	Determination of Consistency
		area when viewed from public roadways. The two regional lift station site options are located on vacant land immediately west of the boundaries of Subarea 4. For both LS-1 Option 1 and LS-1 Option 2, retaining walls would be required to accommodate site topography; however, only approximately 8 feet of wall would extend above the finished grade, with the remaining wall height located below grade and not visible from publicly accessible vantage points. Therefore, the walls would not conflict with the scale, bulk, and height of the surrounding residential development. As such, the proposed Project would be consistent with this policy.

District = Eastern Municipal Water District
SOURCE: City of Menifee 2013.

4.10.6.2 Significance of Impacts

The proposed Project would not conflict with any applicable land use plan, policy, or regulation and impacts would be less than significant.

4.10.6.3 Mitigation

No mitigation is required.

4.10.6.4 Significance of Impacts After Mitigation

No mitigation is required.

4.11 Noise

This section analyzes impacts related to noise that could result from implementation of the proposed Project. Construction of the proposed Project is planned to be carried out in eight phases implemented over a 20-year period. This evaluation is programmatic focusing on the environmental impacts that could occur from implementation of all phases of construction (see Chapter 3). As each phase is constructed, project-level analyses may be required to further quantify any identified significant impacts.

This section includes a setting discussion that describes existing noise and vibration conditions in and around the Project site and summarizes applicable regulations related to noise and vibration. This section also includes an evaluation of potential impacts of the proposed Project related to noise. The analysis in this section is based on the findings provided in the Noise Analysis prepared for the proposed Project (Appendix H).

4.11.1 Existing Conditions

4.11.1.1 Fundamentals of Noise and Vibration

a. Fundamentals of Noise

Sound levels are described in dB units, which are measured on a logarithmic scale that quantifies sound intensity in a manner similar to the Richter scale used for earthquake magnitudes. Thus, a doubling of the energy of a noise source, such as doubling of traffic volume, would increase the noise level by 3 dB; a halving of the energy would result in a 3 dB decrease. Additionally, in technical terms, sound levels are described as either a "sound power level" or a "sound pressure level," which while commonly confused, are two distinct characteristics of sound.

Both share the same unit of measure, the dB. However, sound power, expressed as L_{pw}, is the energy converted into sound by the source. The L_{pw} is used to estimate how far a noise will travel and to predict the sound levels at various distances from the source. As sound energy travels through the air, it creates a sound wave that exerts pressure on receivers such as an eardrum or microphone and is the sound pressure level. Noise measurement instruments only measure sound pressure, and noise level limits used in standards are generally sound pressure levels.

The human ear is not equally sensitive to all frequencies within the sound spectrum. To accommodate this phenomenon, the A-scale, which approximates the frequency response of the average young ear when listening to most ordinary everyday sounds, was devised. When people make relative judgments of the loudness or annoyance of a sound, their judgments correlate well with the A-scale sound levels of those sounds. Therefore, the "A-weighted" noise scale is used for measurements and standards involving the human perception of noise. Noise levels using A-weighted measurements are designated with the notation dB(A).

The impact of noise is not a function of loudness alone. The time of day when noise occurs and the duration of the noise are also important. In addition, most noise that lasts for more than a few seconds is variable in its intensity. Consequently, a variety of noise descriptors have been developed.

The noise descriptors used for this study are the one-hour equivalent noise level (L_{eq}) and the maximum equivalent noise level (L_{max}). The L_{max} is the maximum generated noise level while the L_{eq} is the average noise level over a specified period of time, typically one-hour. Sound from a small, localized source (approximating a "point" source) radiates uniformly outward as it travels away from the source in a spherical pattern, known as geometric spreading. The sound level decreases or drops off at a rate of 6 dB(A) for each doubling of the distance.

The propagation of noise is also affected by the intervening ground, known as ground absorption. A hard site (such as parking lots or smooth bodies of water) receives no additional ground attenuation, and the changes in noise levels with distance (drop-off rate) are simply the geometric spreading of the source. A soft site (such as soft dirt, grass, or scattered bushes and trees) receives an additional ground attenuation value of 1.5 dB(A) per doubling of distance. Thus, a point source over a soft site would attenuate at 7.5 dB(A) per doubling of distance.

Human perception of noise has no simple correlation with acoustical energy. A change in noise levels is generally perceived as follows: 3 dB(A) barely perceptible, 5 dB(A) readily perceptible, and 10 dB(A) perceived as a doubling or halving of noise (Caltrans 2013).

b. Fundamentals of Vibration

Vibration is oscillatory movement of mass (typically a solid) over time. It is described in terms of frequency and amplitude and, unlike sound, can be expressed as displacement, velocity, or acceleration. For environmental studies, vibration is often studied as a velocity that, akin to the discussion of sound pressure levels, can also be expressed in dB as a way to cast a large range of quantities into a more convenient scale and with respect to a reference quantity. Vibration impacts to buildings are generally discussed in terms of inches per second (in/sec) peak particle velocity (PPV), which will be used herein to discuss vibration levels for ease of reading and comparison with relevant standards. Vibration can also be annoying and thereby impact occupants of structures, and vibration of sufficient amplitude can disrupt sensitive equipment and processes (Caltrans 2020), such as those involving the use of electron microscopes and lithography equipment. Common sources of vibration within communities include construction activities and railroads. Groundborne vibration generated by construction projects is usually highest during pile driving, rock blasting, soil compacting, jack hammering, and demolition-related activities where sudden releases of subterranean energy or powerful impacts of tools on hard materials occur. Depending on their distances to a sensitive receptor, operation of large bulldozers, graders, loaded dump trucks, or other heavy construction equipment and vehicles on a construction site also have the potential to cause high vibration amplitudes.

4.11.1.2 Existing Noise Levels

Existing noise levels at the Project site were measured on July 23, 2025, using one Larson-Davis LxT Sound Expert Sound Level Meter, serial number 3896. The following parameters were used:

Filter:	A-weighted
Response:	Slow
Time History Period:	5 seconds

The meter was calibrated before and after the measurements. The meter was set five feet above the ground level for each measurement. Noise measurements were taken to obtain typical ambient noise levels at the Project site and in the vicinity. The weather was warm and sunny. Six 15-to-60-minute measurements were taken at each of the lift station locations. Measurement 1a was located at LS-1 (Option 1), measurement 1b was located at LS-1 (Option 2), and measurements 2 through 5 were located at LS-2 through LS-5, respectively. Noise sources at each of the measurement locations are typical of rural residential neighborhoods and include occasional vehicles on neighborhood roadways, aircraft flyovers, barking dogs, roosters, and chickens. The measurement locations are shown on Figure 4.11-1, and detailed data is presented in Attachment 1 to Appendix H. Measured noise levels are summarized in Table 4.11-1.

Table 4.11-1
Noise Measurements

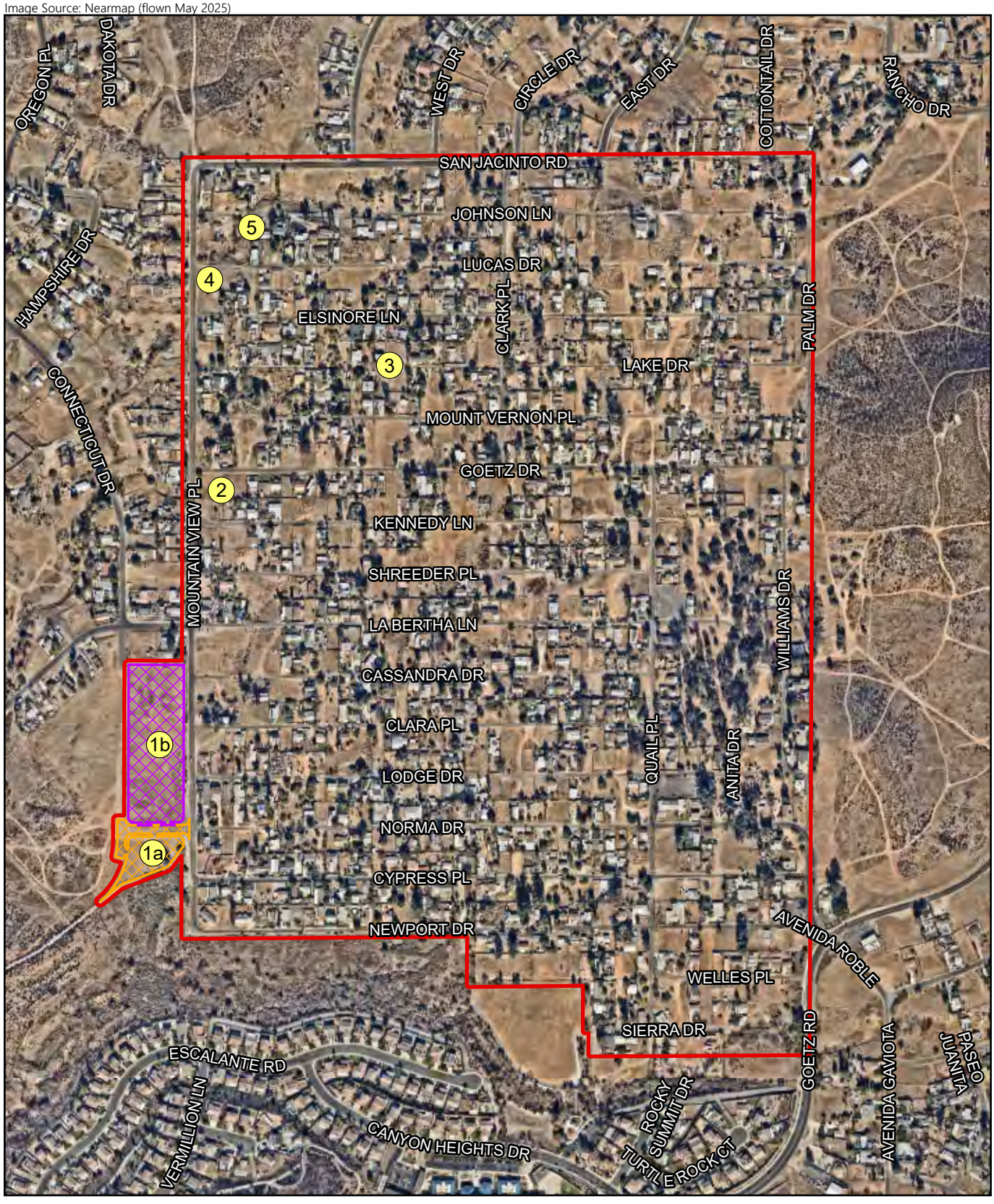
Measurement	Location	Time (Duration)	Noise Sources	L_{eq}
1a	LS-1 (Option 1)	10:23 a.m.–10:53 a.m. (30 minutes)	Vehicle traffic on Mountain View Place, aircraft, dogs, roosters, bird vocalizations	49.8
1b	LS-1 (Option 2)	11:02 a.m.–12:02 p.m. (60 minutes)	Vehicle traffic on Mountain View Place, aircraft, dogs, roosters, bird vocalizations	48.0
2	LS-2	12:46 p.m.–1:16 p.m. (30 minutes)	Vehicle traffic on Mountain View Place, aircraft, dogs, roosters, bird vocalizations	49.3
3	LS-3*	1:24 p.m.–1:39 p.m. (15 minutes)	Aircraft, chickens	41.3
4	LS-4	2:29 p.m.–2:59 p.m. (30 minutes)	Vehicle traffic on Mountain View Place, aircraft	48.2
5	LS-5	2:01 p.m.–2:16 p.m. (15 minutes)	Vehicle traffic on Mountain View Place, aircraft	42.4

LS = lift station; L_{eq} = one-hour equivalent noise level
NOTE: Noise measurement data is contained in Attachment 1 to Appendix H.
*Measurement 3 was located four lots east of LS-3; however, noise levels at each location are considered equivalent.
SOURCE: Appendix H.

4.11.2 Applicable Regulatory Requirements

The District, as a public agency, is not subject to other jurisdictional agencies' established noise standards. Likewise, as a public agency, the District is not subject to City or County of Riverside ordinances and would not be required to obtain variances. The District has not established an applicable noise standard of its own for permanent or temporary ambient noise levels. However, the District follows a "good neighbor" approach to adhering to local noise standards. The noise standards of the Federal Transit Administration (FTA) and the City are used for the purposes of evaluating the significance of the proposed Project's noise levels for the purposes of this analysis under CEQA.

Image Source: Nearmap (flown May 2025)



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Project Boundary

LS-1 Option 1

LS-1 Option 2

Measurements

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FIGURE 4.11-1
Noise Measurement Locations

4.11.2.1 Federal Regulations

a. Federal Transit Administration

According to the FTA, project construction noise criteria should account for the existing noise environment, the absolute noise levels during construction activities, the duration of the construction, and the adjacent land use. The FTA considers a daytime exterior construction noise level of 80 dB(A) L_{eq} as a reasonable threshold for noise sensitive residential land use (FTA 2018). For the purposes of this analysis, this threshold is applied at the property line of residential uses.

4.11.2.2 Local Regulations

a. City of Menifee Municipal Code

The City regulates construction noise by establishing allowable hours in its Municipal Code.

Section 8.01.010, Hours of Construction, of the City's Municipal Code states the following:

> Any construction within the city located within one-fourth mile from an occupied residence shall be permitted Monday through Saturday, except nationally recognized holidays, 6:30 a.m. to 7:00 p.m. There shall be no construction permitted on Sunday or nationally recognized holidays unless approval is obtained from the City Building Official or City Engineer.

The City also regulates noise through Section 9.210.060, Noise Control Regulation, of the Municipal Code. Section 9.210.060(C) states the following:

> C. Construction-Related Exemptions. Exceptions may be requested from the standards set forth in Section 9.210.060 of this chapter and may be characterized as construction-related, single event or continuous events exceptions.
>
> 1. Private construction projects, with or without a Building Permit, located one-quarter of a mile or more from an inhabited dwelling.
>
> 2. Private construction projects, with or without a building permit, located within one-quarter of a mile from an inhabited dwelling, shall be permitted Monday through Saturday, except nationally recognized holidays, 6:30 a.m. to 7:00 p.m., or specified in Section 8.01.010. There shall be no construction permitted on Sunday or nationally recognized holidays unless approval is obtained from the City Building Official or City Engineer.
>
> 3. Construction-related exceptions. If construction occurs during off hours or exceeds noise thresholds, an application for a construction-related exception shall be made using the temporary use application provided by the Community Development Director in Chapter 9.105 of this Title. For

construction activities on Sunday or nationally recognized holidays, Section 8.01.010 of this Code shall prevail.

Section 9.210.060(D) of the City's Municipal Code states the following:

D. General Sound Level Standards. No person shall create any sound, or allow the creation of any sound, on any property that causes the exterior and interior sound level on any other occupied property to exceed the sound level standards set forth in Table 9.210.060-1, Stationary Source Noise Standards.

These standards are summarized in Table 4.11-2.

Table 4.11-2
City of Menifee Stationary Source Noise Standards

	Interior Standards	Exterior Standards
10:00 p.m. to 7:00 a.m.	40 dB(A) L_{eq} (10-minute)	45 dB(A) L_{eq} (10-minute)
7:00 a.m. to 10:00 p.m.	55 dB(A) L_{eq} (10-minute)	65 dB(A) L_{eq} (10-minute)

dB(A) = A-weighted decibels; L_{eq} = one-hour equivalent noise level
SOURCE: City of Menifee Municipal Code Section 9.210.060(D).

b. City of Menifee General Plan

The Noise Element of the City's General Plan outlines the City's planning policies and objectives to prevent future noise incompatibilities. The City's noise compatibility standards for residential uses were used to analyze impacts associated with off-site construction-related traffic. Single family residential land uses are considered normally acceptable with noise levels up to 60 CNEL, conditionally acceptable with noise levels up to 70 CNEL, normally unacceptable with noise levels up to 75 CNEL, and clearly unacceptable with noise levels above 75 CNEL (City of Menifee 2013).

4.11.3 Significance Determination Thresholds

Thresholds used to evaluate noise impacts are based on applicable criteria in the CEQA Guidelines (CCR Sections 15000–15387), Appendix G. The proposed Project would have a significant impact on the environment if it would:

1) Generate 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;

2) Generate excessive groundborne vibration or groundborne noise levels; or

3) 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, expose people residing or working in the project area to excessive noise levels.

4.11.4 Methodology

4.11.4.1 Construction Noise

Noise impacts from construction are a function of the noise generated by equipment, the location and sensitivity of nearby land uses, and the timing and duration of the noise generating activities. Table 4.11-3 presents a list of noise generation levels for various types of equipment anticipated to be used for construction of the proposed Project. The duty cycle is the amount of time that equipment generates the reported noise level during typical, standard equipment operation. The noise levels and duty cycles summarized in Table 4.11-3 are based on measurements and studies conducted by Federal Highway Administration and the FTA.

For construction of the regional lift station (LS-1 Options 1 and 2), the simultaneous use of an excavator, loader, and dozer, would generate a combined sound power level of 116.3 dB(A) L_{pw}. This noise level was modeled as an area source covering the entire parcels. For the smaller lift station sites (LS-2 through LS-5), due to site constraints, it was assumed that one piece of construction equipment would be active at a given time. The use of an excavator, which generates a sound power level of 112.7 dB(A) L_{pw}, was modeled as an area source over the footprints of LS-2 through LS-5. Noise contour mapping and noise levels at specific receiver locations were modeled using SoundPLAN.

Table 4.11-3
Typical Construction Equipment Noise Levels

Equipment	Maximum Noise Level at 50 Feet [dB(A) L_{max}]	Typical Duty Cycle (percent)	Maximum Average Hourly Noise Level [dB(A) L_{eq}]
Backhoe/Loader	80	40%	76
Compressor	80	40%	76
Concrete Saw	90	20%	83
Crane	81	16%	73
Dozer	85	40%	81
Excavator	85	40%	81
Generator	82	50%	79
Water Truck[1]	84	40%	80
Utility Truck[2,3]	78	5%	65

dB(A) = A-weighted decibels; L_{max} = maximum equivalent noise level; L_{eq} = one-hour equivalent noise level
[1]Water truck noise is assumed to be comparable to tractor noise.
[2]Utility truck noise is assumed to be comparable to flat-bed truck noise.
[3]The dump truck and utility truck duty cycle was adjusted to five percent to represent the time this equipment is arriving at and departing from the site. Engines would be idle all other times.
SOURCE: Federal Highway Administration 2006, 2008; Federal Transit Administration 2018.

Other construction activities would occur within the roadway ROW to install the sewer pipeline. Construction noise from a linear project, such as a pipeline project, is assessed from the centerline of the alignment and work area. Maximum noise levels would occur when the construction equipment is nearest to a noise sensitive receiver. Although construction equipment may temporarily be located at the point on the alignment nearest to a receiver, equipment would move along the alignment

throughout the day. Therefore, the distance from a receiver to the centerline of the alignment is not the same as the average distance during a given day from the receiver to construction equipment. Thus, average noise levels correlate to the area of active construction. Narrow street widths within the Project site present construction access and staging challenges. While excavation equipment is expected to fit within the existing ROW, navigating around obstacles (such as electrical poles with light fixtures and mailboxes) constrains access. The interior streets' ROWs are all 20 feet wide and one-way access. Due to these site constraints, it was assumed that one piece of construction equipment would be active at a given time and location. The use of an excavator, which generates an average hourly noise level of 81 dB(A) L_{eq}, was modeled. Due to the complex nature of the construction area, rather than generating SoundPLAN contours for the pipeline, noise levels were calculated using an attenuation rate of 6 dB(A) for every doubling of distance.

4.11.4.2 Construction-Related Traffic Noise

Based on CalEEMod modeling prepared as part of the Air Quality Analysis (see Appendix C), it was calculated that the proposed Project would generate up to 30 daily worker trips and 21 daily hauling trips. These trips would be added to the roadway network during the duration of the construction activities. Traffic noise associated with these trips was modeled using the Federal Highway Administration Traffic Noise Prediction Model algorithms and reference levels. Traffic noise levels were calculated at 20 feet from the centerline of the roadways to determine the noise level associated with the proposed Project. The model uses various input parameters, such as traffic volumes, vehicle mix, distribution, and speed. For the Project site, a speed of 25 miles per hour and a vehicle classification mix of 59 percent automobiles and 41 percent heavy trucks was modeled based on the worker and hauling trips calculated by CalEEMod. These trips would only occur during the daytime hours. The analysis of the noise environment considered that the topography was flat with no intervening terrain between sensitive land uses and roadways. This is conservative since buildings and other obstructions along the roadways would shield distant receivers from the traffic noise.

4.11.4.3 Operational Noise

Operational noise would result from the periodic emergency generator testing at the lift stations. All other lift station equipment would be in underground wells and would not generate significant noise levels. The belowground pipeline would not generate noise during operation. Noise may also be associated with occasional vehicle maintenance trips, but these trips would be negligible.

Noise levels associated with the backup emergency generators were modeled assuming it would be equipped with a Level 3 sound enclosure that results in maximum noise levels of 73 dB(A) L_{eq} at 23 feet. The standby generator would only be used in emergencies when power is cut from the fire station. However, generator maintenance would include periodic testing. It was assumed that the generator would run for 15 minutes during daytime hours only for testing purposes. A testing average hourly sound power level of 91.9 dB(A) L_{pw} was modeled. Modeled noise levels take into account the six-foot barriers that would be constructed at each lift station site.

4.11.5 Threshold 1: Increase in Ambient Noise

Would the project generate 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?

4.11.5.1 Impact Analysis

a. Construction Noise

Residential Uses

The construction noise level limit at residential property lines is 80 dB(A) L_{eq}. Construction noise levels associated with construction of the proposed Project were calculated using methodology discussed in Section 4.11.4.1 above. Noise levels were modeled at specific receiver locations adjacent to the proposed lift stations using SoundPLAN. The results are summarized in **Table 4.11-4**. Modeled receiver locations and lift station construction noise contours are shown in **Figures 4.11-2a** through **4.11-2f**. SoundPLAN data is provided in Attachment 2 to Appendix H. Note that noise impacts associated with sensitive habitat areas along with the reference 60 dB(A) L_{eq} limit are discussed in detail in Section 4.3, Biological Resources, and are included in this table for informational purposes. The analysis in this section addresses impacts to human (residential) receivers.

As shown in **Table 4.11-4**, noise levels at the residential receivers adjacent to LS-1 (Option 1), LS-1 (Option 2), LS-2, and LS-4 are not projected to exceed 80 dB(A) L_{eq}. Noise impacts due to construction activities in these areas would be less than significant. Noise levels would exceed 80 dB(A) L_{eq} at the residence located closest to LS-3 (Receiver 2; **Impact NOI-1**) and at the residence located closest to LS-5 (Receiver 1; **Impact NOI-2**).

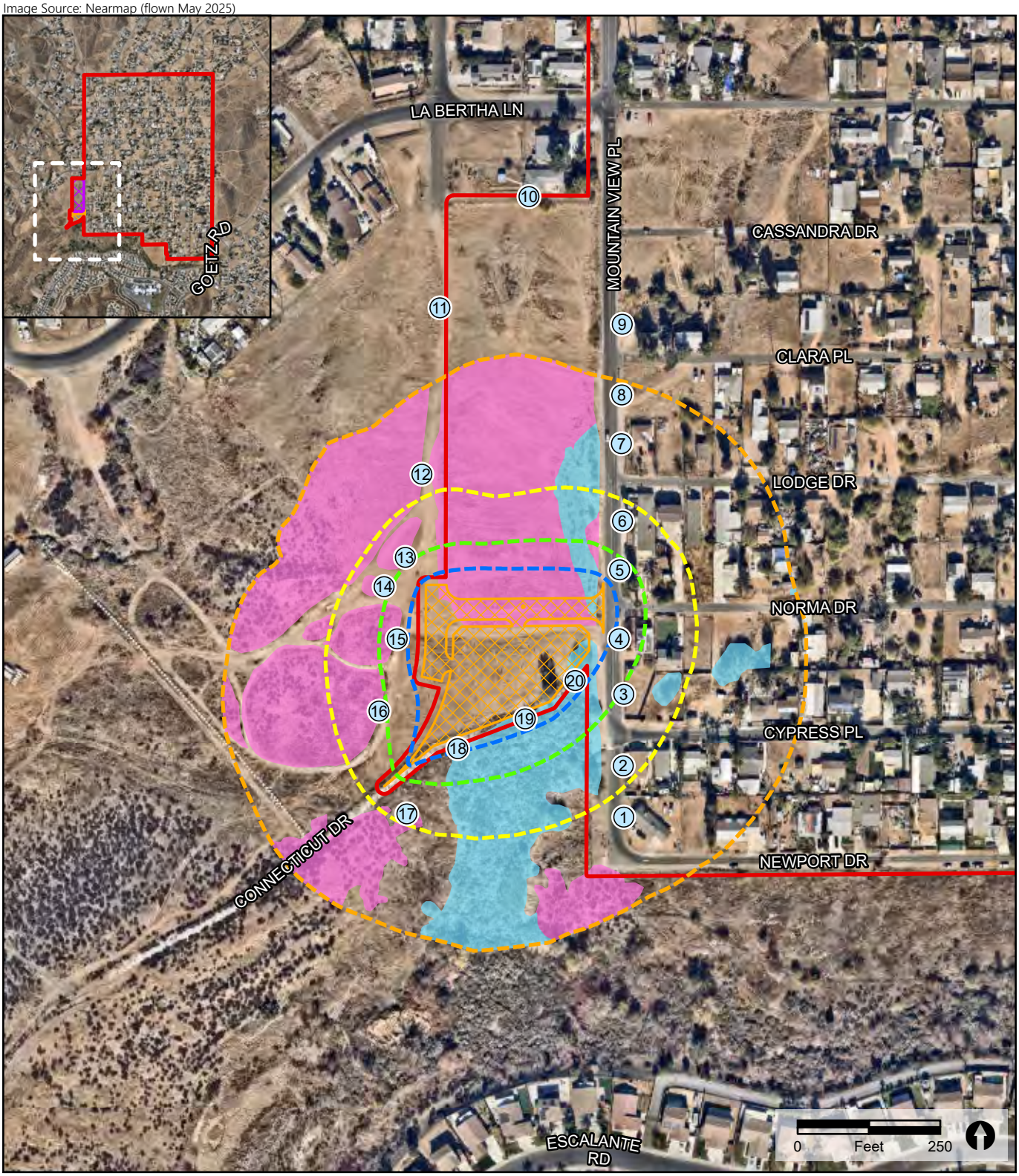
Pipeline construction noise contours for each phase are shown in **Figures 4.11-3a through 4.11-3i**. For pipeline construction activities that would occur within the ROW, noise levels due to operation of an excavator would attenuate to 80 dB(A) L_{eq} at a distance of approximately 55 feet. As discussed, there are narrow street widths within the Project site. The interior streets' ROWs are all 20 feet wide and one-way access. Residential uses are therefore located closer than 55 feet from the construction areas, and noise levels would have the potential to exceed 80 dB(A) L_{eq} at the residential uses located throughout the Project site, without implementation of any noise reduction measures. As discussed in Section 3.5, the project would implement environmental commitments that would become conditions of approval. These features include construction noise BMPs (see Section 3.5.1). However, the degree to which construction noise levels would be reduced cannot be known at a program level of analysis. Due to the close proximity of residential uses throughout the project areas, noise impacts associated with pipeline construction activities would remain a temporary significant impact (**Impact NOI-3**).

Table 4.11-4 Construction Noise Levels			
Receiver	Land Use	Noise Level Limit [dB(A) L_{eq}]	Construction Noise Level [dB(A) L_{eq}]
Lift Station 1 (Option 1)			
1	Residential	80	64
2	Residential	80	66
3	Residential	80	70
4	Residential	80	74
5	Residential	80	71
6	Residential	80	66
7	Residential	80	62
8	Residential	80	60
9	Residential	80	58
10	Residential	80	56
11	Habitat	60	58
12	**Habitat**	60	**64**
13	**Habitat**	60	**69**
14	**Habitat**	60	**69**
15	**Habitat**	60	**73**
16	**Habitat**	60	**69**
17	**Habitat**	60	**66**
18	**Habitat**	60	**76**
19	**Habitat**	60	**77**
20	**Habitat**	60	**77**
Lift Station 1 (Option 2)			
1	Residential	80	58
2	Residential	80	59
3	Residential	80	62
4	Residential	80	65
5	Residential	80	70
6	Residential	80	70
7	Residential	80	71
8	Residential	80	71
9	Residential	80	70
10	Residential	80	72
11	**Habitat**	60	**72**
12	**Habitat**	60	**70**
13	**Habitat**	60	**66**
14	**Habitat**	60	**64**
15	**Habitat**	60	**62**
16	Habitat	60	59
17	Habitat	60	57
18	Habitat	60	59
19	**Habitat**	60	**61**
20	**Habitat**	60	**63**

Table 4.11-4 (cont.) Construction Noise Levels			
Receiver	Land Use	Noise Level Limit [dB(A) L_{eq}]	Construction Noise Level [dB(A) L_{eq}]
Lift Station 2			
1	Residential	80	77
2	Residential	80	70
3	Residential	80	71
4	Residential	80	67
5	**Habitat**	60	**70**
Lift Station 3			
1	Residential	80	80
2	**Residential**	80	**85**
3	Residential	80	78
4	**Habitat**	60	**86**
5	**Habitat**	60	**85**
6	Residential	80	73
Lift Station 4			
1	**Habitat**	60	**83**
2	Residential	80	68
3	Residential	80	68
4	Residential	80	72
Lift Station 5			
1	**Residential**	80	**84**
2	Residential	80	78
3	**Habitat**	60	**79**
4	Residential	80	71
5	Residential	80	77
6	**Habitat**	60	**83**

dB(A) L_{eq} = A-weighted decibels equivalent noise level
Bold = Exceeds threshold
NOTE: Construction noise impacts at sensitive habitat areas are discussed in Section 4.3 of this Program Environmental Impact Report.
SOURCE: Appendix H.

Image Source: Nearmap (flown May 2025)



Project Boundary

LS-1 Option 1

Receivers

Sensitive Habitat Noise Impacts

Coastal California Gnatcatcher Habitat

Least Bell's Vireo Habitat

Construction Noise Contours

60 dB(A) L_{eq}

65 dB(A) L_{eq}

70 dB(A) L_{eq}

75 dB(A) L_{eq}

FIGURE 4.11-2a

Construction Noise Contours – Lift Station 1 Option 1

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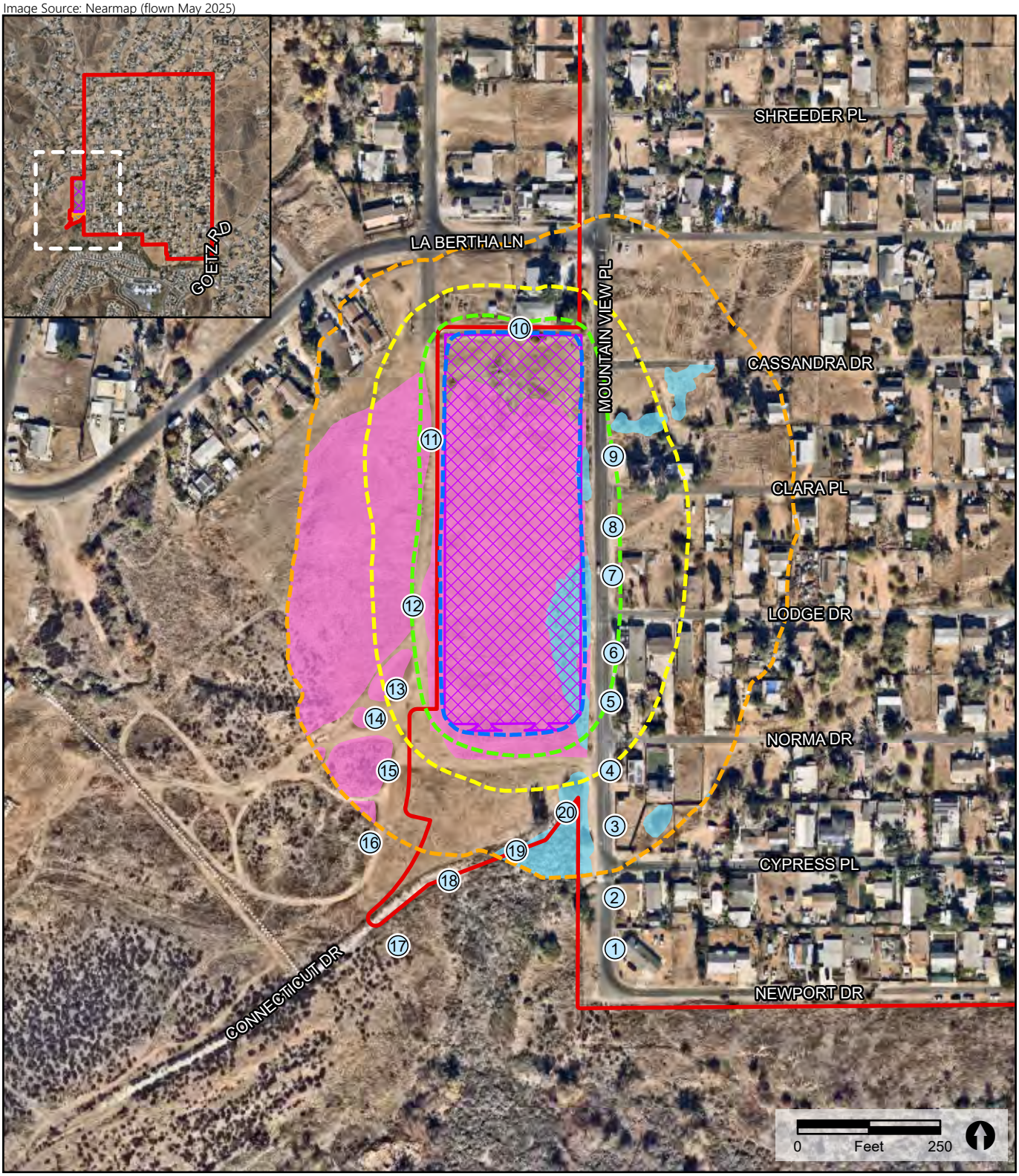
Image Source: Nearmap (flown May 2025)



Project Boundary

LS-1 Option 2

Receivers

Sensitive Habitat Noise Impacts

Coastal California Gnatcatcher Habitat

Least Bell's Vireo Habitat

Construction Noise Contours

60 dB(A) L_{eq}

65 dB(A) L_{eq}

70 dB(A) L_{eq}

75 dB(A) L_{eq}

FIGURE 4.11-2b

Construction Noise Contours – Lift Station 1 Option 2

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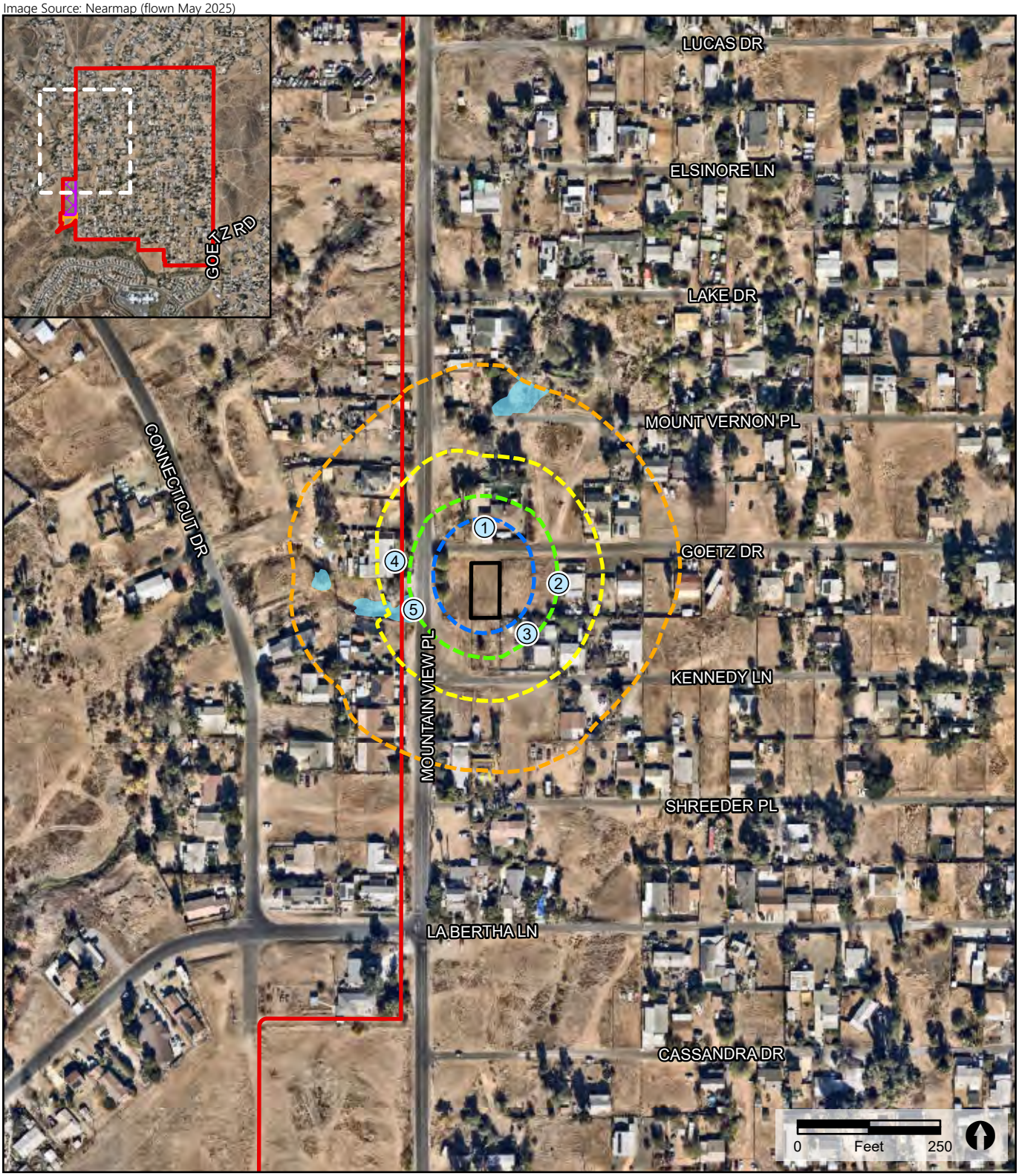
Image Source: Nearmap (flown May 2025)



Project Boundary

Lift Station

Receivers

Sensitive Habitat Noise Impacts

Least Bell's Vireo Habitat

Construction Noise Contours

60 dB(A) L_{eq}

65 dB(A) L_{eq}

70 dB(A) L_{eq}

75 dB(A) L_{eq}

FIGURE 4.11-2c

Construction Noise Contours – Lift Station 2

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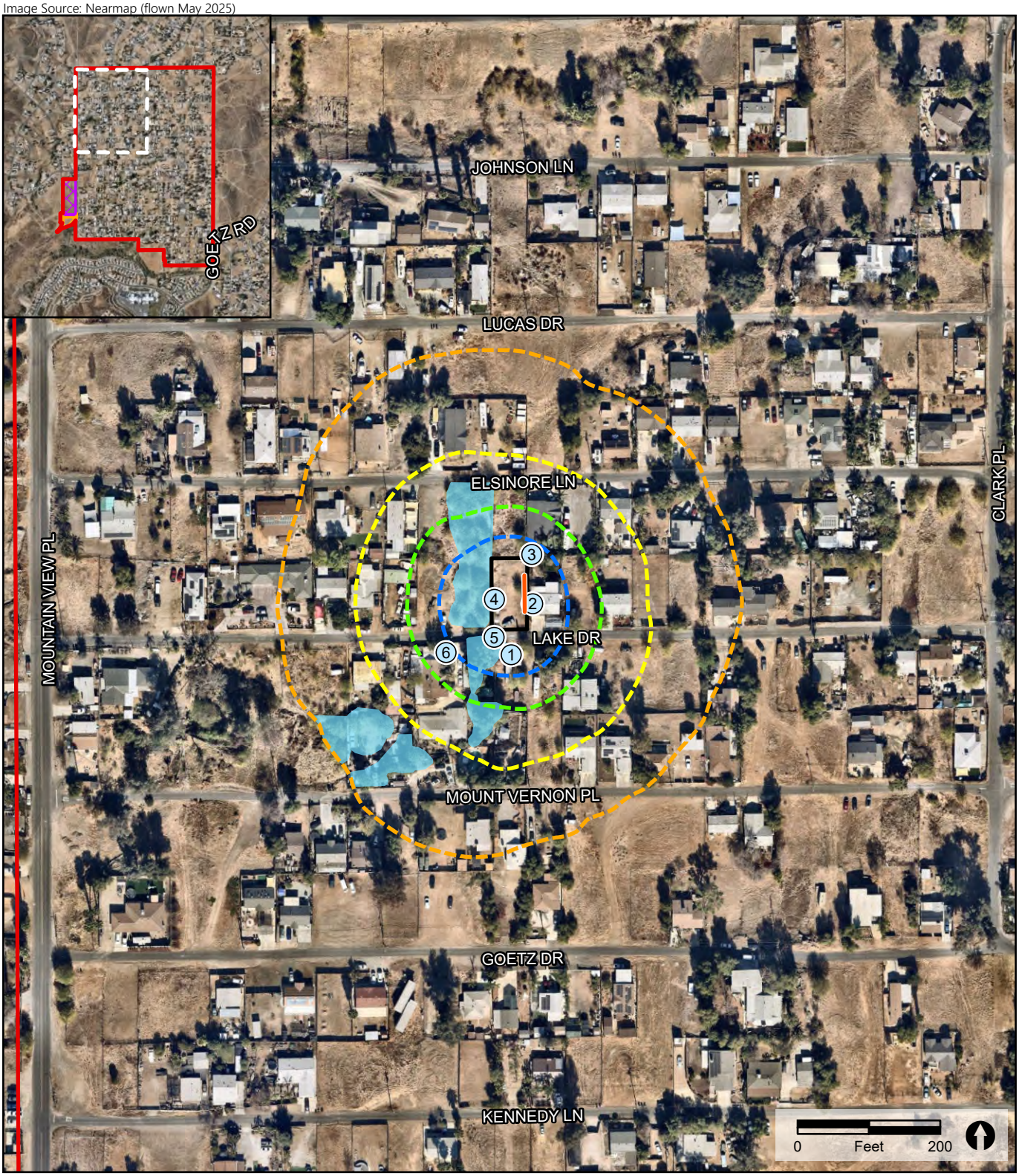
Image Source: Nearmap (flown May 2025)



Project Boundary
Lift Station
Receivers
8-foot Temporary Barrier

Sensitive Habitat Noise Impacts
Least Bell's Vireo Habitat

Construction Noise Contours
60 dB(A) L_{eq}
65 dB(A) L_{eq}
70 dB(A) L_{eq}
75 dB(A) L_{eq}

FIGURE 4.11-2d
Construction Noise Contours – Lift Station 3

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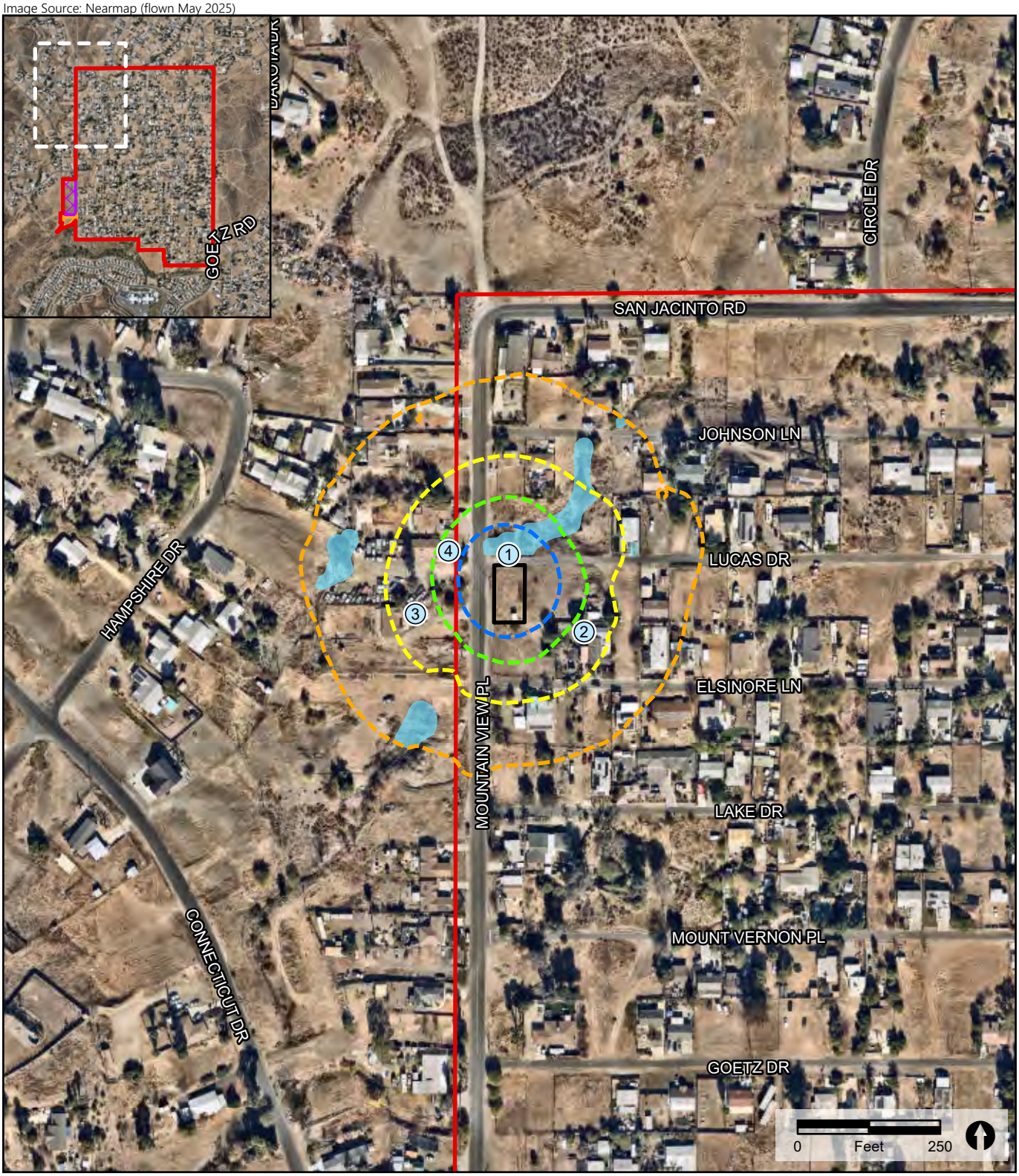
Image Source: Nearmap (flown May 2025)



Project Boundary

Lift Station

Receivers

Sensitive Habitat Noise Impacts

Least Bell's Vireo Habitat

Construction Noise Contours

60 dB(A) L_{eq}

65 dB(A) L_{eq}

70 dB(A) L_{eq}

75 dB(A) L_{eq}

FIGURE 4.11-2e

Construction Noise Contours – Lift Station 4

RECON

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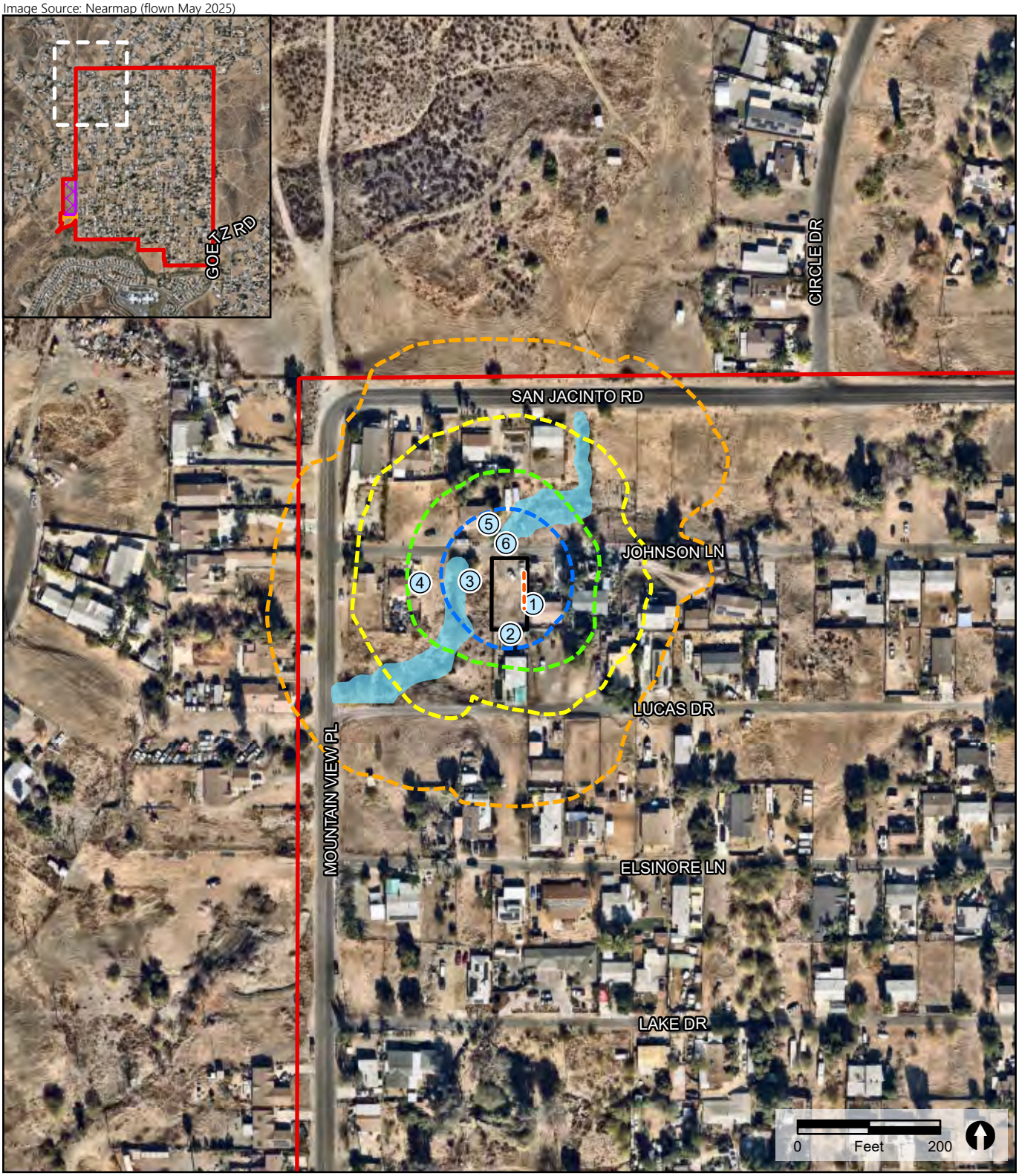
Image Source: Nearmap (flown May 2025)



Project Boundary

Lift Station

6-foot Temporary Barrier

Sensitive Habitat Noise Impacts

Least Bell's Vireo Habitat

Construction Noise Contours

60 dB(A) L_{eq}

65 dB(A) L_{eq}

70 dB(A) L_{eq}

75 dB(A) L_{eq}

FIGURE 4.11-2f

Construction Noise Contours – Lift Station 5

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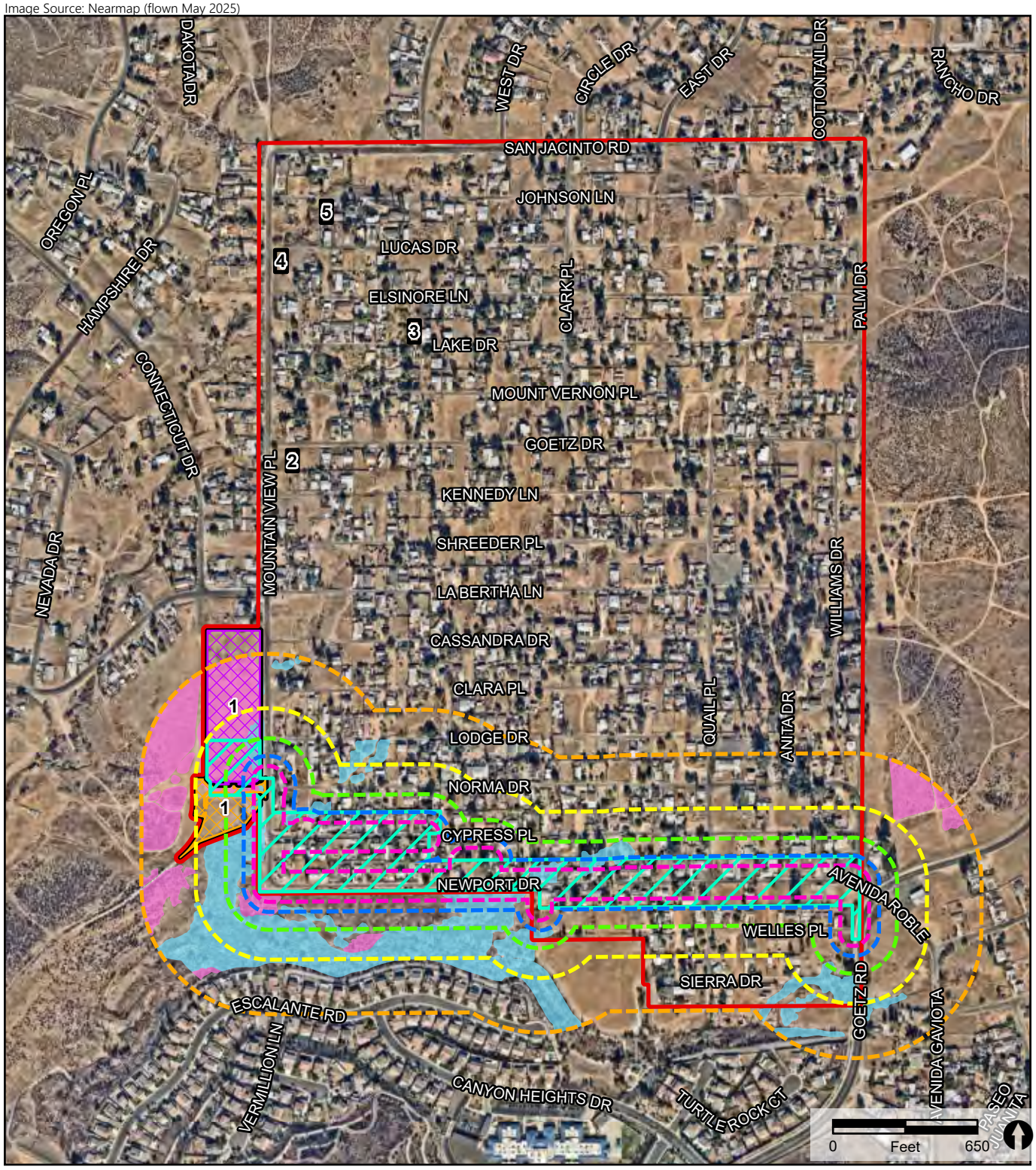
Image Source: Nearmap (flown May 2025)



- Project Boundary
- Phase 1A
- Lift Station (LS)
- LS-1 Option 1
- LS-1 Option 2

Sensitive Habitat Noise Impacts

- Coastal California Gnatcatcher Habitat
- Least Bell's Vireo Habitat

Construction Noise Contours

- 60 dB(A) L_{eq}
- 65 dB(A) L_{eq}
- 70 dB(A) L_{eq}
- 75 dB(A) L_{eq}
- 80 dB(A) L_{eq}

FIGURE 4.11-3a
Construction Noise Contours – Phase 1A

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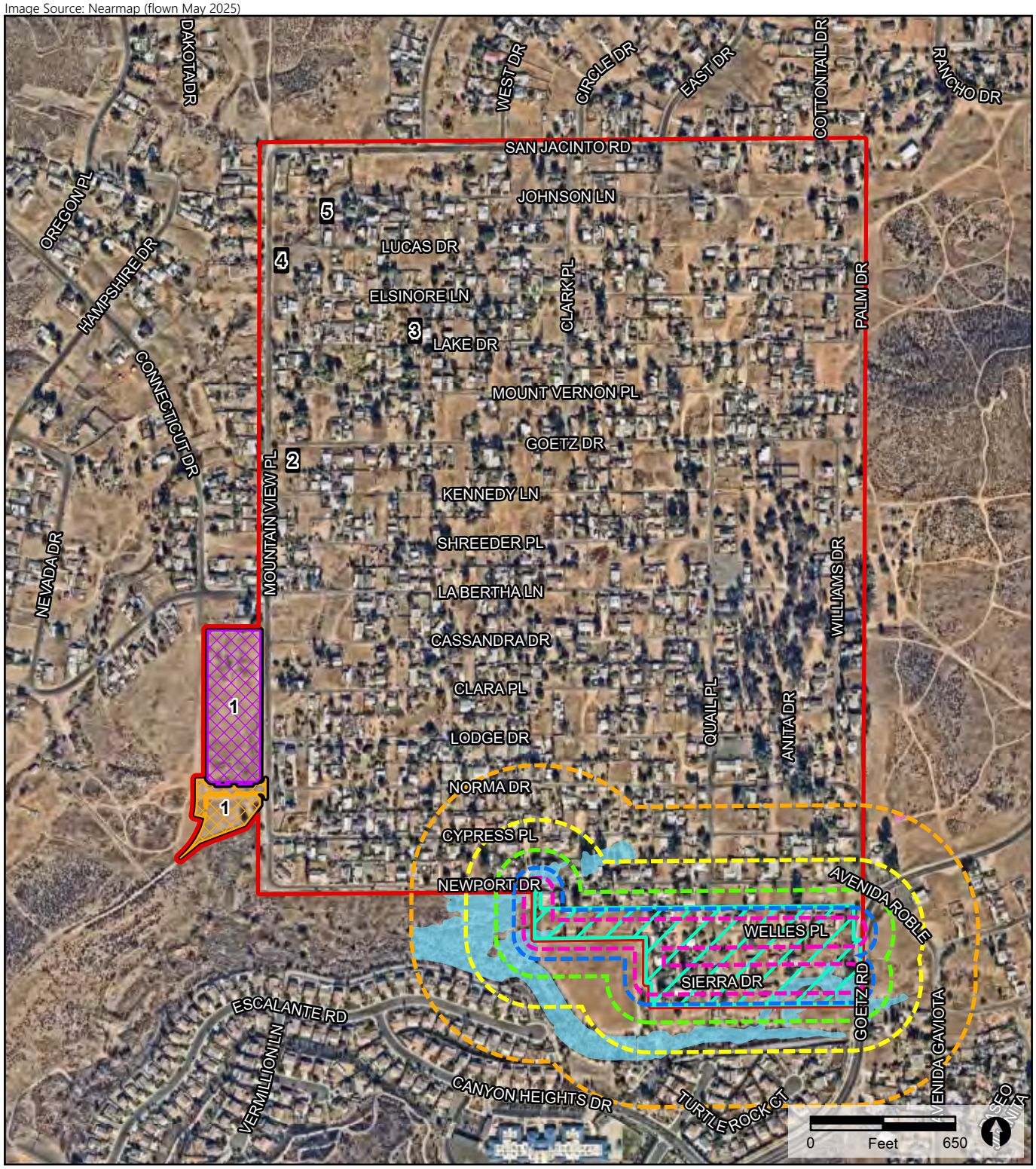
Image Source: Nearmap (flown May 2025)



Project Boundary
Phase 1B
Lift Station (LS)
LS-1 Option 1
LS-1 Option 2

Sensitive Habitat Noise Impacts

Coastal California Gnatcatcher Habitat
Least Bell's Vireo Habitat

Construction Noise Contours

60 dB(A) L_{eq}
65 dB(A) L_{eq}
70 dB(A) L_{eq}
75 dB(A) L_{eq}
80 dB(A) L_{eq}

FIGURE 4.11-3b
Construction Noise Contours – Phase 1B

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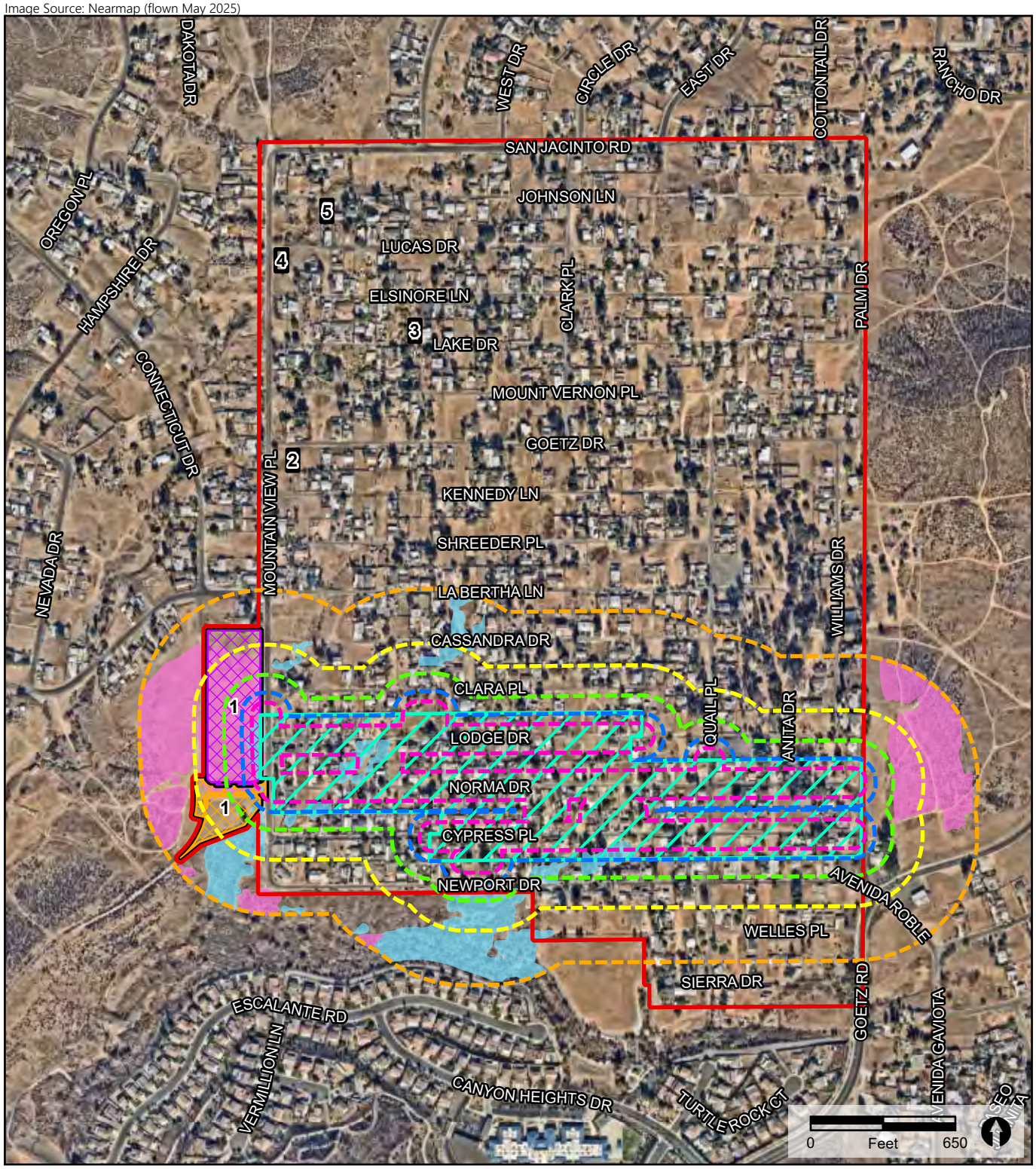
Image Source: Nearmap (flown May 2025)



- Project Boundary
- Phase 2
- Lift Station (LS)
- LS-1 Option 1
- LS-1 Option 2

Sensitive Habitat Noise Impacts

- Coastal California Gnatcatcher Habitat
- Least Bell's Vireo Habitat

Construction Noise Contours

- 60 dB(A) L_{eq}
- 65 dB(A) L_{eq}
- 70 dB(A) L_{eq}
- 75 dB(A) L_{eq}
- 80 dB(A) L_{eq}

RECON

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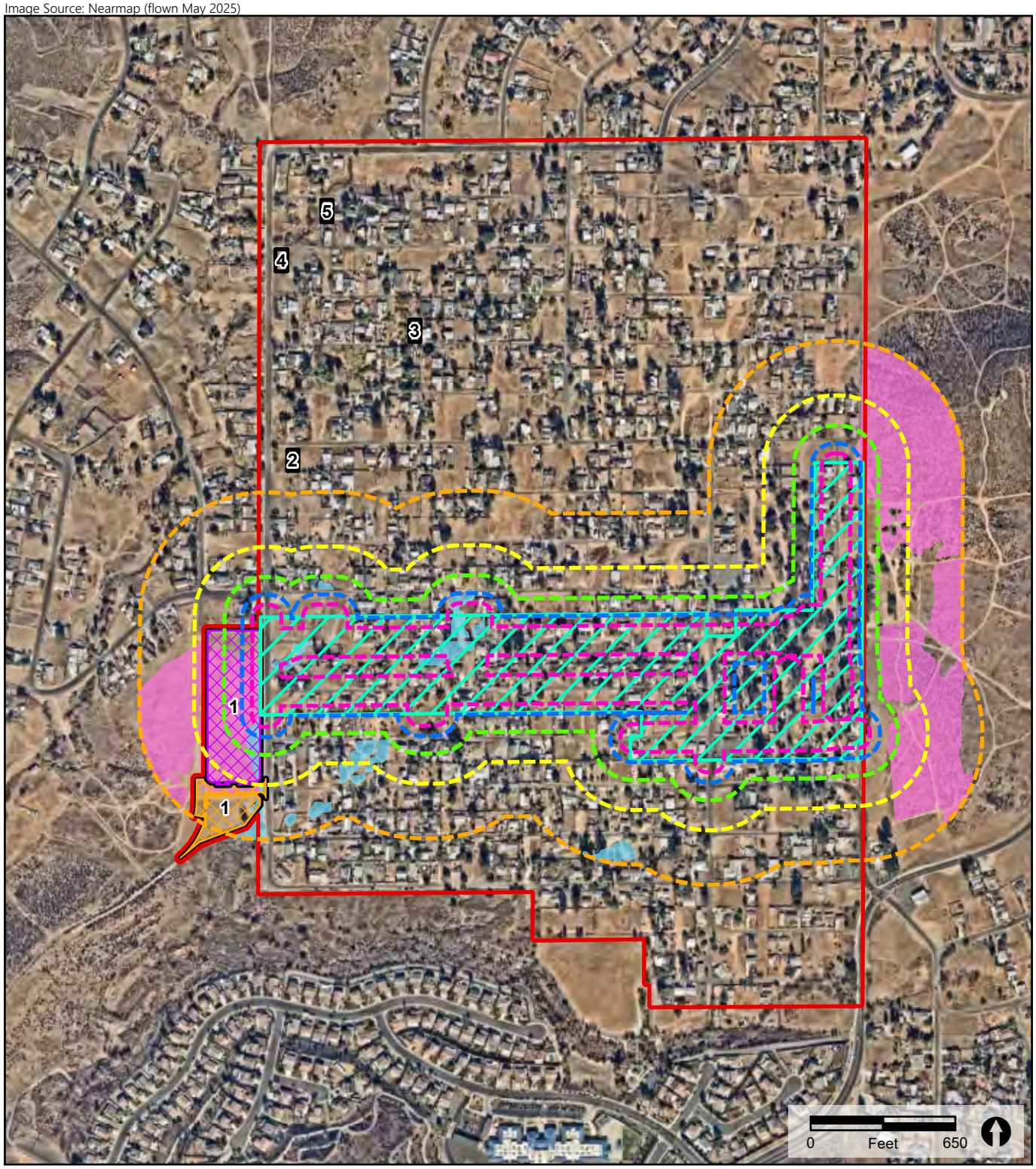
FIGURE 4.11-3c
Construction Noise Contours – Phase 2

Image Source: Nearmap (flown May 2025)



Project Boundary
Phase 3
Lift Station (LS)
LS-1 Option 1
LS-1 Option 2

Sensitive Habitat Noise Impacts
Coastal California Gnatcatcher Habitat
Least Bell's Vireo Habitat

Construction Noise Contours
60 dB(A) L_{eq}
65 dB(A) L_{eq}
70 dB(A) L_{eq}
75 dB(A) L_{eq}
80 dB(A) L_{eq}

FIGURE 4.11-3d
Construction Noise Contours – Phase 3

RECON

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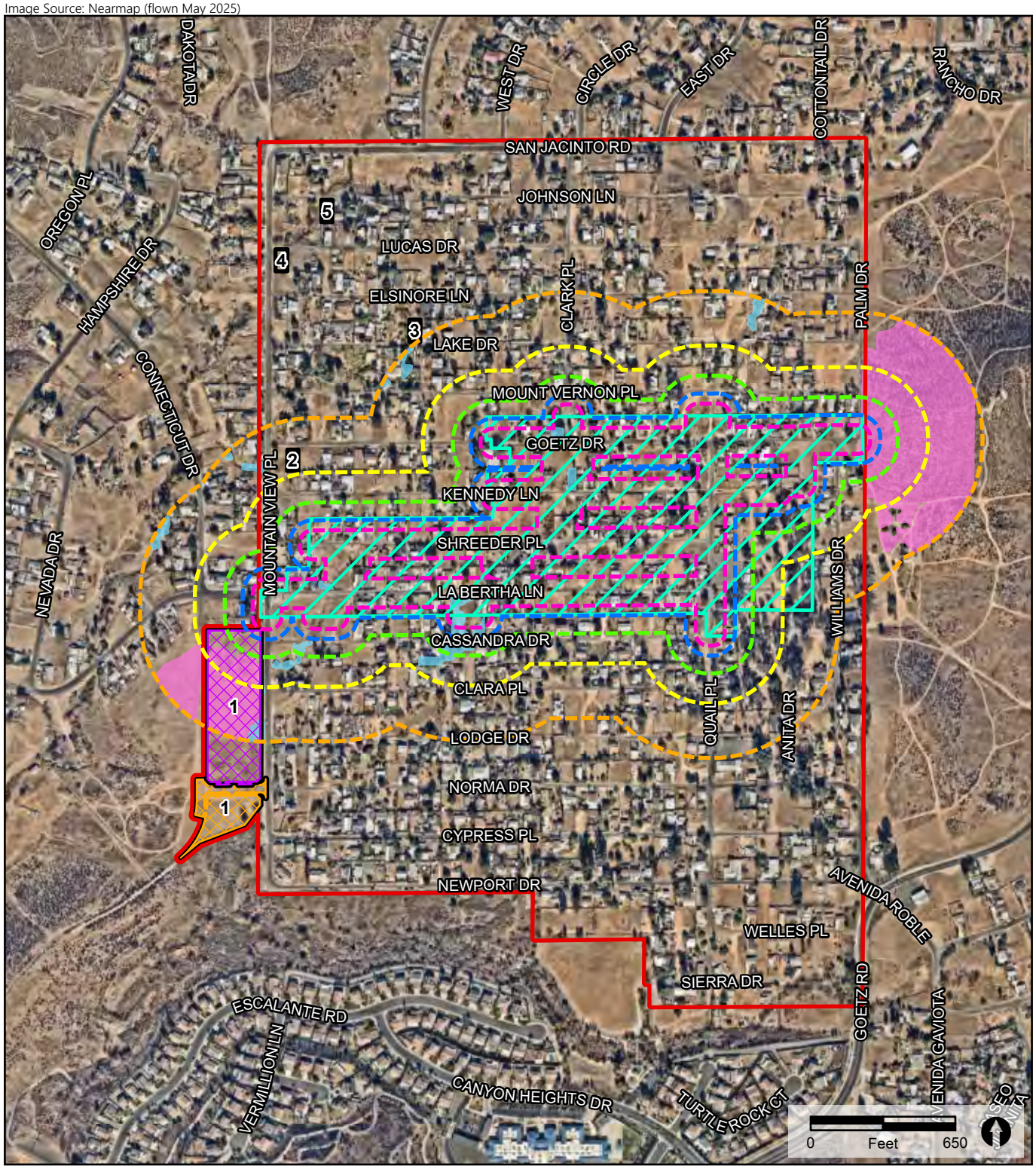
Image Source: Nearmap (flown May 2025)



- Project Boundary
- Phase 4
- Lift Station (LS)
- LS-1 Option 1
- LS-1 Option 2

Sensitive Habitat Noise Impacts

- Coastal California Gnatcatcher Habitat
- Least Bell's Vireo Habitat

Construction Noise Contours

- 60 dB(A) L_{eq}
- 65 dB(A) L_{eq}
- 70 dB(A) L_{eq}
- 75 dB(A) L_{eq}
- 80 dB(A) L_{eq}

RECON

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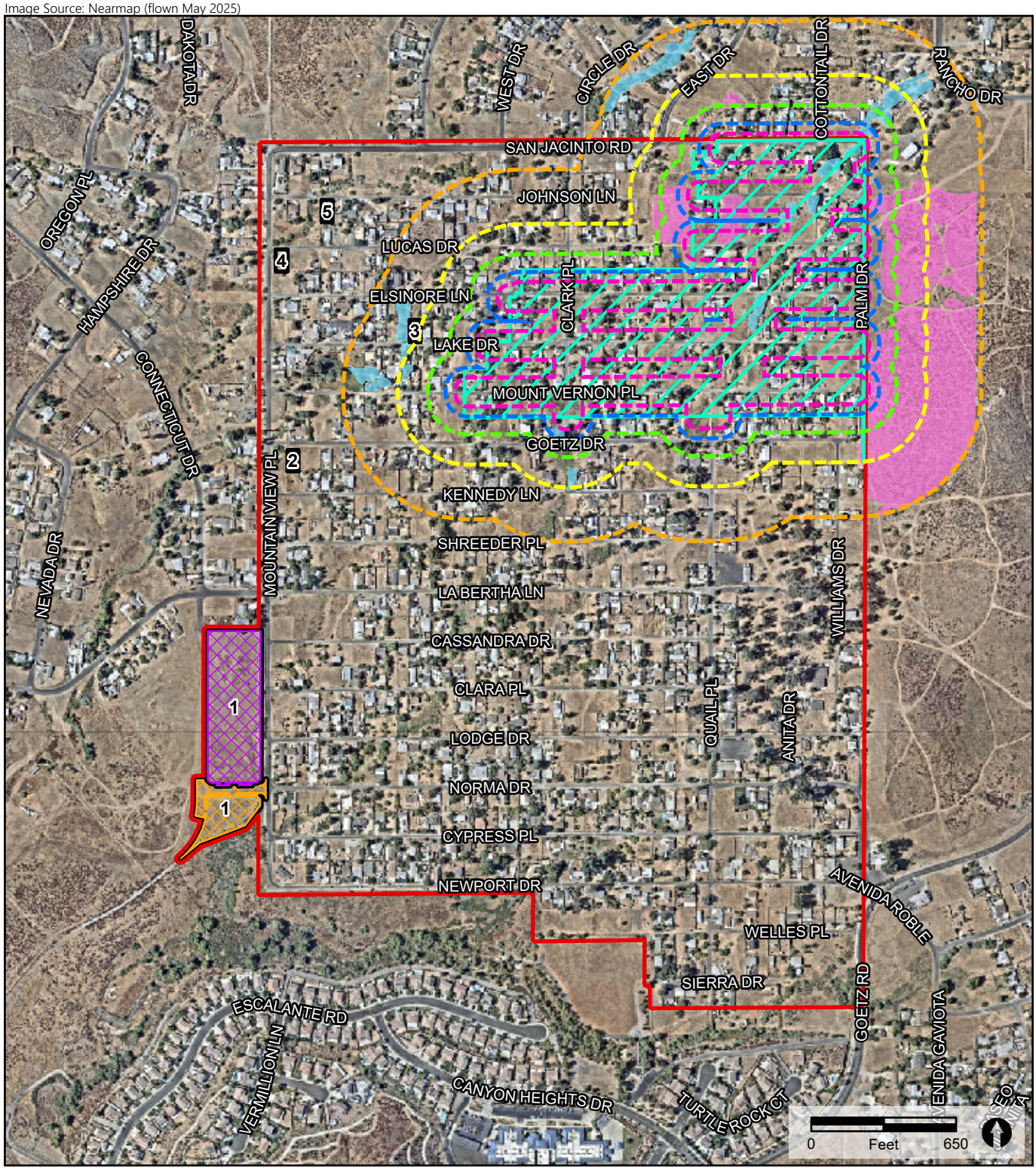
FIGURE 4.11-3e
Construction Noise Contours – Phase 4

Image Source: Nearmap (flown May 2025)



- Project Boundary
- Phase 5
- Lift Station (LS)
- LS-1 Option 1
- LS-1 Option 2

Sensitive Habitat Noise Impacts

- Coastal California Gnatcatcher Habitat
- Least Bell's Vireo Habitat

Construction Noise Contours

- 60 dB(A) L_{eq}
- 65 dB(A) L_{eq}
- 70 dB(A) L_{eq}
- 75 dB(A) L_{eq}
- 80 dB(A) L_{eq}

FIGURE 4.11-3f
Construction Noise Contours – Phase 5

RECON

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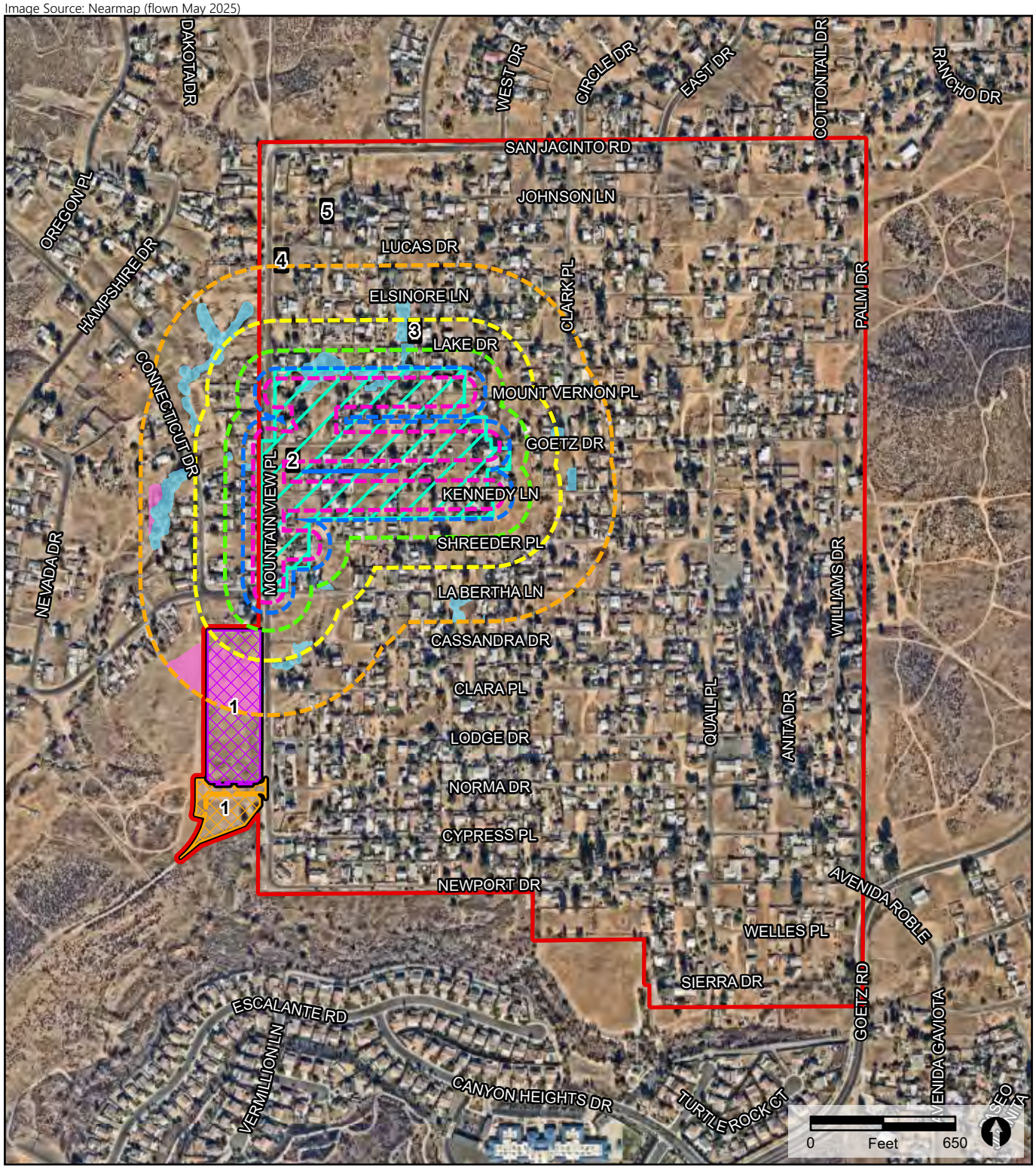
Image Source: Nearmap (flown May 2025)



Project Boundary
Phase 6
Lift Station (LS)
LS-1 Option 1
LS-1 Option 2

Sensitive Habitat Noise Impacts

Coastal California Gnatcatcher Habitat
Least Bell's Vireo Habitat

Construction Noise Contours

60 dB(A) L_{eq}
65 dB(A) L_{eq}
70 dB(A) L_{eq}
75 dB(A) L_{eq}
80 dB(A) L_{eq}

FIGURE 4.11-3g
Construction Noise Contours – Phase 6

RECON

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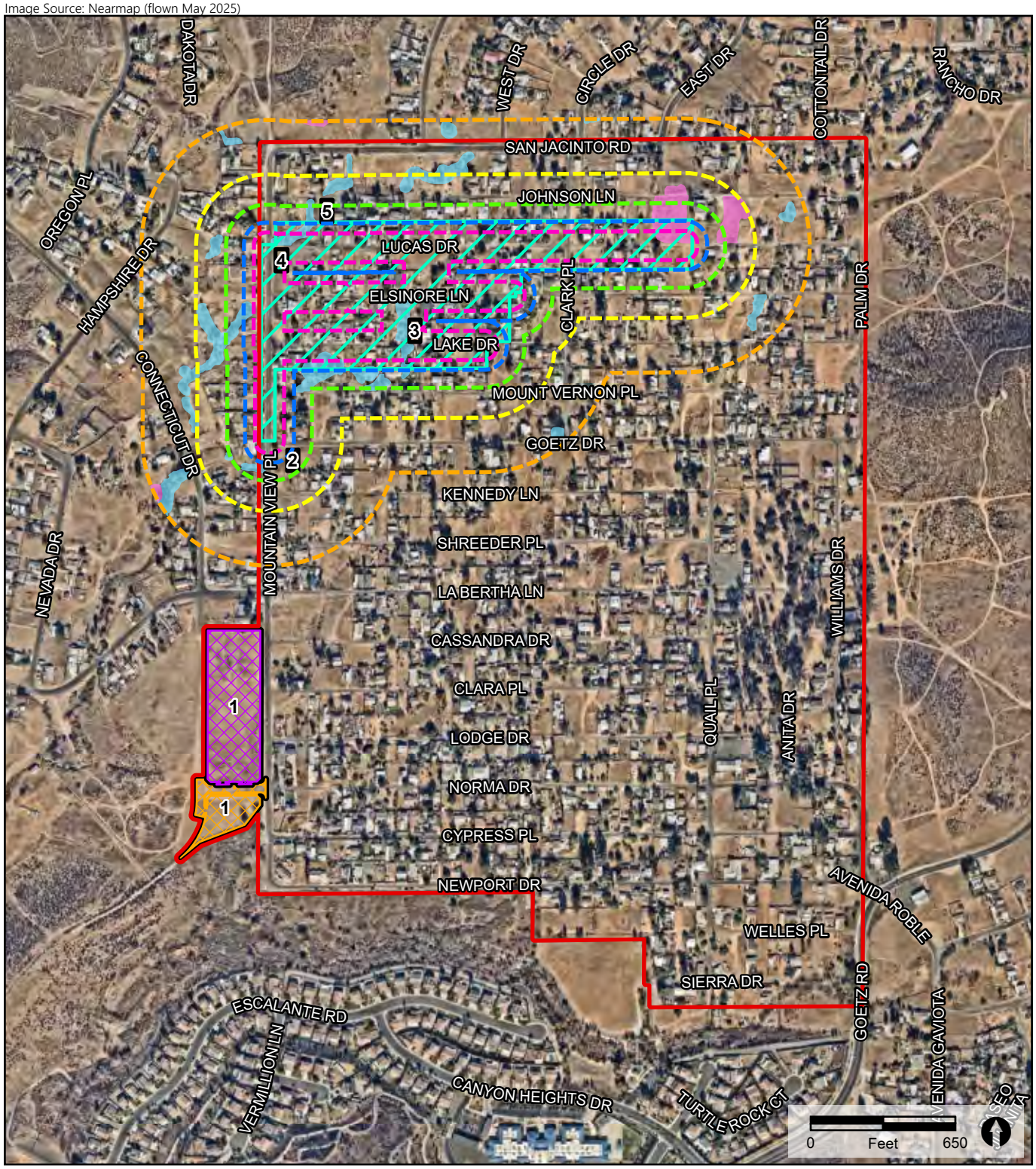
Image Source: Nearmap (flown May 2025)



Project Boundary
Phase 7
Lift Station (LS)
LS-1 Option 1
LS-1 Option 2

Sensitive Habitat Noise Impacts

Coastal California Gnatcatcher Habitat
Least Bell's Vireo Habitat

Construction Noise Contours

60 dB(A) L_{eq}
65 dB(A) L_{eq}
70 dB(A) L_{eq}
75 dB(A) L_{eq}
80 dB(A) L_{eq}

FIGURE 4.11-3h
Construction Noise Contours – Phase 7

RECON

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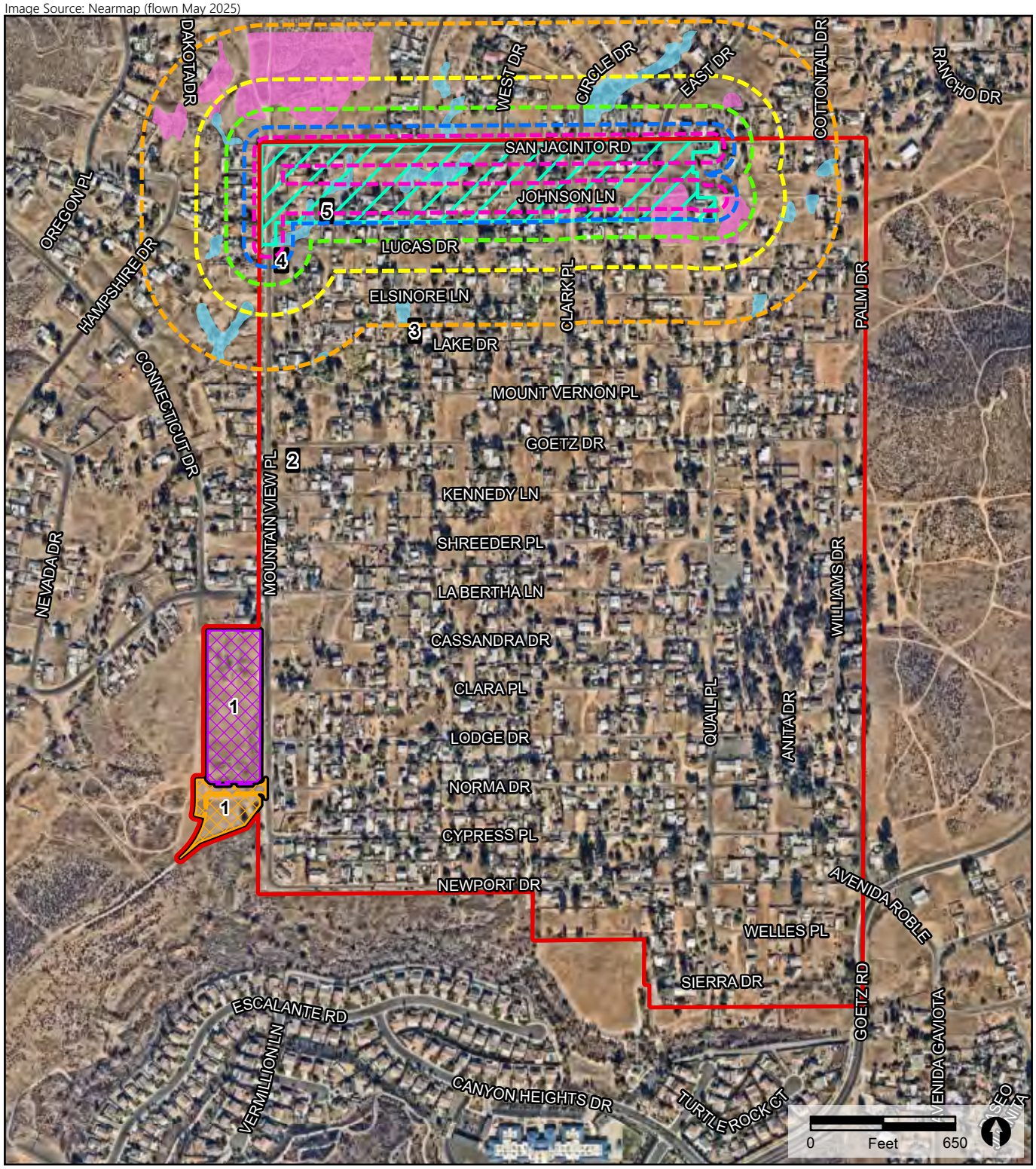
Image Source: Nearmap (flown May 2025)



Project Boundary
Phase 8
Lift Station (LS)
LS-1 Option 1
LS-1 Option 2

Sensitive Habitat Noise Impacts

Coastal California Gnatcatcher Habitat
Least Bell's Vireo Habitat

Construction Noise Contours

60 dB(A) L_{eq}
65 dB(A) L_{eq}
70 dB(A) L_{eq}
75 dB(A) L_{eq}
80 dB(A) L_{eq}

FIGURE 4.11-3i
Construction Noise Contours – Phase 8

RECON

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b. Construction-Related Traffic Noise

The proposed Project would generate up to 30 daily worker trips and 21 daily hauling trips during any given phase of construction. These trips would be added to the roadway network during the duration of the construction activities. Noise levels associated with these trips were calculated using the parameters discussed in Section 4.11.4.2. It was calculated that construction-related vehicle trips would generate a noise level of approximately 53 CNEL at 20 feet from a roadway centerline. The City General Plan Noise Element establishes land use compatibility levels for community noise environments. For single family residential land uses, the normally acceptable and conditionally acceptable noise levels are 60 CNEL and 70 CNEL, respectively. Noise levels would be less than the compatibility standards, and impacts would be less than significant.

c. Operational Noise

The primary operational noise source would be the periodic testing of the emergency generators located at each lift station site. Modeled receiver locations and lift station operational noise contours are shown in **Figures 4.11-4a through 4.11-4f**. As shown in **Table 4.11-5**, noise levels due to the periodic testing of the emergency generators are not anticipated to exceed the City's stationary noise standard of 65 dB(A) L_{eq} at the adjacent residential receivers. Testing would only occur during the daytime hours. Without emergency generator sound enclosures, noise levels would exceed those shown in **Table 4.11-5** and impacts would be significant (**Impact NOI-3**).

Image Source: Nearmap (flown May 2025)

Project Boundary
LS-1 Option 1
Receivers
6-foot Barrier
Site Plan

Generator Noise Contours

- 40 dB(A) L_{eq}
- 45 dB(A) L_{eq}
- 50 dB(A) L_{eq}
- 55 dB(A) L_{eq}
- 60 dB(A) L_{eq}
- 65 dB(A) L_{eq}

FIGURE 4.11-4a
Generator Noise Contours – Lift Station 1 Option 1

RECON

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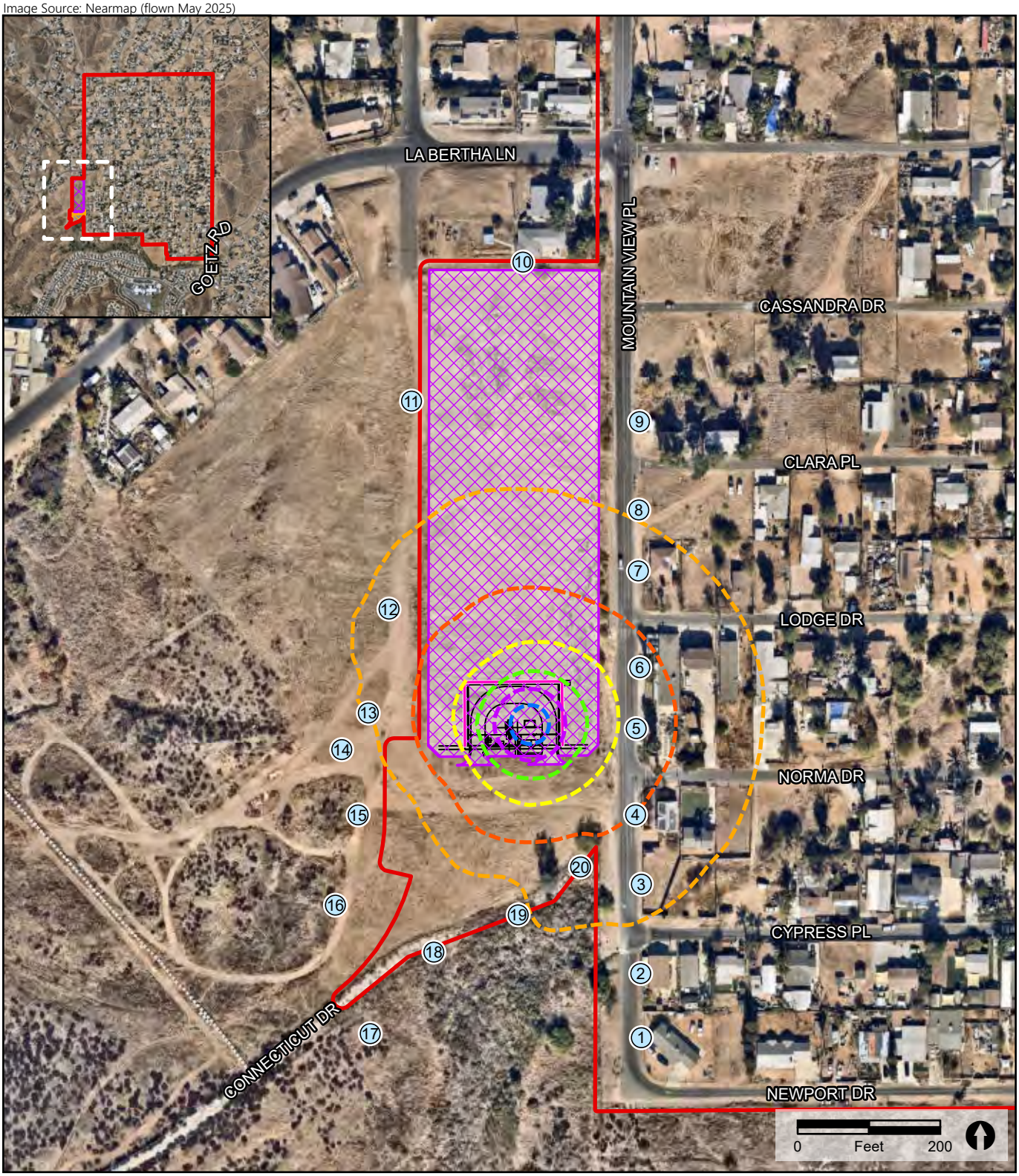
Image Source: Nearmap (flown May 2025)



Project Boundary
LS-1 Option 2
Receivers
6-foot Barrier
Site Plan

Generator Noise Contours

40 dB(A) L_{eq}
45 dB(A) L_{eq}
50 dB(A) L_{eq}
55 dB(A) L_{eq}
60 dB(A) L_{eq}
65 dB(A) L_{eq}

FIGURE 4.11-4b
Generator Noise Contours – Lift Station 1 Option 2

RECON

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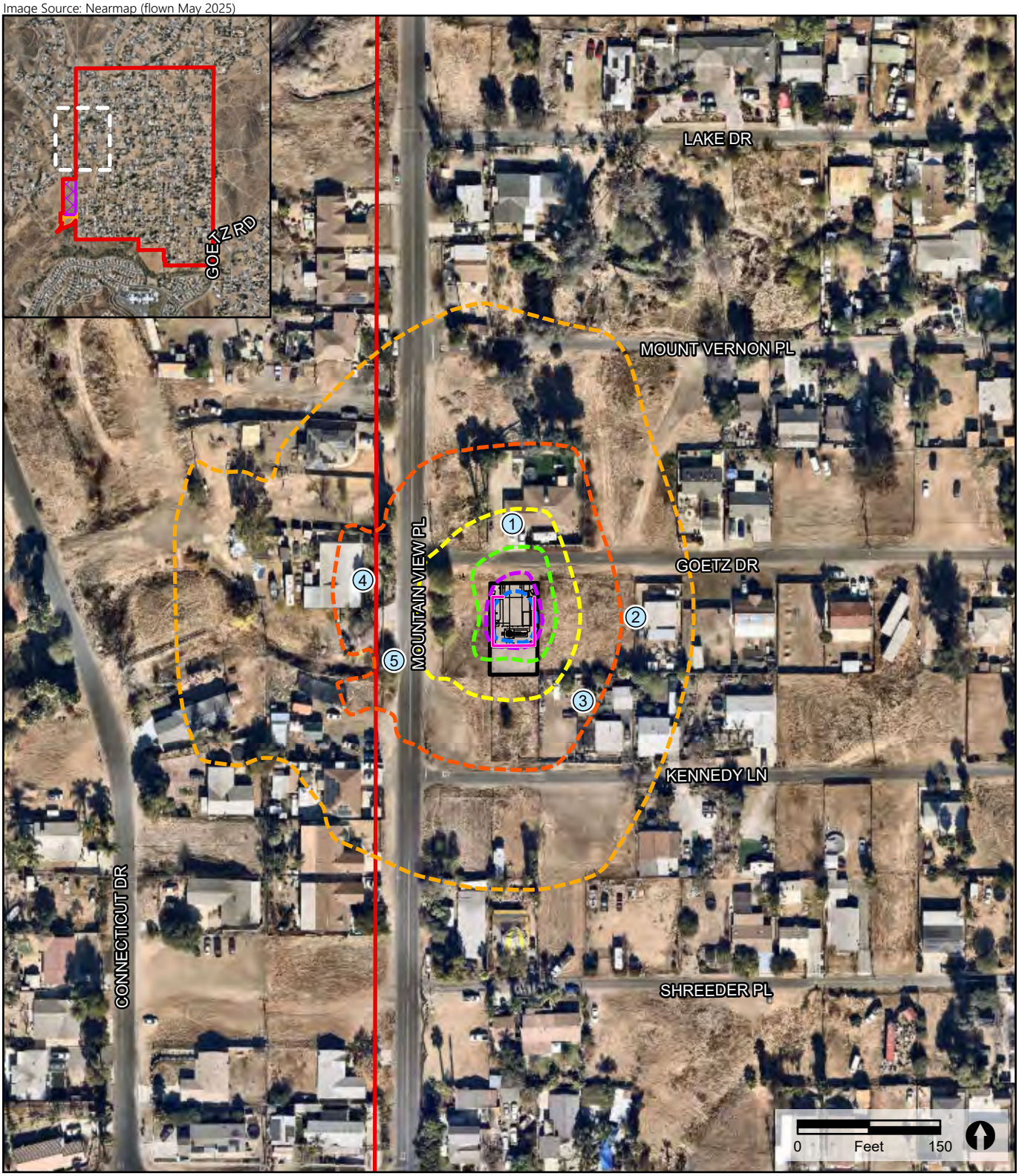
Image Source: Nearmap (flown May 2025)



Project Boundary
Lift Station
Receivers
6-foot Barrier
Site Plan

Generator Noise Contours

- 40 dB(A) L_{eq}
- 45 dB(A) L_{eq}
- 50 dB(A) L_{eq}
- 55 dB(A) L_{eq}
- 60 dB(A) L_{eq}
- 65 dB(A) L_{eq}

FIGURE 4.11-4c
Generator Noise Contours – Lift Station 2

RECON

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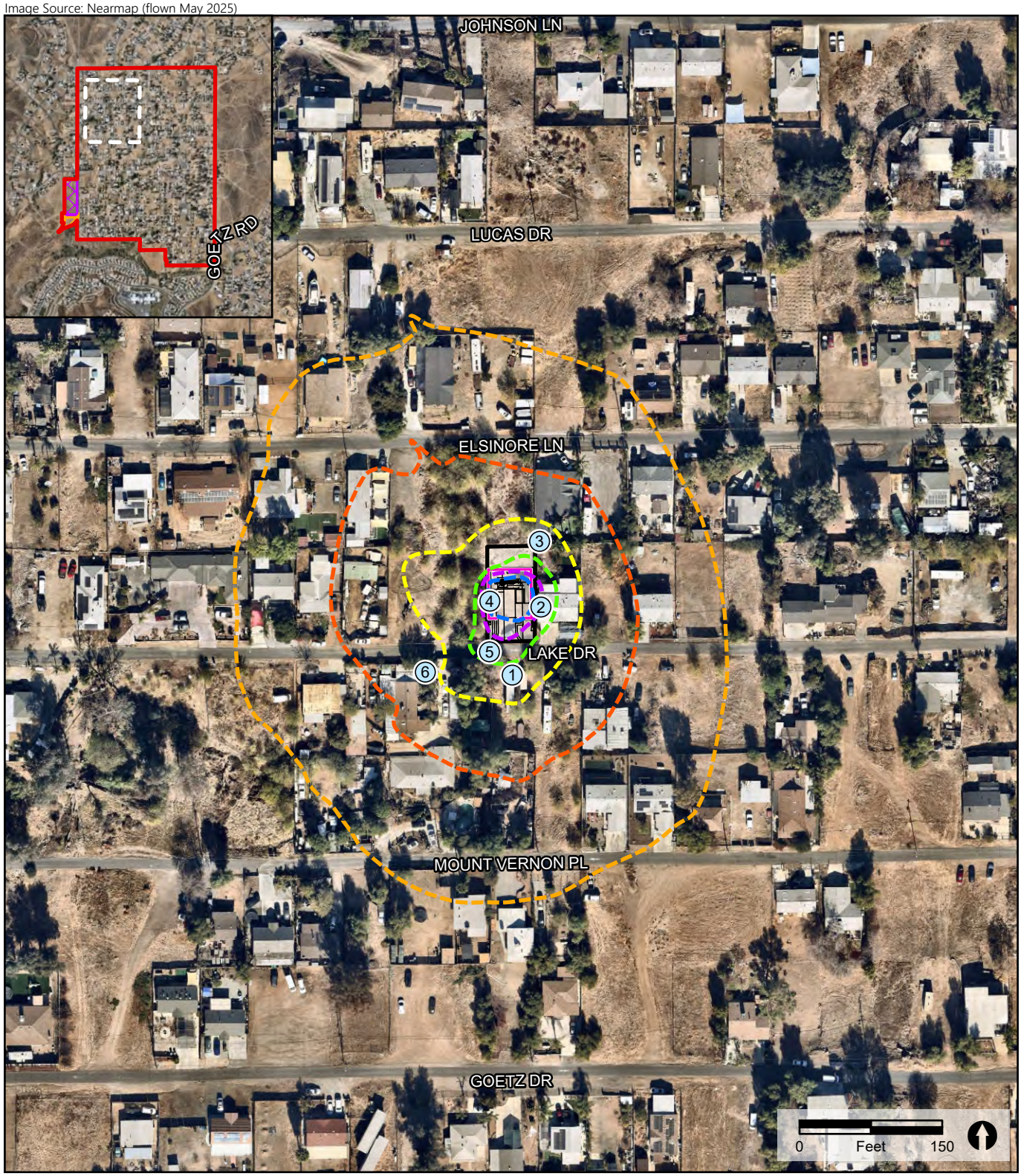
Image Source: Nearmap (flown May 2025)



Project Boundary
Lift Station
Receivers
6-foot Barrier
Site Plan

Generator Noise Contours

- 40 dB(A) L_{eq}
- 45 dB(A) L_{eq}
- 50 dB(A) L_{eq}
- 55 dB(A) L_{eq}
- 60 dB(A) L_{eq}
- 65 dB(A) L_{eq}

FIGURE 4.11-4d
Generator Noise Contours – Lift Station 3

RECON

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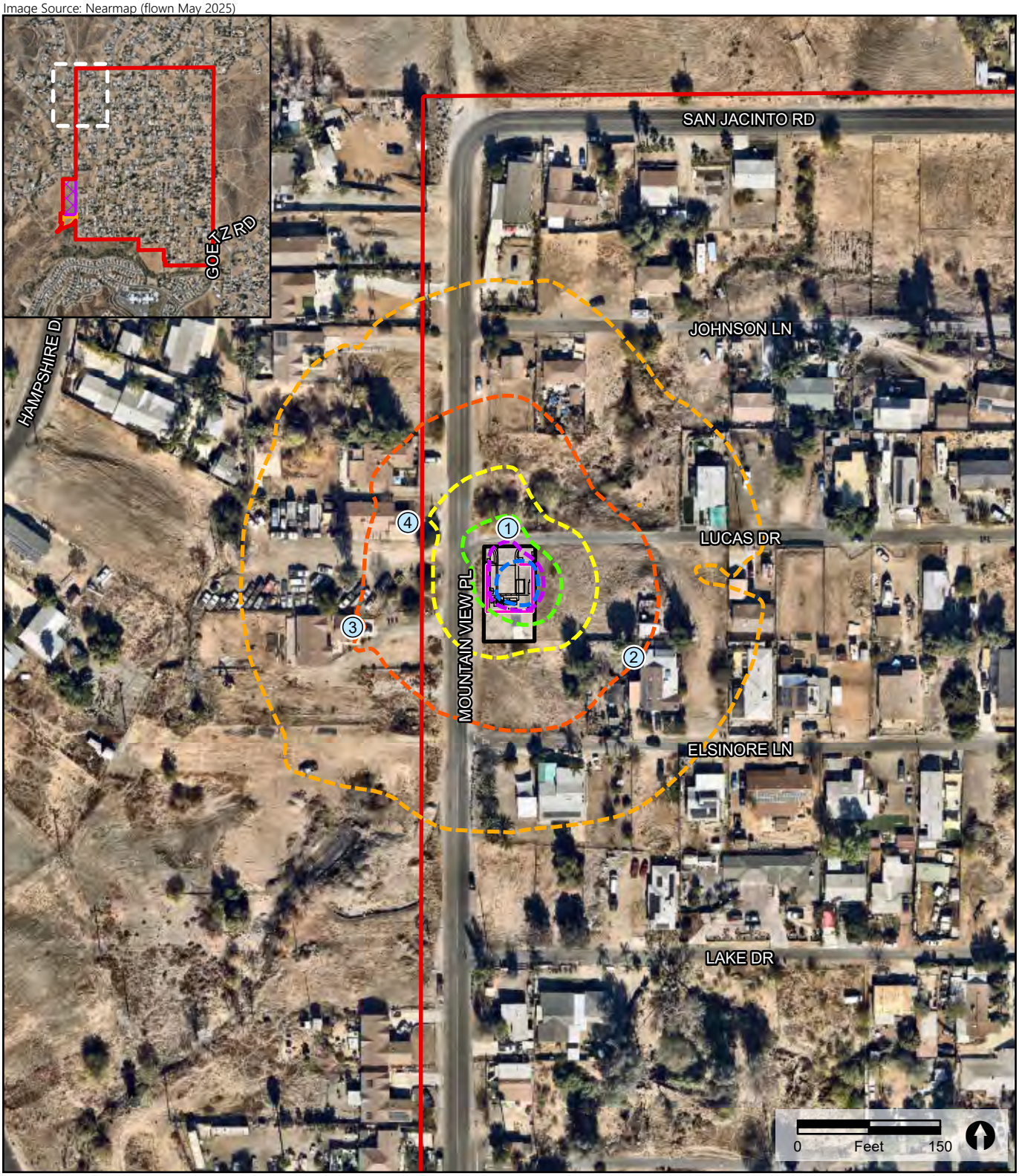
Image Source: Nearmap (flown May 2025)



Project Boundary
Lift Station
Receivers
6-foot Barrier
Site Plan

Generator Noise Contours

- 40 dB(A) L_{eq}
- 45 dB(A) L_{eq}
- 50 dB(A) L_{eq}
- 55 dB(A) L_{eq}
- 60 dB(A) L_{eq}
- 65 dB(A) L_{eq}

FIGURE 4.11-4e
Generator Noise Contours – Lift Station 4

RECON

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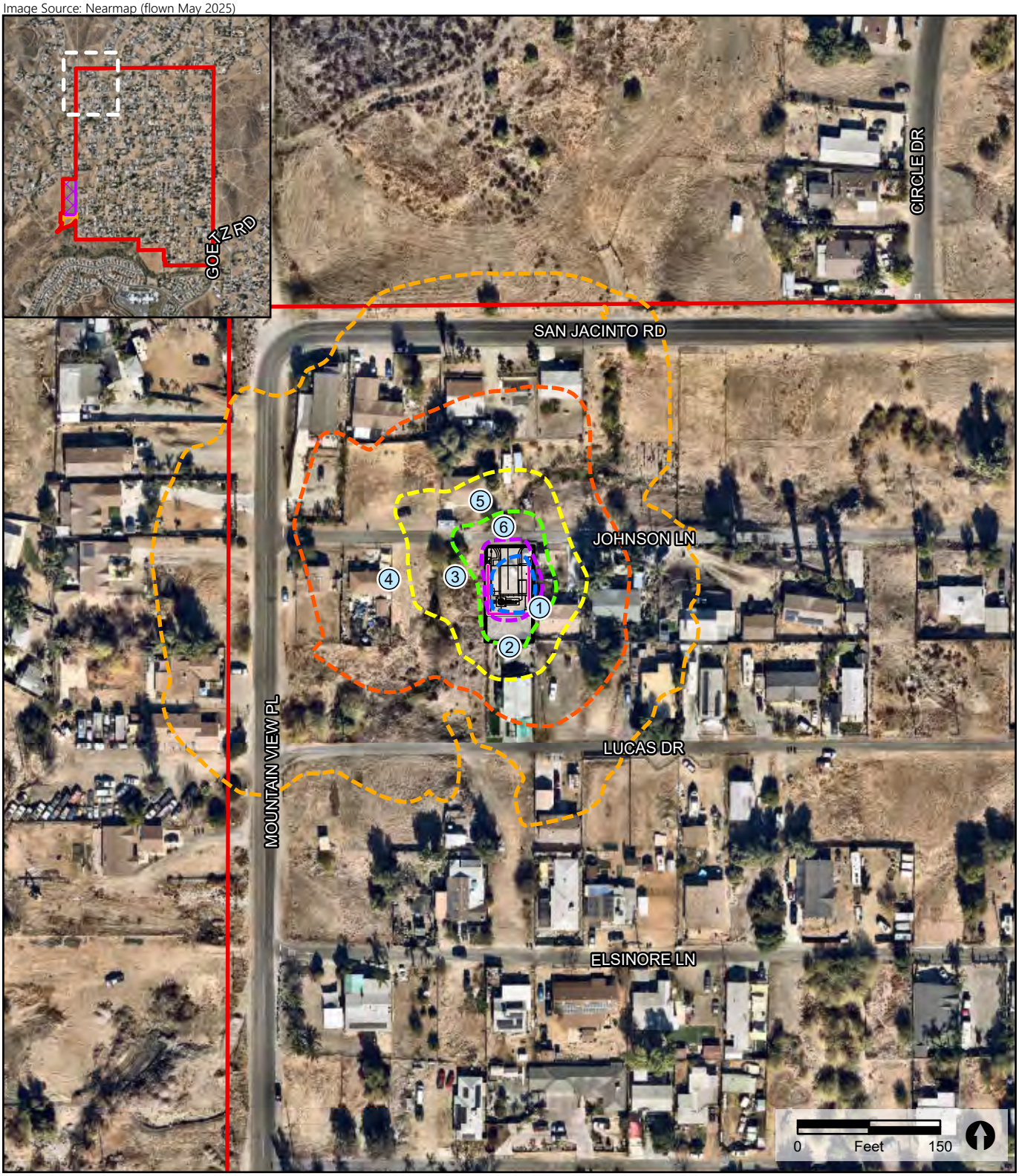
Image Source: Nearmap (flown May 2025)



Project Boundary
Lift Station
6-foot Barrier
Site Plan

Generator Noise Contours

- 40 dB(A) L_{eq}
- 45 dB(A) L_{eq}
- 50 dB(A) L_{eq}
- 55 dB(A) L_{eq}
- 60 dB(A) L_{eq}
- 65 dB(A) L_{eq}

FIGURE 4.11-4f
Generator Noise Contours – Lift Station 5

RECON

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Table 4.11-5 Operational Noise Levels			
Receiver	Land Use	Noise Level Limit [dB(A) L_{eq}]	Emergency Generator Testing Noise Level [dB(A) L_{eq}]
Lift Station 1 (Option 1)			
1	Residential	65	38
2	Residential	65	39
3	Residential	65	40
4	Residential	65	43
5	Residential	65	38
6	Residential	65	36
7	Residential	65	33
8	Residential	65	31
9	Residential	65	29
10	Residential	65	27
11	Habitat	60	26
12	Habitat	60	35
13	Habitat	60	40
14	Habitat	60	40
15	Habitat	60	44
16	Habitat	60	41
17	Habitat	60	40
18	Habitat	60	44
19	Habitat	60	47
20	Habitat	60	40
Lift Station 1 (Option 2)			
1	Residential	65	37
2	Residential	65	38
3	Residential	65	42
4	Residential	65	45
5	Residential	65	47
6	Residential	65	47
7	Residential	65	42
8	Residential	65	40
9	Residential	65	37
10	Residential	65	33
11	Habitat	60	35
12	Habitat	60	41
13	Habitat	60	38
14	Habitat	60	36
15	Habitat	60	36
16	Habitat	60	34
17	Habitat	60	34
18	Habitat	60	35
19	Habitat	60	39
20	Habitat	60	43

Table 4.11-5 (cont.) Operational Noise Levels			
Receiver	Land Use	Noise Level Limit [dB(A) L_{eq}]	Emergency Generator Testing Noise Level [dB(A) L_{eq}]
Lift Station 2			
1	Residential	65	52
2	Residential	65	44
3	Residential	65	46
4	Residential	65	46
5	Habitat	60	48
Lift Station 3			
1	Residential	65	54
2	Residential	65	62
3	Residential	65	53
4	Habitat	60	55
5	Habitat	60	57
6	Residential	65	48
Lift Station 4			
1	Habitat	60	58
2	Residential	65	45
3	Residential	65	44
4	Residential	65	47
Lift Station 5			
1	Residential	65	59
2	Residential	65	53
3	Habitat	60	53
4	Residential	65	49
5	Residential	65	52
6	Habitat	60	58

dB(A) L_{eq} = A-weighted decibels equivalent noise level
NOTE: Operational noise impacts at sensitive habitat areas are discussed in Section 4.3 of this Program Environmental Impact Report.
SOURCE: Appendix H.

4.11.5.2 Significance of Impacts

a. Construction Noise

Noise impacts due to construction activities at LS-1 (Option 1), LS-1 (Option 2), LS-2, and LS-4 would be less than significant. Noise levels would exceed 80 dB(A) L_{eq} at the residence located closest to LS-3 (Receiver 2; **Impact NOI-1**) and at the residence located closest to LS-5 (Receiver 1; **Impact NOI-2**). Noise barriers would be required as mitigation (**mitigation measures NOI-1 and NOI-2**) in order to reduce potential construction noise impacts to residential receivers. Additionally, although noise levels are not anticipated at other lift station locations, due to the close proximity of residential uses to active construction throughout the Project site, best management practices presented in Section 3.5.1 would be implemented to reduce noise at all lift station sites would be required.

Residential uses are located closer than 55 feet from the pipeline construction areas, and noise levels would have the potential to exceed 80 dB(A) L_{eq} at the residential uses located throughout the Project site if no noise reduction techniques are implemented. Construction noise BMPs presented in Section 3.5.1 would be required to reduce noise from all construction activities; however, the degree to which construction noise levels would be reduced cannot be known at a program level of analysis. Due to the close proximity of residential uses throughout the project areas, noise impacts associated with construction activities would remain a temporary significant impact (**Impact NOI-3**).

b. Construction-Related Traffic Noise

Noise levels would be less than the land use compatibility levels for community noise environments as outlined in the City General Plan Noise Element. Therefore, impacts would be less than significant.

c. Operational Noise

Without emergency generator sound enclosures, noise levels would exceed those shown in **Table 4.11-5** and impacts would be significant (**Impact NOI-4**). In order to ensure that noise levels do not exceed those modeled in this Program Environmental Impact Report, the emergency generator must meet the performance requirements specified in **mitigation measure NOI-3**.

4.11.5.3 Mitigation

a. Construction Noise

NOI-1: Lift Station 3 (LS-3) Temporary Construction Barrier. Prior to the commencement of construction activities at Lift Station 3 (LS-3), a temporary 8-foot barrier along the eastern residential property line shall be constructed as identified in **Figure 4.11-2d**. The barrier must be solid and free of cracks or holes and may be constructed of materials such as plywood. The temporary barrier shall be identified on the construction plans for Lift Station 3 (LS-3).

NOI-2: Lift Station 5 (LS-5) Temporary Construction Barrier. Prior to the commencement of construction activities at Lift Station 5 (LS-5), a temporary 6-foot barrier along the eastern residential property line shall be constructed as identified in **Figure 4.11-2f**. The barrier must be solid and free of cracks or holes and may be constructed of materials such as plywood. The temporary barrier shall be identified on the construction plans for Lift Station 5 (LS-5).

b. Construction-Related Traffic Noise

No mitigation is required.

c. Operational Noise

NOI-3: Emergency Generator Sound Enclosure. The emergency backup generators located at each lift station site shall be equipped with a Level 3 sound enclosure that results in noise levels not exceeding 73 A-weighted decibels at 23 feet (7 meters).

4.11.5.4 Significance of Impacts After Mitigation

a. Construction Noise

Implementation of **mitigation measures NOI-1 and NOI-2**, along with construction noise BMPs presented in Section 3.5.1, would reduce lift station construction noise impacts (**Impact NOI-1 and NOI-2**) to a less than significant level.

Implementation of construction noise BMPs presented in Section 3.5.1 would reduce pipeline construction noise impacts (**Impact NOI-3**); however, the degree to which construction noise levels would be reduced cannot be known at a program level of analysis. Due to the close proximity of residential uses throughout the project areas, noise impacts associated with construction activities would remain a temporary significant unavoidable impact.

b. Construction-Related Traffic Noise

No mitigation is required.

c. Operational Noise

Implementation of **mitigation measure NOI-3** would reduce noise impacts due to emergency generator testing (**Impact NOI-4**) to a less than significant level.

4.11.6 Threshold 2: Vibration

Would the project generate excessive groundborne vibration or groundborne noise levels?

4.11.6.1 Impact Analysis

a. Construction

Construction would have the potential to result in varying degrees of temporary ground vibration, depending on the specific construction equipment used and operations involved. Ground vibration generated by construction equipment spreads through the ground and diminishes in magnitude with increases in distance. The effects of ground vibration may be imperceptible at the lowest levels, low rumbling sounds and detectable vibrations at moderate levels, and damage to nearby structures at the highest levels. Vibration perception would occur at structures, as people do not perceive vibrations without vibrating structures.

Human reaction to vibration is dependent on the environment the receiver is in as well as individual sensitivity. For example, vibration outdoors is rarely noticeable and generally not considered annoying. Typically, humans must be inside a structure for vibrations to become noticeable and/or annoying. Based on several federal studies, the threshold of perception is 0.035 in/sec PPV, with 0.24 in/sec PPV being a distinctly perceptible (Caltrans 2020). Vibration standards have been developed by the FTA and are used in this analysis to assess potential building damage caused by vibration associated with construction activities. FTA guidelines show that a vibration level of up to

0.5 in/sec PPV is considered safe for buildings consisting of reinforced concrete, steel, or timber (no plaster), and would not result in any construction vibration damage. For non-engineered timber and masonry buildings, the criterion for building damage caused by construction vibration is 0.2 in/sec in PPV.

Construction equipment could include equipment such as loaded trucks, excavators, small dozers, and loaders. Vibration levels from these pieces of equipment would generate vibration levels with a PPV ranging from 0.035 to 0.076 in/sec PPV at 25 feet. A vibration level of 0.076 in/sec PPV at 25 feet would be 0.2 in/sec at 10 feet. Equipment would operate within the ROW and at the lift station sites. The ROW in the Project site is 20 feet; therefore, equipment would not operate as close as 10 feet from a structure. Therefore, vibration levels are not anticipated to exceed 0.2 in/sec PPV.

b. Operation

Once operational, the proposed Project would not include the use of any stationary equipment that would generate substantial vibration levels. Therefore, the proposed Project would not expose persons to or generate excessive groundborne vibration or groundborne noise.

4.11.6.2 Significance of Impacts

During construction, vibration levels are not anticipated to exceed 0.2 in/sec PPV and construction vibration impacts would be less than significant. Once operational, the proposed Project would not expose persons to or generate excessive groundborne vibration or groundborne noise, and impacts would be less than significant.

4.11.6.3 Mitigation

No mitigation is required.

4.11.6.4 Significance of Impacts After Mitigation

No mitigation is required.

4.11.7 Threshold 3: Airports

Would the project expose people residing or working in the project area to excessive aircraft noise levels?

4.11.7.1 Impact Analysis

The nearest airport is the Perris Valley Airport, located approximately 3.88 miles northeast of the Project site. The noise contours for the Perris Valley Airport do not extend into the City, and airport noise levels at the Project site are well less than 60 CNEL (Riverside County Airport Land Use Commission 2004). The proposed Project is limited to construction of a gravity sewer system and would not introduce any noise sensitive receivers. Human presence would be limited to temporary

construction and periodic maintenance. Therefore, implementation of the proposed Project would not expose people to excessive airport noise levels, and impacts would be less than significant.

4.11.7.2 Significance of Impacts

The proposed Project would not expose people to excessive noise levels, and impacts would be less than significant.

4.11.7.3 Mitigation

No mitigation is required.

4.11.7.4 Significance of Impacts After Mitigation

No mitigation is required.

4.12 Transportation

This section evaluates impacts related to transportation that could result from implementation of the proposed Project. Construction of the proposed Project is planned to be carried out in eight phases implemented over a 20-year period. This evaluation is programmatic, focusing on the environmental impacts that could occur from implementation of all phases of construction (see Chapter 3). As each phase is constructed, project-level analyses may be required to further quantify any identified significant impacts.

This section includes a setting discussion that describes existing transportation conditions in and around the Project site and summarizes applicable regulations related to transportation. This section also includes an evaluation of potential impacts of the proposed Project related to transportation.

4.12.1 Existing Conditions

4.12.1.1 Regional Traffic Circulation System

Vehicles accessing the Project site use the following regional freeways within the regional circulation system:

- I-215 is a north–south freeway that runs through the County and bisects the City. The segment of I-215 that crosses Newport Road is located approximately 5.5 miles (driving) southeast of the Project site and has an average daily traffic load range of 100,000 to 115,000 vehicles (Caltrans 2024). It is expected that most traffic generation by the proposed Project would use I-215 to reach Quail Valley Subarea 4. I-215 is designated as a truck route for the City and would be used during construction for the transport of materials to and from the proposed Project site.

- I-15 is a north-south freeway that runs through the County, west and southwest of the proposed Project site. I-15 merges with I-215 in the City, approximately 11 miles south of the proposed Project site. I-15 intersects SR-74, approximately 5.07 miles southwest of the proposed Project site near Lake Elsinore.

- SR-74 is an east–west freeway that connects Orange County and the County. SR-74 connects with I-215 in the City of Perris. The segment of SR-74 that crosses I-215 is located approximately 6.9 miles (driving) northeast of the proposed Project site and has an average daily traffic load range of 96,000 to 104,000 vehicles in the area of the proposed Project (Caltrans 2024).

4.12.1.2 Local Traffic Circulation System

Local access to the Project site is provided via Newport Road and Goetz Road. Newport Road is an urban, arterial six-lane roadway, and Goetz Road is a major four-lane roadway (City of Menifee 2013).

As described above, I-215 is designated as a truck route within the City and connects to Newport Road, which in turn connects to Goetz Road.

4.12.1.3 Transit Services

Transit services are provided by the Riverside Transit Agency (RTA). The RTA provides fixed-route and Dial-a-Ride bus service within the City and neighboring jurisdictions. No RTA bus routes run through, or immediately adjacent to the Project site. The closest RTA bus routes to the Project site include Route 61, located approximately 2.5 miles southeast of Project site along Newport Road and Route 74, located approximately 4 miles northeast of the Project site along Mccall Boulevard. The proposed Project would not affect either of these RTA bus routes due to their distance from the Project site.

4.12.1.4 Bicycle and Pedestrian Facilities

The Project site does not contain sidewalks. A short segment of sidewalk is provided along Goetz Road adjacent to the Project site to the east, extending south from Avenida Roble to Rock Canyon Drive. No bicycle facilities are located within or adjacent to the Project site.

4.12.2 Applicable Regulatory Requirements

4.12.2.1 State Regulations

a. California Department of Transportation

Caltrans is responsible for planning, designing, building, operating, and maintaining California's transportation system, including I-15, I-215, and SR-74. Caltrans sets standards, policies, and strategic plans that aim to do the following: (1) provide the safest transportation system for users and workers; (2) maximize transportation system performance and accessibility; (3) efficiently deliver quality transportation projects and services; (4) preserve and enhance California's resources and assets; and (5) promote quality service. Caltrans has the discretionary authority to issue special permits for the use of state highways for other than normal transportation purposes. Caltrans also reviews all requests from utility companies, developers, volunteers, nonprofit organizations, and others desiring to conduct various activities within the state highway ROW. The California Vehicle Code, Division 15, Chapters 1 through 5, establishes requirements pertaining to the licensing, size, weight, and load of vehicles operated on highways.

b. California Fire Code

The CFC establishes requirements pertaining to fire and life safety, including requirements for building materials and methods, fire protection systems in buildings, emergency access to buildings, and handling and storage of hazardous materials (Title 24 CCR Part 9). All structures and facilities associated with the proposed Project would be required to comply with the CFC, ensuring that design, construction, and operation meet applicable fire and life safety standards.

4.12.2.2 Regional Regulations

a. Southern California Association of Governments

The SCAG is the regional transportation planning agency and Metropolitan Planning Organization for the southern California region. As the Metropolitan Planning Organization for the region, SCAG is required to prepare and update the RTP every four years. The RTP must provide for the development, integrated management, and operation of transportation systems and facilities that will function as an intermodal transportation network for the SCAG metropolitan planning area. SCAG also develops the Regional Transportation Improvement Programs and regional growth forecasting.

4.12.2.3 Local Regulations

a. Connect SoCal 2024: The 2024-2050 Regional Transportation Plan/Sustainable Communities Strategy

In November 2024, SCAG adopted its 2024-2050 RTP known as Connect SoCal 2024. Connect SoCal 2024 is a long-range visioning plan that balances future mobility and housing needs with economic and environmental and goals. Connect SoCal 2024 embodies a collective vision for the region's future based on input from local governments, county transportation commissions, tribal governments, non-profit organizations, businesses, and local stakeholders within the Counties of Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura (SCAG 2024).

Connect SoCal 2024 is an important planning document for the region, allowing project sponsors to qualify for federal funding. In addition, Connect SoCal 2024 identifies a combination of transportation and land use strategies that help the region achieve state greenhouse gas emission reduction goals and federal CAA requirements, preserve open space areas, improve public health and roadway safety, and support the vital goods movement industry.

b. City of Menifee General Plan

The City's General Plan includes the following goals and policies related to transportation.

Circulation Element

Goal C-1: A roadway network that meets the circulation needs of all residents, employees, and visitors to the City of Menifee.

- Policy C-1.1: Require roadways to:
    - Comply with federal, state, and local design and safety standards.
    - Meet the needs of multiple transportation modes and users.
    - Be compatible with the streetscape and surrounding land uses.
    - Be maintained in accordance with best practices.

- Policy C-1.5: Minimize idling times and vehicle miles traveled to conserve resources, protect air quality, and limit GHG emissions.

4.12.3 Significance Determination Thresholds

Thresholds used to evaluate impacts to transportation are based on applicable criteria in the CEQA Guidelines (CCR Sections 15000–15387), Appendix G. The proposed Project would have a significant impact on the environment if it would:

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

2) Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b);

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

4) Result in inadequate emergency access.

4.12.4 Methodology

The potential for significant impacts related to transportation has been evaluated based upon review of existing secondary source information and relevant transportation data.

4.12.5 Threshold 1: Circulation System

Would the project conflict with a plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?

4.12.5.1 Impact Analysis

Project construction would result in temporary work within existing roadways, and possibly road closures in some instances that could disrupt vehicle travel. However, each of the proposed Project's eight phases would be required to prepare a TCP for all within public roadways. TCPs would be subject to review and approval by the City to ensure compliance with local requirements. The TCPs would utilize typical traffic control devices (e.g., traffic cones, K-rails, signs, message boards), as well as flaggers to guide vehicles. When construction activities are not occurring, open trenches would be covered with appropriate materials to restore normal traffic flow. Upon completion of construction, all roadways would be restored to preexisting conditions. Traffic generated by operation of the project would be limited to a maximum of one daily maintenance inspections of the pipelines and lift stations. No weekend maintenance trips are anticipated for the proposed Project. The addition of one vehicle trip per weekday would represent a negligible increase in traffic, which would not affect roadway or intersection operations on the surrounding roadway network.

As described in Section 4.12.1.3 above, there are no public transit routes that run through, or are located immediately adjacent to the Project site. Therefore, the project would not impact public

transportation. As described in Section 4.12.1.4 above, there are no bicycle or pedestrian facilities located within the proposed Project site. The short segment of sidewalk along Goetz Road adjacent to the proposed Project site, extending south from Avenida Roble to Rock Canyon Drive would not be affected by construction and operation. Therefore, the proposed Project would not impact any bicycle or pedestrian facilities.

4.12.5.2 Significance of Impacts

The proposed Project would not conflict with a program, plan, ordinance, or policy addressing the circulation system, and impacts would be less than significant.

4.12.5.3 Mitigation

No mitigation is required.

4.12.5.4 Significance of Impacts After Mitigation

No mitigation is required.

4.12.6 Threshold 2: Vehicle Miles Traveled

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

4.12.6.1 Impact Analysis

Per the City's Traffic Impact Analysis Guidelines for VMT, projects generating less than 110 daily vehicle trips screen out and do not require a VMT assessment (City of Menifee 2022). Traffic generated during operation of the project would be limited to a maximum of one daily maintenance inspection of the pipelines and lift stations. No weekend maintenance trips are anticipated for the proposed Project. Therefore, the project screens out under the City's guidelines, and preparation of a VMT Analysis is not required.

4.12.6.2 Significance of Impacts

Preparation of a VMT Analysis per CEQA Guidelines Section 15064.3, subdivision (b) is not required because the proposed Project meets the City's screening criteria, and impacts would be less than significant.

4.12.6.3 Mitigation

No mitigation is required.

4.12.6.4 Significance of Impacts After Mitigation

No mitigation is required.

4.12.7 Threshold 3: Hazards Due to a Design Feature

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

4.12.7.1 Impact Analysis

The proposed Project is limited to construction of a new gravity sewer system, including wastewater pipelines installed underground and lift stations which would be primarily subterranean, with limited above-ground features. Construction within roadway rights-of-way would be temporary, and each of the proposed Project's eight phases would implement a TCP to maintain safe access, traffic flow, and appropriate separation between construction activities and traveling vehicles. The lift stations are designed to allow emergency vehicle access and routine maintenance without obstructing public roadways. Roadways would be restored to preexisting conditions once construction is completed. Because the wastewater pipelines would be underground and the lift stations would be contained within secured sites, the proposed Project would not introduce new geometric hazards, such as sharp curves or dangerous intersections, nor would it create conflicts with incompatible uses such as farm equipment or pedestrian traffic outside of typical construction activity.

4.12.7.2 Significance of Impacts

The proposed Project would not substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses, and impacts would be less than significant.

4.12.7.3 Mitigation

No mitigation is required.

4.12.7.4 Significance of Impacts After Mitigation

No mitigation is required.

4.12.8 Threshold 4: Emergency Access

Would the project result in inadequate emergency access?

4.12.8.1 Impact Analysis

The proposed Project is limited to construction of sewer infrastructure needed to replace the existing septic systems within Subarea 4. Project construction would result in temporary work within existing roadways, and possibly road closures in some instances that could disrupt vehicle travel. However, each of the proposed Project's eight phases would be required to prepare a TCP for all construction work within public roadways. TCPs would be subject to review and approval by the City to ensure compliance with local requirements. The TCPs would utilize typical traffic control devices (e.g., traffic cones, K-rails, signs, message boards, as needed), as well as flaggers to guide vehicles.

Although traffic may be closed to thru traffic in some instances, ingress and egress would be maintained at all times for residents. In addition, construction activities would be coordinated to maintain access along designated emergency evacuation routes identified in the City's General Plan. As shown in Exhibit S-9, Emergency Evacuation Routes, in the City's General Plan, the nearest designated evacuation route to the Project site is Goetz Road. The proposed Project would connect to the pipeline within Goetz Road but otherwise would not require work within Goetz Road. TCPs would be reviewed to ensure that construction staging, lane closures, and detours do not obstruct emergency evacuation routes or otherwise impair emergency response capabilities. Where work occurs along or adjacent to an emergency evacuation route, temporary traffic control measures would be implemented to maintain adequate capacity and access at all times.

In the event of an emergency, construction work would cease and trenches would be covered with an appropriate cover to restore normal traffic flow. These measures would ensure that emergency vehicles can access construction areas and that roadways remain open, thereby preventing interference with emergency response or evacuation. Roadways would be restored to preexisting conditions once construction is completed.

4.12.8.2 Significance of Impacts

The proposed Project would not result in inadequate emergency access, and impacts would be less than significant.

4.12.8.3 Mitigation

No mitigation is required.

4.12.8.4 Significance of Impacts After Mitigation

No mitigation is required.

4.13 Utilities and Service Systems

This section evaluates potential impacts related to utilities and service systems that could result from implementation of the proposed Project. Construction of the proposed Project is planned to be carried out in eight phases implemented over a 20-year period. This evaluation is programmatic focusing on the environmental impacts that could occur from implementation of all phases of construction. As each phase is constructed, project-level analyses may be required to further quantify any identified significant impacts.

This section includes a setting discussion that describes existing utilities and service systems that serve the Project site and a summary of applicable regulations related to utilities and service systems. This section also includes an evaluation of potential impacts of the proposed Project related to utilities and service systems.

4.13.1 Existing Conditions

4.13.1.1 Water Supply

The proposed Project is located within the District's service area, which includes 555 square miles of western Riverside County. The District is a water retailer that provides potable water, wastewater treatment, and recycled water services for portions of Riverside County, including the Cities of Beaumont, Canyon Lake, Hemet, Menifee, Moreno Valley, Murrieta, Perris, Riverside, San Jacinto, and Temecula. The District is one of 26 member agencies of the Metropolitan Water District of Southern California (MWD). The majority of the District's water supplies consist of imported water purchased through MWD from the State Water Project and the Colorado River Aqueduct. The District depends on MWD for approximately half of its retail water supply (Eastern Municipal Water District 2021).

The remainder of the District's water is supplied through local resources including groundwater, desalinated groundwater, and recycled water. Groundwater is pumped from the Hemet/San Jacinto and West San Jacinto areas of the San Jacinto Groundwater Basin. In addition, the District operates three desalination plants that convert brackish groundwater from the West San Jacinto Basin into potable water. The District also owns, operates, and maintains its own recycled water system that consists of four Regional Water Reclamation Facilities (RWRFs) and multiple storage ponds throughout the District's service area. Recycled water is sold to customers, discharged to Temescal Creek, or percolated in storage ponds throughout the District's service area (Eastern Municipal Water District 2021).

As shown in **Table 4.13-1**, demand for both potable and recycled water is expected to increase through 2045. According to the 2020 Urban Water Management Plan, the District plans to meet projected demand increases through a combination of local supply development projects and ongoing water conservation. Future projects to increase water supply within the District's service area include enhanced recharge and recovery, groundwater contamination prevention and remediation, water replenishment, and construction of a new desalter (Eastern Municipal Water District 2021).

Table 4.13 1 Existing and Projected Water Demand in the District s Service Area (Acre Feet per Year)					
	2025	2030	2035	2040	2045
Retail Water[1]					
Portable and Raw Water Demand	102,600	108,300	114,400	118,900	123,000
Recycled Water Demand	43,330	49,020	54,500	59,800	64,100
Total Retail Water Use	145,930	157,320	168,900	178,700	187,100
Wholesale Water[2]					
Portable and Raw Water Demand	58,200	52,400	54,400	56,700	58,800
Recycled Water Demand	4,770	5,180	5,600	5,600	5,600
Total Wholesale Water Use	62,970	57,580	60,000	62,300	64,400
Total Demand	**208,900**	**214,900**	**228,900**	**241,000**	**251,500**
[1]Retail water is water delivered directly to customers. [2]Wholesale water is sold to other agencies for distribution to their customers. SOURCE: Eastern Municipal Water District 2021.					

4.13.1.2 Wastewater

The District provides wastewater collection and treatment services to approximately 283,000 sewer service accounts within its 682 square miles of service area. Effluent is conveyed via approximately 2,067 miles of sewer pipeline to the following four active RWRFs: the San Jacinto Valley RWRF, Moreno Valley RWRF, Temecula Valley RWRF, and the Perris Valley RWRF. These plants have a collective total treatment capacity of 86,300 acre-feet per year, and produce tertiary suitable for California Department of Health Services permitted uses. As shown in **Figure 4.13-1**, wastewater flows generated by the proposed project would exit the Subarea 4 site via the Goetz Road pipeline and travel south to lift stations at or near Newport Road. From there, flows would be conveyed to the Sun City lift station and ultimately treated at the Perris Valley RWRF.

4.13.1.3 Stormwater Drainage

The City is in the San Jacinto Subbasin of the larger Santa Ana River Watershed. The Santa Ana River watershed includes much of Orange County, the northwestern corner of Riverside County, part of southwestern San Bernardino County, and a small portion of Los Angeles County. The Santa Ana River watershed is bounded by the Santa Margarita watershed to the south, on the east by the Salton Sea and Southern Mojave watersheds, and on the north and west by the Mojave and San Gabriel watersheds, respectively. The watershed covers approximately 2,800 square miles, with about 700 miles of rivers and major tributaries spanning the watershed. The San Jacinto River originates in the San Jacinto Mountains and flows 42 miles west to Lake Elsinore; however, during flooding and heavy storms, Lake Elsinore overflows into Temescal Creek, which flows northwest and discharges into the Santa Ana River (City of Menifee 2013).

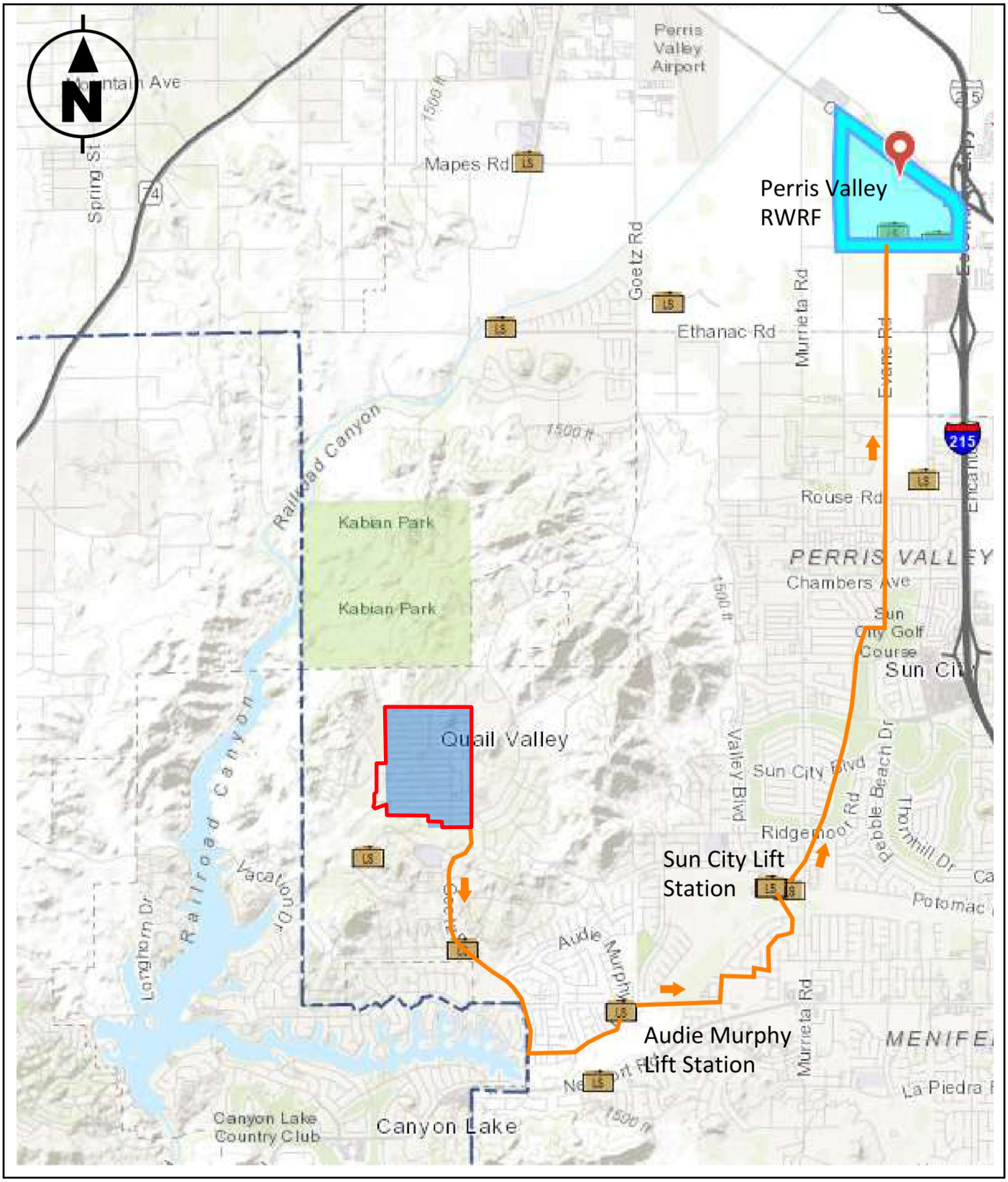

FIGURE 4.13-1
Wastewater Conveyance from the Proposed Project to Perris Valley RWRF

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In the City, open drainage channels and underground storm drains larger than 36 inches diameter are operated and maintained by the Riverside County Flood Control and Water Conservation District (RCFCWCD); smaller underground storm drains are operated and maintained by the City's Public Works Department (City of Menifee 2013). The proposed Project is located within RCFCWCD Zone 4, which encompasses approximately 733 square miles and includes the Cities of Beaumont, Canyon Lake, Hemet, Lake Elsinore, Menifee, Moreno Valley, Murrieta, Perris, Riverside, San Jacinto, and Wildomar (RCFCWCD 2025).

4.13.1.4 Solid Waste

Solid waste in the City is collected by Waste Management, Inc. Waste Management, Inc. transports solid waste to the El Sobrante Landfill, Badlands Sanitary Landfill, and Lamb Canyon Sanitary Landfill for disposal. The El Sobrante Landfill (10910 Dawson Canyon Road, Corona, CA 91719) is located approximately 14.22 miles northwest of the proposed Project site. The Badlands Sanitary Landfill (31125 Ironwood Avenue, Moreno Valley, CA 92555) is located approximately 18.54 miles northeast of the proposed Project site. The Lamb Canyon Sanitary Landfill (16411 Lamb Canyon Road, Beaumont, CA 92223) is located approximately 18.92 miles northeast of the proposed Project site. Table 4.13-2 lists the closure dates, daily permitted capacities, remaining permitted capacities, and proximity of the proposed Project to these Class III solid waste landfills. As shown in the table, the three landfills are open and have remaining capacities available ranging from 2032 to 2059.

Table 4.13 2
Landfills in Proximity to the Proposed Project

Facility Name	Closure Date	Daily Permitted Capacity (tons/day)	Remaining Permitted Capacity (cubic yards)	Approximate Distance from Project Area
El Sobrante Landfill	January 1, 2051	16,054	121,083,583	14.22 miles
Badlands Sanitary Landfill	January 1, 2059	5,000	4,900,000	18.54 miles
Lamb Canyon Sanitary Landfill	April 1, 2032	5,000	14,540,000	18.92 miles
SOURCE: California Department of Resources Recycling and Recovery 2025a, 2025b, 2025c.				

4.13.1.5 Electricity and Natural Gas

SCE and SoCalGas provide natural gas and electricity services in the City through their transmission and distribution infrastructure. Both SCE and SoCalGas are regulated by the CPUC, which is responsible for ensuring that California utilities customers have safe and reliable utility service.

4.13.2 Applicable Regulatory Requirements

4.13.2.1 Federal

a. Clean Water Act

Originally enacted in 1948 and amended in 1972 and 1987, the CWA establishes two national goals: eliminate the discharge of pollutants into the nation's waters and achieve water quality that is both

"fishable" and "swimmable." Discharge of pollutants into waters of the U.S. from any "point source" (i.e., a discharge pipe) is prohibited, unless authorized by a NPDES permit. The 1987 amendments direct the U.S. EPA to establish a permitting framework under the NPDES program to address stormwater discharges associated with urban areas and certain industrial activities.

b. Federal National Pollutant Discharge Elimination System Permit Program

Section 402 of the CWA prohibits the discharge of pollutants in waters of the U.S. from any point source without an NPDES permit. Results of the Nationwide Urban Runoff Program also identified contaminated stormwater (a non-point source) as a primary cause of water quality impairment. To regulate stormwater discharges, the U.S. EPA developed a two-phased NPDES permit program. Phase one of the program requires municipalities that own and operate separate storm drain systems serving populations of 100,000 or more to obtain municipal stormwater NPDES permits. Municipalities must have a stormwater management program to obtain a permit. Phase two regulates discharges from smaller municipalities with populations between 10,000 and 100,000.

c. Energy Independence and Security Act of 2007

The Energy Independence and Security Act was signed into law in December 2007 and is an energy policy law that contains provisions designed to increase energy efficiency and the availability of renewable energy. This act contains provisions for increasing fuel economy standards for cars and light trucks, while establishing new minimum efficiency standards for lighting as well as residential and commercial appliance equipment.

d. Energy Policy Act of 2005

The Energy Policy Act was passed in July 2005 and includes a comprehensive set of provisions to address energy issues. The Energy Policy Act includes tax incentives for the following: energy conservation improvements in commercial and residential buildings; fossil fuel production and clean coal facilities; and construction and operation of nuclear power plants, among other things. Subsidies are also included for geothermal, wind energy, and other alternative energy producers.

e. National Energy Policy

The National Energy Policy was established in 2001 by the National Energy Policy Development Group. This policy is designed to help the private sector and state and local governments promote dependable, affordable, and environmentally sound production and distribution of energy for the future. Key issues addressed by the energy policy are energy conservation, repair, and expansion of energy infrastructure, and ways of increasing energy supplies while protecting the environment.

f. Safe Drinking Water Act

The Safe Drinking Water Act authorizes the U.S. EPA to set national health-based standards for drinking water, called the National Primary Drinking Water Regulations, to protect against both naturally occurring and human-made contaminants. These standards set enforceable maximum contaminant levels in drinking water and require particular methods for treating water to remove

contaminants for all water providers in the U.S., except for private wells serving fewer than 25 people. In California, the State Department of Public Health sets drinking water standards. If a water system does not meet standards, it is the water supplier's responsibility to notify its customers.

4.13.2.2 State

a. Urban Water Management Planning Act

The Urban Water Management Planning Act of 1983, California Water Code Sections 10610 et seq., requires preparation of a plan by the urban water supplier that:

- Plans for water supply and assesses the reliability of each source of water, over a 20-year period, in five-year increments.
- Identifies and quantifies adequate water supplies, including recycled water, for existing and future demands, in normal, single-dry, and multiple-dry years.
- Implements conservation and the efficient use of urban water supplies. Significant new requirements for quantified demand reductions have been added by the Water Conservation Act of 2009 (SB 7 of Special Extended Session 7), which amends the act and adds new water conservation provisions to the California Water Code.

b. The Porter-Cologne Water Quality Control Act

Under the Porter-Cologne Water Quality Control Act, the SWRCB is given the ultimate authority of state water rights and water quality policy. It also establishes nine RWQCBs. The proposed Project site is in the jurisdictional area of the Santa Ana RWQCB.

c. California National Pollutant Discharge Elimination System Permit Programs

The U.S. EPA has delegated administration of the NPDES permit program to the SWRCB and its nine regional boards. The NPDES program regulates point source discharges of pollutants to waters of the United States to protect surface water quality. Construction activities associated with the proposed Project would be required to obtain coverage under the Statewide General NPDES Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit). Each phase of the proposed Project would disturb over one acre of land, and therefore would require preparation of a SWPPP. Compliance with the Construction General Permit requires preparation and implementation of the SWPPP, including BMPs to control erosion, sediment, and other construction-related pollutants.

If operation of the proposed sewer facilities results in discharges of treated wastewater to surface waters, such discharges would be subject to applicable Waste Discharge Requirements (WDRs) and/or NPDES permits issued by the appropriate RWQCB. In addition, any dewatering or temporary discharges to surface waters during construction would require authorization under an applicable NPDES permit.

d. 2006 Waste Discharge Requirements Order

The SWRCB adopted Statewide General WDR for Sewer Systems (Order No. 2006-0003-DWQ). The intent of the order is to regulate all collections systems in the state to reduce or eliminate the number of sanitary sewer overflows, which by their nature, pollute the environment. A sanitary sewer overflow is any overflow, spill, release, discharge, or diversion of wastewater from a sewer system. The order is applicable for all publicly owned sewage collection systems with more than one mile of sewer pipe.

e. California Integrated Waste Management Act of 1989 (As Amended by Assembly Bill 341)

Originally, the Integrated Waste Management Plan mandated diversion of 25 percent of solid waste by 1995 and 50 percent by 2000. AB 341 amended these requirements as follows: (1) California Department of Resources Recycling and Recovery to issue a report to the Legislature that includes strategies and recommendations that would enable the state to divert 75 percent of the solid waste generated in the state from disposal by January 1, 2020; (2) requires businesses that meet specified thresholds in the bill to arrange for recycling services by January 1, 2012; (3) streamlines the amendment process for non-disposal facility elements, by allowing changes without review and comment from a local task force; and (4) allows a solid waste facility to modify their existing permit, instead of having to undergo a permit revision, under specified circumstances.

4.13.2.3 Local

a. City of Menifee General Plan

The City's General Plan includes the following policies related to utilities and service systems.

Land Use Element

Goal LU-3: A full range of public utilities and related services that provide for the immediate and long-term needs of the community.

- Policy LU-3.4: Require that approval of new development be contingent upon the project's ability to secure appropriate infrastructure services.

- Policy LU-3.5: Facilitate the shared use of right-of-way, transmission corridors, and other appropriate measures to minimize the visual impact of utilities infrastructure throughout Menifee.

b. City of Menifee Municipal Code

City Municipal Code Chapter 6.30: Collection of Solid Waste and Recycling explains in detail the City's regulations regarding waste management. This includes the guidelines for service and requirements for both the collectors of waste and the owners of the waste-generating properties. This section also details the unlawful acts associated with trash collection, such as prohibited containers and refuse burning. The purpose of Chapter 6.40: Waste Reduction and Recycling Plan Requirements for

Construction and Demolition Projects is to increase the amount of construction and demolition debris that is recycled or reused so as to reduce the amount that is disposed of in landfills in compliance with the California Waste Management Act.

City Municipal Code Chapter 15.01: Storm Water/Urban Runoff includes BMPs, lists non-storm water discharge requirements, and details prohibited discharges. Per Section 15.01.015(B)(2): "Any person performing construction work in the city shall be regulated by the State Water Resources Control Board in a manner pursuant to and consistent with applicable requirements contained in the General Permit No. CAS000002, State Water Resources Control Board Order Number 2009-0009-DWQ. The City may notify the SWRCB of any person performing construction work that has a non-compliant construction site per the General Permit."

c. Eastern Municipal Water District Sewer System Management Plan

The SWRCB adopted the Statewide General Waste Discharge Requirement for Sanitary Sewer Systems on December 6, 2022, that required the development and implementation of a Sewer System Management Plan (SSMP). The purpose of the SSMP is to document the District's program to properly operate and maintain its sanitary sewer system. The SSMP also identifies the chain of communication for reporting overflows, from receipt of a complaint or other information, including the person responsible for reporting sanitary sewer overflows to the SWRCB, Riverside County Health Departments, and the California Emergency Management Agency.

4.13.3 Significance Determination Thresholds

Thresholds used to evaluate impacts to utilities and service systems are based on applicable criteria in the CEQA Guidelines (CCR Sections 15000–15387), Appendix G. The proposed Project would have a significant impact on the environment if it would:

1) Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electrical power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects;

2) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years;

3) 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;

4) 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; or

5) Comply with federal, state, or local management and reduction statutes and regulations related to solid waste.

4.13.4 Methodology

The evaluation of potential impacts to utilities and service systems is based on current utility service levels and the ability of service providers to accommodate the construction and operation of the proposed Project.

4.13.5 Threshold 1: Utility Infrastructure

Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electrical power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

4.13.5.1 Impact Analysis

The proposed Project is limited to construction of sewer infrastructure needed to replace existing septic systems within Subarea 4. The proposed Project does not include residential, commercial, or other uses that would increase consumption of water, electricity, natural gas, or telecommunications. Future phased construction would consume a minimal amount of water and energy for activities such as dust control, trenching, pipe installation, lift station construction, operation of heavy-duty construction equipment and on-road trucks, electricity use for lighting, hand tools, and other temporary electric-powered equipment, and worker commutes. These construction-related water and energy demands would be temporary, limited in scope, and would not require the development of new or expanded water, electrical power, or natural gas facilities.

Operation would require minimal electricity for lift station pumps and control systems, and would not require additional water supply. These operational demands would be accommodated by existing utility infrastructure and would not require new or expanded facilities.

The proposed Project would construct a wastewater collection and conveyance system that provides consistent and reliable service to all Subarea 4 residences consistent with established District and State standards and would be located entirely within the boundaries of the Project site. Potential impacts associated with construction of these facilities have been analyzed throughout this PEIR.

Furthermore, the proposed sewer infrastructure improvements within Subarea 4 represent the second phase of the District's overall sewer system expansion within Quail Valley, following upgrades completed in Subarea 9 that began in 2019. As discussed in Section 4.13.1.2, and shown in **Figure 4.13-1**, wastewater flows generated by the proposed Project would exit the Subarea 4 site via the Goetz Road pipeline and travel south to lift stations at or near Newport Road. From there, flows would be conveyed to the Sun City lift station and ultimately treated at the Perris Valley RWRF.

Anticipated sewer flows from Subarea 4 have been accounted for in the District's current sewer flow and equivalent dwelling unit projections as part of the tributary area conveying flows to the Perris Valley RWRF. The flows from the proposed Project are included within the Perris Valley RWRF assumed flows and would be accommodated by existing permitted treatment capacity. In addition, the District's Capital Improvement Program includes current and planned projects to maintain reliable wastewater treatment at the Perris Valley RWRF while accommodating projected regional

growth, including development within Subarea 4. Therefore, the abandonment of the approximately 525 septic tanks in Subarea 4 and connection of the associated parcels to the main sewer line stub is included within the District's regional long-range planning, and adequate wastewater treatment capacity exists to support the proposed Project.

4.13.5.2 Significance of Impacts

The proposed Project would not require the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electrical power, natural gas, or telecommunications facilities, and would be less than significant.

4.13.5.3 Mitigation

No mitigation is required.

4.13.5.4 Significance of Impacts After Mitigation

No mitigation is required.

4.13.6 Threshold 2: Water Supply

Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

4.13.6.1 Impact Analysis

The proposed Project is limited to construction of sewer infrastructure needed to replace the existing septic systems within Subarea 4 and would not introduce any residential, commercial, or other uses that would consume water. Future phased development would consume a minimal amount of water for dust control purposes during construction in compliance with SCAQMD Rule 403 standards (see Section 4.2, Air Quality), and for concrete mixing and sanitary purposes. Construction demand would be minimal and accommodated by existing supplies.

4.13.6.2 Significance of Impacts

Sufficient water supplies are available to serve construction of the proposed Project and impacts would be less than significant.

4.13.6.3 Mitigation

No mitigation is required.

4.13.6.4 Significance of Impacts After Mitigation

No mitigation is required.

4.13.7 Threshold 3: Wastewater Treatment

Would the project 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?

4.13.7.1 Impact Analysis

The proposed sewer infrastructure improvements within Subarea 4 represent the second phase of the District's overall sewer system expansion within Quail Valley, following upgrades completed in Subarea 9 that began in 2019. As discussed in Section 4.13.1.2 and shown in **Figure 4.13-1**, wastewater flows generated by the proposed Project would exit the Subarea 4 site via the Goetz Road pipeline and travel south to lift stations at or near Newport Road. From there, flows would be conveyed to the Sun City lift station and ultimately treated at the Perris Valley RWRF. Anticipated sewer flows from Subarea 4 have been accounted for in the District's current sewer flow and equivalent dwelling unit projections as part of the tributary area conveying flows to the Perris Valley RWRF. In addition, the District's Capital Improvement Program includes current and planned projects to maintain reliable wastewater treatment at the Perris Valley RWRF while accommodating projected regional growth, including development within Subarea 4. Therefore, the abandonment of the approximately 525 septic tanks in Subarea 4 and connection of the associated parcels to the main sewer line stub is included within the District's regional long-range planning, and adequate wastewater treatment capacity exists to support the proposed Project.

4.13.7.2 Significance of Impacts

Adequate wastewater treatment capacity would exist to serve the proposed Project, and impacts would be less than significant.

4.13.7.3 Mitigation

No mitigation is required.

4.13.7.4 Significance of Impacts After Mitigation

No mitigation is required.

4.13.8 Thresholds 4 and 5: Solid Waste

Would the project 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?

Would the project comply with federal, state, or local management and reduction statutes and regulations related to solid waste?

4.13.8.1 Impact Analysis

The proposed Project is limited to construction of sewer infrastructure needed to replace existing septic systems within Subarea 4 and would not introduce any residential, commercial, or other uses that would generate solid waste. Construction of future phased development under the proposed Project would generate small amounts of waste (e.g., concrete and asphalt from lift station pads, pipe packaging materials, and minor construction debris such as wood, metal, and plastic). Construction waste would be disposed of at either the El Sobrante Landfill, Badlands Sanitary Landfill, or Lamb Canyon Sanitary Landfill. As discussed in Section 4.13.1.4 above and shown in **Table 4.13-2**, these landfills have remaining capacities and are expected to remain operational through 2032 to 2059. The projected construction waste generated over the eight phases of the proposed Project, implemented over a 20-year period, would be accommodated within the existing landfill capacity, and therefore would not exceed local infrastructure limits.

Furthermore, the proposed Project would comply with applicable solid waste and recycling requirements in the City's Municipal Code as discussed under Section 4.13.2.3.b above. Operation of the proposed Project would not generate any solid waste.

4.13.8.2 Significance of Impacts

The proposed Project would not generate solid waste in excess of the capacity of local infrastructure, and construction waste would be disposed of in compliance with applicable requirements in the City's Municipal Code. Impacts would be less than significant.

4.13.8.3 Mitigation

No mitigation is required.

4.13.8.4 Significance of Impacts After Mitigation

No mitigation is required.

4.14 Wildfire

This section analyzes potential impacts related to wildfire that could result from implementation of the proposed Project. Construction of the proposed Project is planned to be carried out in eight phases implemented over a 20-year period. This evaluation is programmatic, focusing on the environmental impacts that could occur from implementation of all phases of construction. As each phase is constructed, project-level analyses may be required to further quantify any identified significant impacts.

This section includes a setting discussion that describes existing wildfire conditions in and around the Project site and summarizes applicable regulations related to wildfire. This section also includes an evaluation of potential impacts of the proposed Project related to wildfire. This analysis relies on secondary source information, including data available from CAL FIRE and other applicable agencies.

4.14.1 Existing Conditions

4.14.1.1 Wildfire Hazards

CAL FIRE establishes FHSZs throughout the state based on factors that influence fire likelihood and fire behavior. Many factors are considered, including fire history, existing and potential fuel (i.e., natural vegetation), flame length, blowing embers, terrain, and typical weather.

Wildland fire protection in California is the responsibility of either the state, local, or the federal government. State Responsibility Area (SRA) is a legal term defining the area where the state has financial responsibility for wildland fire protection. LRAs include incorporated cities, cultivated agriculture lands, and portions of the desert. The Project site is in the City's LRA.

To assist each fire agency in addressing its LRA, CAL FIRE has developed a fire hazard severity scale that utilizes three criteria to evaluate and designate potential fire hazards in wildland areas. The criteria are fuel loading, fire weather, and topography. CAL FIRE presents the results of this evaluation through mapping of FHSZs, which include moderate, high, and very high. **Figure 4.14-1** presents the distribution of FHSZ mapping within the Project site. As shown in **Figure 4.14-1**, the entire Project site is mapped as a high FHSZ (CAL FIRE 2025a).

4.14.1.2 Fire History

Fire history information can provide an understanding of fire frequency, fire type, most vulnerable project areas, and significant ignition sources. The Fire and Resource Assessment Program annually maintains and distributes an historical fire perimeter data set from across public and private lands in California. Review of the Fire and Resource Assessment Program database determined that CAL FIRE has not recorded any wildfires within the Project site (CAL FIRE 2025b).

Image Source: Nearmap (flown May 2025)

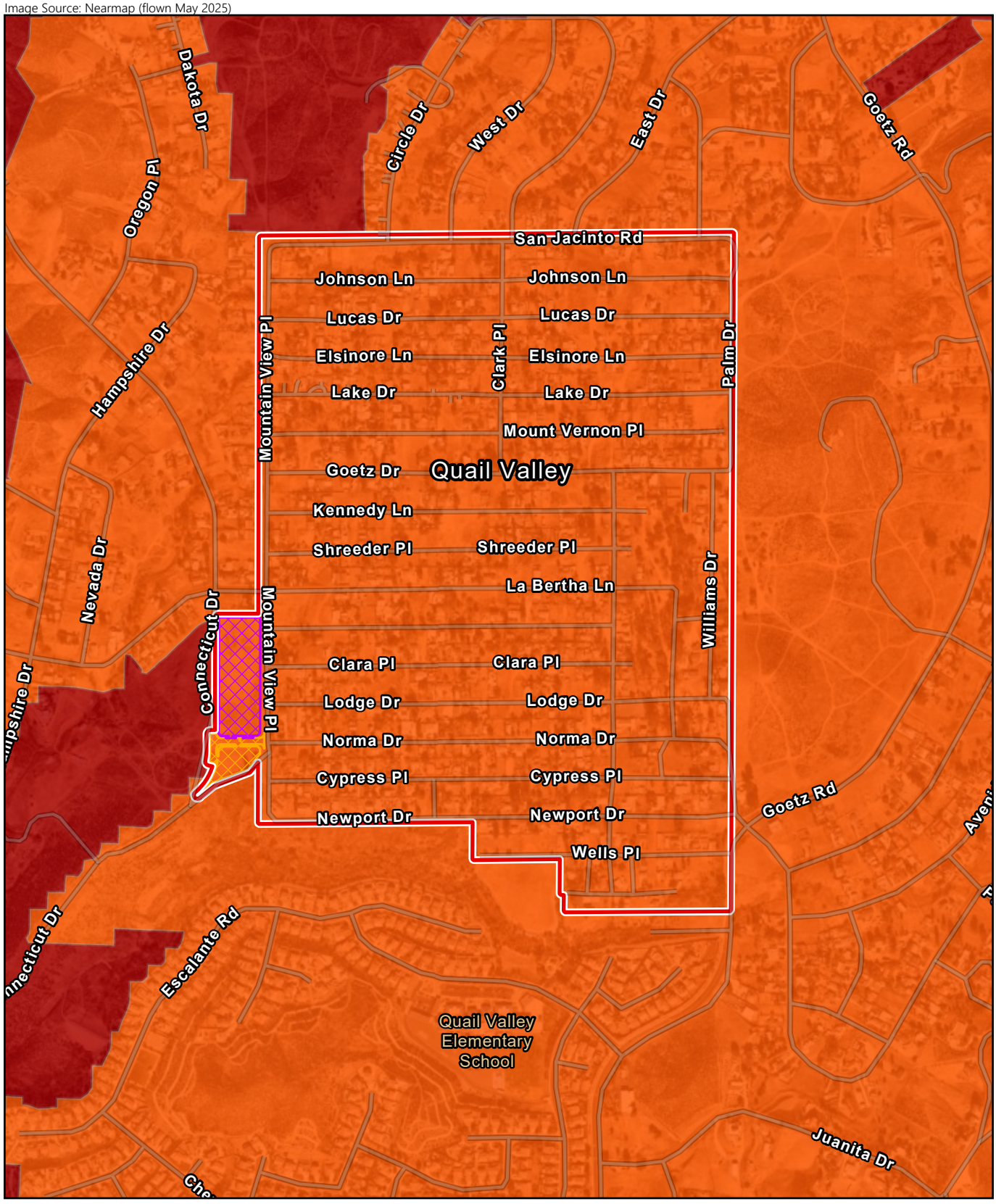

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FIGURE 4.14-1
Fire Hazard Severity Zones

4.14.2 Applicable Regulatory Requirements

4.14.2.1 Federal Regulations

a. Disaster Mitigation Act

The Disaster Mitigation Act of 2000, commonly known as the 2000 Stafford Act amendment, requires that a state mitigation plan, as a condition of disaster assistance, add incentives for increased coordination and integration of mitigation activities at the state level through the establishment of requirements for two different levels of state plans: "Standard" and "Enhanced." The Disaster Mitigation Act also established a new requirement for local mitigation plans, stating that jurisdictions that wish to be eligible for federal hazard mitigation grant funding must prepare a hazard mitigation plan that meets a certain set of guidelines and submit this plan to FEMA for review and approval. These guidelines are outlined in 44 CFR Part 201.

4.14.2.2 State Regulations

a. California Fire Code

The CFC (24 CCR Part 9) establishes regulations to safeguard the public health, safety, and general welfare from hazards of fire, explosion, or dangerous conditions in new and existing buildings, structures, and premises. The CFC also establishes requirements intended to provide safety for and assistance to firefighters and emergency responders during emergency operations. The provisions of the CFC apply to the construction, alteration, movement, enlargement, replacement, repair, equipment, use and occupancy, location, maintenance, removal, and demolition of every building or structure throughout California. The CFC includes regulations regarding fire-resistance-rated construction, fire protection systems such as alarm and sprinkler systems, fire services features, such as fire apparatus access roads, means of egress, fire safety during construction and demolition, and wildland-urban interface areas. The City has adopted the CFC as Title 5, Division 9, Chapter 1 the Municipal Code.

b. California Public Resources Code

Public Resources Code Section 4201-4204 and Government Code Section 51175-89

PRC Sections 4201–4204 and Government Code Section 51175-89 require CAL FIRE to map areas of significant fire hazards and identify FHSZs within the state. FHSZs are identified as very high, high, and medium. In LRAs, local agencies are required to adopt and designate very high FHSZs, based on the fire hazard severity mapping prepared by CAL FIRE.

Public Resources Code Section 4125-4137

PRC Sections 4125–4137 establish a process for the state to identify lands that are SRA FHSZs and procedures associated with such areas. These statutes define the criteria and procedures used to evaluate wildfire hazards based on factors such as fuel loading, topography, weather patterns, and

potential fire behavior, and require the adoption and periodic update of SRA FHSZ maps. The resulting designations are used by state and local agencies to inform land use planning, building standards, and wildfire risk reduction measures in areas subject to state fire protection responsibility.

Public Resources Code Sections 4290 and 4291

PRC Sections 4290 and 4291 require local jurisdictions to make specified findings that a subdivision is consistent with fire safety and defensible space regulations, and that fire protection and suppression services are available for the subdivision (Government Code Section 66474.02), before approving a tentative subdivision map or parcel map (for which a tentative map was not required) within a SRA FHSZ.

c. Attorney General Wildfire Guidance

The California Office of the Attorney General issued guidance outlining best practices for analyzing and mitigating wildfire impacts of development projects under CEQA (California Office of the Attorney General 2022). The guidance is intended to help local governments' evaluation and approval considerations for development projects in fire-prone areas, and to help project design in a way that minimizes wildfire ignition and incorporates emergency access and evacuation measures. Importantly, the guidance does not impose additional legal requirements on local governments, nor does it alter any applicable laws or regulations. The guidance suggests best practices including establishing baseline conditions, guidance for local governments in establishing thresholds of significance, modeling fire behavior and risk, providing qualitative assessment of fire risk, and offering potential measures to mitigate fire risk. The guidance additionally addresses wildfire evacuation analysis best practices.

In wildfire-prone areas, the California Office of the Attorney General Guidance (in Section IV C. Analyzing the Project's Impact on Evacuation and Emergency Access), notes that a lead agency would be best positioned to ensure that a proposed development project facilitates emergency access and ease constraints on evacuation with an assessment of evacuation modelling and planning prior to project approval. The guidance states that evacuation modeling and analysis should include the following:

- Evaluation of the capacity of roadways to accommodate project and community evacuation and simultaneous emergency access.
- Assessment of the timing for evacuation.
- Identification of alternative plans for evacuation depending upon the location and dynamics of the emergency.
- Evaluation of the project's impacts on existing evacuation plans.
- Consideration of the adequacy of emergency access, including the project's proximity to existing fire services and the capacity of existing services.
- Traffic modeling to quantify travel times under various likely scenarios.

- If a project presents significant increased wildfire risks and/or evacuation and access impacts, CEQA requires the lead agency to consider and adopt feasible alternatives and mitigation measures to avoid or reduce the project's impacts (or make a finding of overriding consideration).

d. Evacuation Planning Bills–Senate Bill 99 and Assembly Bill 747

SB 99 (Government Code Section 65302, subdivision [g][5]) requires Safety Elements to identify residential developments in any hazard area that do not have at least two emergency evacuation routes. AB 747 (Government Code Section 65302.15) requires jurisdictions to identify evacuation routes and their capacity, safety, and viability under various emergency scenarios.

4.14.2.3 Local Regulations

a. City of Menifee Local Hazard Mitigation Plan

The City's LHMP was created in 2015 as a result of the adoption of The Disaster Mitigation Act of 2000. The LHMP is primarily used to assess environmental hazards within the City and to contextualize identified risks, including potential effects to the City's critical infrastructure. In order to minimize potential risks identified within the LHMP, mitigation is provided in order to reduce potential risks. The mitigation measures include preventive actions, property protection techniques, structural projects, natural resource protection strategies, emergency services, and public education and awareness activities.

b. City of Menifee Emergency Operations Plan

The City's EOP is designed as a reference and guidance document for the foundation of response and recovery operations for the City. The EOP is meant to coordinate with the County Operational Area EOP and the City Emergency Operations Center to facilitate effective response to any emergency. This plan establishes the emergency organization, assigns tasks, and specifies policies and general procedures during both response and recovery. It also provides for coordination with the County as the Operational Area lead agency. This plan includes the critical elements of California's Standardized Emergency Management System, the National Incident Management System, the Incident Command System, and the National Response Framework.

c. City of Menifee Municipal Code

Chapter 8.20, Section 010 of the Municipal Code relates to the adoption of the CFC. This section states the following:

> Except as otherwise provided in this Chapter, the California Fire Code, Title 24, California Code of Regulations, Part 9, including Chapter 1, Division II - Scope and Administration, except that Section 103.2 and 109.3 are not adopted, and Chapters 3, 25, and Section 403.12, 503, 510.2, and 1103.2 are adopted, including any and all amendments set forth in this Chapter, and including any and all amendments thereto

that may hereafter be made and adopted by the State of California, is hereby adopted as the City Fire Code.

More specifically, subsection CC of the Municipal Code recognizes that FHSZs and maps as defined in the CFC include Section 4904 and the revisions related to Government Code Sections 51175 through 51189 for Very High FHSZs, and that these resources are retained on file at the office of the Fire Chief.

d. City of Menifee General Plan

The City's General Plan, adopted in 2013, includes eight General Plan elements that contain specific long-range planning goals and policies designed to guide growth and development in the City. The General Plan's relevant goals, objectives, and policies are described below.

Safety Element

Goal S-4: A community that has effective fire mitigation and response measures in place, and as a result is minimally impacted by wildland and structure fires.

- Policy S-4.1: Require fire-resistant building construction materials, the use of vegetation control methods, and other construction and fire prevention features to reduce the hazard of wildland fire. Ensure all new development and/or redevelopment in the LRA and very high FHSZ will comply with the CFC and California Building Code. All new development within the LRA very high fire zone will comply with Chapter 49 of the CFC and Chapter 7A of the California Building Code.

- Policy S-4.2: Ensure, to the maximum extent possible, that fire services, such as firefighting equipment and personnel, infrastructure, and response times, are adequate for all sections of the City. The City will continue to coordinate with the Riverside County Fire Department, for Interagency coordination, to respond to emergency calls in Menifee and to provide training and ongoing programs for public education.

4.14.3 Significance Determination Thresholds

Thresholds used to evaluate wildfire impacts are based on applicable criteria in the CEQA Guidelines (CCR Sections 15000–15387), Appendix G. The proposed Project would have a significant impact on the environment if it would:

1) Substantially impair an adopted emergency response plan or emergency evacuation plan;

2) 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;

3) 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; or

4) 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.

4.14.4 Methodology

The potential for significant impacts associated with the proposed Project has been determined based upon review of existing secondary source information and data relative to wildfires available for the proposed Project site.

4.14.5 Threshold 1: Emergency Response Plans

Would the project substantially impair an adopted emergency response plan or emergency evacuation plan?

4.14.5.1 Impact Analysis

The proposed Project is limited to construction of sewer infrastructure needed to replace the existing septic systems within Subarea 4. Project construction would result in temporary work within existing roadways, and possibly road closures in some instances that could disrupt vehicle travel. However, each of the proposed Project's eight phases would be required to prepare a TCP for all construction work within public roadways. TCPs would be subject to review and approval by the City to ensure compliance with local requirements. The TCPs would utilize typical traffic control devices (e.g., traffic cones, K-rails, signs, message boards), as well as flaggers to guide vehicles.

Although traffic may be closed to through traffic in some instances, ingress and egress would be maintained at all times for residents. In addition, construction activities would be coordinated to maintain access along designated emergency evacuation routes identified in the City's General Plan. As shown in Exhibit S-9, Emergency Evacuation Routes, in the City's General Plan, the nearest designated evacuation route to the Project site is Goetz Road. The proposed Project would connect to the pipeline within Goetz Road but otherwise would not require work within Goetz Road. TCPs would be reviewed to ensure that construction staging, lane closures, and detours do not obstruct emergency evacuation routes or otherwise impair emergency response capabilities. Where work occurs along or adjacent to an emergency evacuation route, temporary traffic control measures would be implemented to maintain adequate capacity and access at all times.

In the event of an emergency, construction work would cease and trenches would be covered with an appropriate cover to restore normal traffic flow. These measures would ensure that emergency vehicles can access construction areas and that roadways remain open, thereby preventing interference with emergency response or evacuation. Roadways would be restored to preexisting conditions once construction is completed.

4.14.5.2 Significance of Impacts

The proposed Project would not substantially impair an adopted emergency response plan or emergency evacuation plan, and impacts would be less than significant.

4.14.5.3 Mitigation

No mitigation is required.

4.14.5.4 Significance of Impacts After Mitigation

No mitigation is required.

4.14.6 Threshold 2: Wildfire

Due to slope, prevailing winds, and other factors, would the project exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

4.14.6.1 Impact Analysis

The Project site is mapped as a high FHSZ (CAL FIRE 2025a). However, the proposed Project is limited to construction of sewer infrastructure needed to replace the existing septic systems within Subarea 4 and would not introduce any new habitable structures that could expose people to wildfire risk.

During construction, equipment and on-site diesel fuel could pose a risk to wildfire with possible ignition sources such as internal combustion engines, gasoline-powered tools, blasting equipment, and equipment that could produce a spark, fire, or flame. The use of spark-producing construction machinery within fire risk areas could result in a temporary increase in fire ignition potential during construction activities. While these conditions represent a short-term construction-related fire safety concern, they would not exacerbate wildfire behavior or expose nearby residents to increased wildfire-related hazards, such as smoke or uncontrolled fire spread.

All personnel would be required to comply with PRC Sections 4427, 4428, 4431, and 4442, which include regulations relating to the handling of combustible fuels and equipment that can exacerbate fire risks. During construction, strict adherence to these PRC sections would ensure that contractors are responsible for all monitoring and safety measures ensuring that any risk to exacerbate wildfire would be reduced. Additionally, all construction must comply with fire protection and prevention requirements specified in the CCR and Cal/OSHA. This includes various measures such as easy accessibility of firefighting equipment, proper storage of combustible liquids, no smoking in service and refueling areas, operation of a blaster and handling of explosive materials during blasting activities, and worker training for firefighter extinguisher use. Compliance with PRC Sections 4427, 4428, 4431, and 4442, as well as fire protection and prevention requirements specified in the CCR and Cal/OSHA, would ensure that construction activities comply with applicable City Municipal Code regulations and General Plan policies discussed in Section 4.14.2.3 above.

Once construction is complete, the proposed Project would not exacerbate wildfire risk in a manner that would expose people to wildfire-related hazards. The proposed Project would not introduce habitable structures, permanent on-site occupancy, or new population growth in fire-prone areas. Risk associated with wildfire would remain unchanged compared to the existing condition.

The proposed pipelines would be installed completely underground, and the proposed lift stations would be primarily subterranean, with above-ground features including access hatches, electrical control panels, an emergency generator within an enclosure, and other associated equipment. These facilities would not create new ignition sources, increase fuel loads, or exacerbate wildfire risk, and would not create new exposure pathways for nearby residents or maintenance personnel, as they include minimal or no vegetation and operate in a manner consistent with standard utility practices. In addition, the lift stations would be designed and constructed in accordance with the District's Small Sewage Lift Station Guidelines, Standard Drawings, and Specifications, which incorporate fire safety and electrical standards, California Fire Code requirements, and best management practices to minimize ignition sources and wildfire risk.

Furthermore, operation of the proposed Project would adhere to the District's standard operating procedures for facility maintenance and fire prevention, which include regular inspection of electrical equipment, vegetation management within and around the facilities, and compliance with CFC requirements established by the local fire authority. As a result, the proposed Project would not expose project occupants, nearby residents, or maintenance personnel to increased wildfire-related hazards.

4.14.6.2 Significance of Impacts

Impacts related to risk of loss, injury or death involving wildland fires would be less than significant.

4.14.6.3 Mitigation

No mitigation is required.

4.14.6.4 Significance of Impacts After Mitigation

No mitigation is required.

4.14.7 Threshold 3: Infrastructure

Would the project 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?

4.14.7.1 Impact Analysis

The proposed pipelines would be installed completely underground, and the proposed lift stations would be primarily subterranean, with above-ground features including access hatches, electrical control panels, an emergency generator within an enclosure, and other associated equipment. These aboveground facilities would not exacerbate fire risk because they would include minimal or no

vegetation and would not involve the use or storage of flammable materials beyond those typical of standard utility operations. In addition, the lift stations would be designed and constructed in accordance with the District's Small Sewage Lift Station Guidelines, Standard Drawings, and Specifications, which incorporate fire safety and electrical standards, CFC requirements, and best management practices to minimize ignition sources and wildfire risk.

As described in Section 4.14.6.1 above, construction under the proposed Project would be required to comply with applicable regulations related to the handling of combustible fuels and equipment that can exacerbate fire risks. Additionally, all construction would be required to comply with fire protection and prevention requirements specified in the CCR and Cal/OSHA, which would ensure that construction activities comply with applicable City Municipal Code regulations and General Plan policies discussed in Section 4.14.12.3 above. Once construction is complete, operation of the proposed Project would adhere to the District's standard operating procedures for facility maintenance and fire prevention, which include regular inspection of electrical equipment, vegetation management within and around the facilities, and compliance with CFC requirements established by the local fire authority.

4.14.7.2 Significance of Impacts

Impacts related to the installation or maintenance of associated infrastructure that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment would be less than significant.

4.14.7.3 Mitigation

No mitigation is required.

4.14.7.4 Significance of Impacts After Mitigation

No mitigation is required.

4.14.8 Threshold 4: Flooding or Landslide

Would the project 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?

4.14.8.1 Impact Analysis

The proposed Project is limited to construction of sewer infrastructure needed to replace the existing septic systems within Subarea 4 and would not increase risks associated with flooding and landslide. As shown in **Figure 4.9-1** in Section 4.9 above, the Project site is mapped as a minimal flooding area by the Federal Emergency Management Agency. Areas mapped as minimal flood hazards are outside the 0.2-percent-annual-chance floodplain. The pipelines would be installed completely underground, and the lift stations, which have minimal above-ground components, would not alter existing drainage patterns or increase flood risk to people or structures.

As shown in Figure 4.6.4 and in Table 4.6-1, the proposed lift station sites are located within areas mapped as landslide susceptibility classes V (Moderate Risk) and VIII (High Risk). Construction of the above-ground components associated with the proposed lift stations would be in accordance with the CBC to meet all seismic design parameters. In addition, future phased development of the proposed Project would be required to implement the recommendations of the Geotechnical Exploration Report (see Appendix F to Appendix B), which includes measures to address slope stability and site-specific geologic constraints.

Given the limited extent of above-ground development, compliance with CBC requirements, and implementation of project-specific geotechnical recommendations, the proposed Project would not expose people or structures to significant risks including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes.

4.14.8.2 Significance of Impacts

The proposed Project would not expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes, and impacts would be less than significant.

4.14.8.3 Mitigation

No mitigation is required.

4.14.8.4 Significance of Impacts After Mitigation

No mitigation is required.

Chapter 5.0
Federal Cross-Cutting Environmental Regulation Evaluation

The District is pursuing funding for the proposed Project from a federal program (U.S. EPA's State and Tribal Assistance Grant) and a partially funded federal program (SWRCB's Clean Water State Revolving Fund). As such, federal environmental review requirements must be met. Although the CEQA was modeled after the NEPA, where there are differences between the state's process under CEQA and applicable federal statutes and regulations, the latter must be followed for a federal entity to fulfill its NEPA review requirements before releasing federal funds. Compliance is set out in 40 CFR 35.3575 (Application of Federal cross-cutting authorities) and 7 CFR 1970 (Environmental Policies and Procedures). This section describes the proposed Project's status of compliance with the federal cross-cutting regulations (also referred to as CEQA-Plus) and the consultation that has or will occur. These policies and procedures are based on the SWRB's Appendix I: State Environmental Review Process, which addresses the U.S. EPA review requirements that build upon the state environmental review requirements under CEQA.

5.1 Federal Endangered Species Act

FESA establishes a program for the conservation of threatened and endangered plants and animals and the habitats in which they depend. Section 7 (16 U.S.C. Section 1531 et seq.) requires federal agencies to ensure their actions are not likely to jeopardize the continued existence of threatened or endangered species or result in the destruction or adverse modification of designated critical habitat. If a project could result in an incidental (unintentional but not unexpected) take of a threatened or endangered (listed) species, federal agencies must undergo consultation with USFWS and/or National Oceanic and Atmospheric Administration NMFS to obtain a Biological Opinion. If the federal agency finds that a project is not likely to adversely affect listed species, the federal agency can consult informally, and if USFWS and NFMS agree with that finding, a concurrence letter can be issued. If the Biological Opinion finds that a project could jeopardize the existence or habitat of a listed species ("jeopardy" opinion), the agency cannot authorize the project until it is modified to obtain a "non-jeopardy" opinion.

As described in Section 4.3 of this PEIR, a Biological Resources Report was prepared for the proposed Project (Appendix D). The Biological Resources Report provides documentation to satisfy a CEQA-Plus investigation and the requirements of NEPA. The "survey area" referenced in this section consists of the proposed Project site with a 500-foot buffer.

The proposed Project primarily occurs along existing roadways and urban, vacant lots but could directly or indirectly affect habitats that could support species listed in the FESA. The proposed Project does not occur within or immediately adjacent to designated critical habitat. Critical habitat for coastal California gnatcatcher (*Polioptila californica californica*) occurs approximately one-half

mile west and east of the Project site. No other critical habitat occurs within one mile of the proposed Project. Therefore, the proposed Project would have no effect on critical habitat.

Federally Listed Plant Species. One federally listed plant species has moderate potential to occur, the federally listed endangered Munz's onion (*Allium munzii*). If present, the proposed Project may affect, but not likely to adversely affect, this species. An adverse affect includes actions on a listed species that is constitutes "take" (i.e., (harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect) under the FESA. If an action is likely to result in "take" of even one individual of a species, it is considered "likely to adversely affect." If present on the Project site, Munz's onion may be removed during construction of the proposed Project, particularly within the areas proposed for the regional lift stations. Implementation of Mitigation measures BIO-1, BIO-2a, BIO-2b, and BIO-11, and BIO-14, included in Section 4.3 of this PEIR, shall be implemented to avoid adverse effects to Munz's onion. These measures would require preconstruction surveys to determine presence/absence of Munz's onion within the Project site (BIO-1), avoidance of impacts to any individuals within the Project site, if feasible compensatory mitigation (e.g., purchase of preservation credits at a 1:1 mitigation ratio for habitat occupied by that species, and/or acquisition and preservation of off-site mitigation land containing occupied habitat for that species; and/or preparation and implementation of a rare plant salvage and relocation plan for the species present on the Project site. Implementation of these measures will ensure that impacts are not likely to adversely affect the species. No additional FE, threatened (FT), proposed threatened (FPT), or candidate (FC) plant species have the potential to occur in the vicinity of the survey area.

Federally Listed Animal Species. A query of the Information for Planning and Consultation Database reveals that 10 FE, FT, FC, or FPT animal species have the potential to occur within the Project site. These species were evaluated for their potential to occur within the survey area. The analysis resulted in the following determinations:

- vernal pool fairy shrimp (*Branchinecta lynchi*), FT, low potential, no effect
- Riverside fairy shrimp (*Streptocephalus woottoni*), FE, low potential, no effect
- Monarch butterfly (*Danaus plexippus*), FC, low potential, no effect
- Quino checkerspot (*Euphydryas editha quino*), FE, low potential, no effect
- western spadefoot (*Spea hammondii*), FPT, unexpected due to lack of habitat, no effect
- southwestern pond turtle (*Actinemys pallida*), FPT, unexpected due to lack of habitat, no effect
- least Bell's vireo (*Vireo bellii pusillus*), FE, high potential in survey area/moderate potential in proposed Project site, may affect, not likely to adversely affect
- coastal California gnatcatcher (*Polioptila californica californica*), FT, moderate potential, may affect, not likely to adversely affect
- San Bernardino Merriam's kangaroo rat (*Dipodomys merriami parvus*), FE, low potential, no effect
- Stephens' kangaroo rat (*Dipodomys stephensi*), FT, high potential, may affect, not likely to adversely affect

Species with a may affect, not likely to adversely affect determination are discussed in more detail below.

The proposed Project may result in adverse effects on the federally listed coastal California gnatcatcher within Riversidian sage scrub habitat located on the western edge, specifically in the area of LS-1 (Options 1 and 2). Direct adverse effects could include removal of vegetation supporting active nests and loss of foraging habitat. Indirect adverse effects could occur from construction-related noise near undeveloped areas with active nests, potentially leading to nest abandonment or failure. Implementation of **mitigation measures BIO-1, BIO-3a, BIO-3b, BIO-5, BIO-10, BIO-12, and BIO-13**, included in Section 4.3 of this PEIR, would minimize these adverse effects.

The proposed Project may result in adverse effects on the federally listed least Bell's vireo if present within small stands of riparian habitat within and adjacent to the Project site. Although small, isolated patches of southern willow scrub are located within and directly adjacent to the Project impact areas, the highest potential for least Bell's vireo is within the mature willow vegetation along the southern end of the survey area within an unnamed tributary flowing into Canyon Lake. Indirect adverse effects could occur as a result of construction noise in the immediate vicinity of undeveloped areas supporting an active nest, such that the disturbance results in nest abandonment or nest failure. Implementation of **mitigation measures BIO-1, BIO-3a, BIO-3b, BIO-6a, BIO-6b, BIO-10, and BIO-13**, as described in Section 4.3 of this PEIR, would reduce or avoid these adverse effects.

The proposed Project may result in adverse effects to federally listed Stephens' kangaroo rat where LS-1 (Options 1 and 2) would be installed within Riversidian sage scrub habitat on the western edge of the proposed Project site. Payment of the mitigation fee, as described in **mitigation measure BIO-9** in Section 4.3 of this PEIR, would reduce or compensate for potential adverse effects on this species.

With implementation of these mitigation measures, the proposed Project would have no adverse effect on federally listed species or their critical habitat, and the proposed Project would be in conformance with the FESA.

5.2 National Historic Preservation Act

The NHPA (16 U.S.C. Section 470) establishes a program to protect, preserve, rehabilitate, and restore significant historical, archaeological, and cultural resources. The proposed Project is defined as an undertaking under Section 106 of the NHPA. Section 106 requires federal agencies to take into account effects on historic properties and involves a step-by-step procedure described in detail in the implementing regulations (36 CFR Part 800).

A cultural resource that qualifies for the NRHP is considered significant in terms of the planning process under the NHPA, NEPA, and other federal mandates. The National Register Criteria for Evaluation (36 CFR 60.4) provides guidance in determining a cultural resource's eligibility for listing on the NRHP. This states that the quality of significance in American history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and:

A. is associated with events that have made a significant contribution to the broad patterns of our history; or

B. is associated with the lives of persons significant in our past; or

C. embodies the distinctive characteristics of a type, period, or method of construction, or that represents the work of a master, or that possesses high artistic values, or that represents a significant and distinguishable entity whose components may lack individual distinction; or

D. has yielded, or may be likely to yield, information important in prehistory or history (36 CFR 60.4).

As described in Section 4.4 of this PEIR, a Cultural Resources Survey Report was prepared for the proposed Project (Appendix E). The Cultural Resources Survey Report provides documentation to satisfy a CEQA-Plus investigation, and the requirements of NEPA, including Section 106 of the NHPA. The pedestrian survey of the potential site options for LS-1 (Options 1 and 2) recorded one isolated historic-era feature (post marker; 10667-F-1) within the LS-1 (Option 2) site. The concrete post marker (10667-F-1) is associated with the installation of water infrastructure by the District sometime between 1961 and 1967. This association is not considered a significant event to the history of the City. The post marker therefore does not qualify under Criterion A. The post marker does not qualify under Criterion B, as is not associated with a person significant to the past. The method of construction is not unique or distinctive; therefore, the post marker does not qualify under Criterion C. The post marker does not qualify under Criterion D, as it does not possess important data to the local history. The post marker lacks characteristics that would qualify it for listing on the NRHP. Therefore, the post marker is not a historic property under the NRHP.

The subsequent windshield survey of Subarea 4 did not identify any historic cultural material. As shown in Table 4.4-1, the cultural resources records and literature search completed at the South Coastal Information Center at San Diego State University in support of the Cultural Resources Survey Report identified six cultural resources previously recorded within one-half mile of the Project site, including one prehistoric quarry site, two single-family houses, two water conveyance features, and one recreational building that used to be the Quail Valley Country Club. The recreational building and two single-family houses are within the Project site. However, the proposed wastewater collection and conveyance system components would not affect these properties. There are no recorded historic-era structures located within the 24 CP lots, lots for LS-2 through LS-4, and lots for sewer line extensions in which the wastewater system would be constructed. Furthermore, all 24 CP lots, lots for LS-2 through LS-4, and lots for sewer line extensions are vacant and do not possess any structures. Therefore, the proposed Project would not result in an adverse effect on any historic properties as defined under Section 106 of the NHPA.

5.3 Clean Air Act

The U.S. Congress adopted general conformity requirements as part of the Clean Air Act Amendments in 1990. The U.S. EPA implemented those requirements in 1993 (Section 176 of the CAA; 42 U.S.C. Section 7506; 40 CFR Part 93, Subpart B). The General Conformity Rule requires that federal agencies demonstrate that actions would conform to the applicable SIP, by either determining that the action is exempt from the General Conformity Rule requirements or subject to a formal conformity determination. This requires analysis of the total direct and indirect emissions of criteria pollutants and their precursors for which an area is designated non-attainment or covered by a maintenance plan. The total direct and indirect emissions are the net emission increases in the non-attainment or maintenance area caused by the action. The emissions must be reasonably foreseeable at the time

the conformity determination is made. For indirect emissions, the federal agency also must be able to practicably control the emissions based upon the agency's continuing program responsibility. If the emissions resulting from an action would not exceed applicable General Conformity *de minimis* levels, then the action would conform to the applicable SIP, and no further analysis would be required. If emissions resulting from an action would exceed applicable General Conformity *de minimis* levels, then a formal Air Quality Conformity Analysis would be required.

As described in Section 4.2 of this PEIR, the proposed Project is located within the Basin, which is a federal non-attainment area for 8-hour ozone (extreme) and particulate matter less than 2.5 microns (serious) as well as a maintenance area for carbon monoxide. Therefore, the General Conformity Rule is applicable to emissions of carbon monoxide and ozone precursors (reactive organic gases and oxides of nitrogen) generated by the proposed Project. The General Conformity *de minimis* levels applicable to the Basin are presented in Table 5-1.

Table 5-1
General Conformity *De Minimis* Limits

Pollutant	Designation Category	Emissions (Tons per Year)
Ozone Precursors (VOC or NO_X)	Non-attainment (Extreme)	10
Fine Particulate Matter ($PM_{2.5}$)	Non-attainment (Serious)	70
Carbon Monoxide (CO)	Attainment (Maintenance)	100

VOC = volatile organic compound; NOx = oxides of nitrogen
SOURCES: 40 Code of Federal Regulations 93.53(b)(1); 40 Code of Federal Regulations 93.53(b)(2).

General Conformity *de minimis* levels are appropriate guidelines for the determination of an air quality adverse effect under NEPA. An air quality analysis under NEPA differs from the General Conformity Rule analysis in that both attainment pollutant emissions and non-attainment pollutant emissions are considered in the analysis. Therefore, in addition to the non-attainment pollutant emissions, the NEPA analysis also evaluates emissions of oxides of sulfur, and particulate matter less than 10 microns. The appropriate NEPA criteria are the SCAQMD significance thresholds (see Table 4.2-2).

As shown in Tables 4.2-4 and 4.2-5, construction and operational emissions would not exceed the SCAQMD significance thresholds, and therefore would not result in exceedance of the applicable NEPA thresholds. Table 5-2 presents the total annual emissions (tons per year) in comparison to the General Conformity *de minimis* levels.

Table 5-2
Total Annual Construction Emissions
(tons per year)

	Pollutant					
	ROG	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Year 2027 Annual Emissions	0.84	6.00	6.92	0.02	0.67	0.41
General Conformity de minimis Level	*10*	*10*	*100*	--	*70*	--
Significant Adverse Effect?	No	No	No	No	No	No

ROG = reactive organic gases; NO_X = oxides of nitrogen; CO = carbon monoxide; SO_X = oxides of sulfur; PM_{10} = particulate matter less than 10 microns; $PM_{2.5}$ = particulate matter less than 2.5 microns
SOURCE: Appendix C.

Total annual emissions would decrease as construction continues over the 20-year construction period. As shown in Table 5-2, total annual emissions would not exceed the General Conformity *de minimis* levels and would therefore conform to the applicable SIP. No further analysis would be required.

5.4 Coastal Zone Management Act

The CZMA (16 U.S.C. Section 1451 et seq.) is managed by the National Oceanic and Atmospheric Administration's Office of Ocean and Coastal Resource Management and designed to balance land and water issues in coastal zones. It also aims to "preserve, protect, develop, and where possible, to restore or enhance the resources of the nation's coastal zone." Within California, the CZMA is administered by the San Francisco Bay Conservation and Development Commission, the California Coastal Conservancy, and the California Coastal Commission.

As described in Section 4.9 of this PEIR, the proposed Project site is located approximately 29 miles northeast of the Pacific Ocean. Therefore, no portion of the proposed Project is within the coastal zone and the CZMA does not apply.

5.5 Farmland Protection Policy Act

The Farmland Protection Policy Act (7 U.S.C. Section 4201 et seq.) requires a federal agency to consider the effects of its actions and programs on the nation's farmlands. The Farmland Protection Policy Act is intended to minimize the impacts of federal programs with respect to the conversion of farmland to nonagricultural uses. It assures that, to the extent possible, federal programs are administered to be compatible with state, local, and private programs and policies to protect farmland.

As described in Chapter 7.0 of this PEIR, the Farmland Mapping and Monitoring Program (FMMP) classifies Subarea 4 as Urban and Built-Up Land and the two potential site options for the regional lift station (LS-1) as Other Land (DOC 2022). Similarly, there are no Williamson Act Contracts or agricultural preserves designated within the Project site, nor are any properties within the proposed Project site zoned for agricultural uses. Therefore, the proposed Project would have no adverse effects on farmland protected under the Farmland Protection Policy Act.

5.6 Executive Order 11988—Floodplain Management

EO 11988 requires federal agencies to recognize the values of floodplains and to consider the public benefits from restoring and preserving floodplains. As described in Section 4.9 of this PEIR, and shown in Figure 4.9-1, FEMA has mapped the Project site as a minimal flooding area located outside the 500-year floodplain. Because the Project site is located outside the 500-year floodplain, the proposed Project would not increase flood hazards or interfere with floodplain management. The proposed Project is limited to construction of sewer infrastructure needed to replace the existing septic systems within Subarea 4 and would not introduce any new habitable structures that could expose people to flood hazards. Human presence would be limited to temporary construction and periodic maintenance. Once constructed, the footprints of the wastewater pipelines would be

restored to the pre-project condition. New impervious surfaces would be limited to the proposed lift stations, which would be designed in a manner that would maintain existing drainage patterns. Therefore, the proposed Project would comply with EO 11988.

5.7 Federal Migratory Bird Treaty Act, Bald and Golden Eagle Protection Act, and Executive Order 13168

The MBTA (16 U.S.C. Sections 703–712) and the Bald and Golden Eagle Protection Act (16 U.S.C. Section 668-668c) prohibit the take of migratory birds (or any part, nest, or eggs of any such bird) and the take and commerce of eagles. EO 13168 requires that any project with federal involvement address impacts of federal actions on migratory birds.

As described in Section 4.3 of this PEIR, the proposed Project may result in the direct removal of trees, native shrubs, and grassland habitat as a result of construction. These vegetation types potentially provide habitat for avian species protected under the MBTA. Trees may also need to be trimmed to access construction areas, which could result in the direct take of nesting birds, including raptors, in violation of the MBTA and California Fish and Game Code Sections 3503 and 3503.5. Indirect adverse effects could occur as a result of noise, night lighting, and human presence from construction activities near potential nest locations (i.e., trees). Implementation of **mitigation measure BIO-5**, included in Section 4.3 of this PEIR, would be implemented during future construction phases to reduce or avoid adverse effects to nesting birds, including those protected under the MBTA, Bald and Golden Eagle Protection Act, and EO 13168. With implementation of **mitigation measure BIO-5**, the proposed Project would be consistent with the MBTA, the Bald and Golden Eagle Protection Act, and EO 13168.

5.8 Fish and Wildlife Coordination Act

The Fish and Wildlife Coordination Act as amended (16 U.S.C. Section 661 et seq.) is intended to promote conservation of fish and wildlife resources by preventing their loss or damage, and to provide for development and improvement of fish and wildlife resources in connection with water projects. Federal agencies undertaking water projects are required to fully consider recommendations made by USFWS, NMFS, and state wildlife agencies when any waterbody is impounded, diverted, controlled, or modified for any purpose. Compliance with the Fish and Wildlife Coordination Act is to be coordinated with FESA consultation.

The proposed Project would not impound, divert, or control surface water sources. The proposed Project is limited to construction of sewer infrastructure needed to replace the existing septic systems within Subarea 4 and would not introduce any residential, commercial, or other uses that would consume groundwater. The Project site is located outside of the San Jacinto Groundwater Basin, and therefore would not affect the source of groundwater production for the District and several other water purveyors. Once constructed, the footprints of the wastewater pipelines would be restored to the pre-project condition. New impervious surfaces would be limited to the proposed lift stations, and substantial amount of open space would remain both within and surrounding Subarea 4 that would allow for continued groundwater recharge. Therefore, the proposed Project would not substantially decrease groundwater supplies or interfere with groundwater recharge such that there

would be an adverse effect on fish and wildlife resources. The proposed Project would not conflict with the Fish and Wildlife Coordination Act.

5.9 Executive Order 11990—Protection of Wetlands

Under EO 11990, federal agencies must avoid affecting wetlands unless it is determined that no practicable alternative is available. The EO directs federal agencies to provide leadership and act to minimize the destruction, loss, or degradation of wetlands, and to preserve and enhance the natural and beneficial values of wetlands in implementing civil works.

As described in Section 4.3 of this PEIR, the proposed Project could result in direct adverse effects on potential jurisdictional resources during Project construction activities, including installation of the lift stations, pipelines, and manhole covers. Temporary adverse effects could occur to potential jurisdictional resources during installation of the sewer mains, force mains, and connector pipes, as well as within work areas around the Project components. **Table 4.3-6** summarizes direct permanent and temporary adverse effects to potential jurisdictional resources, as shown in **Figures 4.3-10a and 4.3-10b**. Direct effects to jurisdictional aquatic resources would be avoided through construction methods such as jack and bore, micro-drilling, and/or the use of standard Best Management Practices. Implementation of **mitigation measures BIO-11, BIO-14, BIO-15a, and BIO-15b,** included in Section 4.3 of this PEIR, would reduce any remaining adverse effects on jurisdictional wetlands. With these measures, the District would maintain compliance with EO 11990, Protection of Wetlands.

5.10 Executive Order 13112—Invasive Species

Under EO 13112, federal agencies must prevent and control introductions of invasive non-native species in a cost-effective and environmentally conscious manner to minimize their economic, ecological, and human health impacts. As directed by this EO, a national invasive species management plan guides federal actions to minimize invasive species and their impacts. To support implementation of this plan, the USACE released a memorandum describing its Invasive Species Policy. As part of this policy, all civil works projects are required to address invasive species and potential impacts that may be caused by the project.

As described in Section 4.3 of this PEIR, construction activities could result in adverse effects from altered hydrology, fugitive dust, chemical and particulate pollution, and introduction of non-native plant species during construction activities. Habitat degradation from non-native plant species infestations after ground disturbance associated with project activities has the potential to reduce the long-term availability of habitat for special-status plants and wildlife species. Implementation of **mitigation measures BIO-11, BIO-12, and BIO-14**, included in Section 4.3 of this PEIR, would reduce adverse effects to native vegetation communities from invasive species. With these measures, the District would maintain compliance with EO 13112, Invasive Species.

5.11 Wild and Scenic Rivers Act

The Wild and Scenic Rivers Act (6 U.S.C. Section 1271 et seq.) was passed to preserve and protect designated rivers for their natural, cultural, and recreational value. There are no designated wild and scenic rivers that cross or are located adjacent to the Project site, nor will any designated rivers be adversely affected by the proposed Project. Therefore, the proposed Project would not adversely affect resources protected under the Wild and Scenic Rivers Act.

5.12 Safe Drinking Water Act—Source Water Protection

Section 1424(e) of the Safe Drinking Water Act (42 U.S.C. Section 300f et seq.) established the U.S. EPA's Sole Source Aquifer Program. This program protects communities from groundwater contamination from federally funded projects. Within U.S. EPA's Region 9, which includes California, there are nine sole source aquifers. None of these sole source aquifers are located beneath the Project site (U.S. EPA 2025a). Therefore, the Sole Source Aquifer Program does not apply, and the proposed Project would comply with Section 1424(e) of the Safe Drinking Water Act.

5.13 Executive Order 13195—Trails for America in the 21st Century

EO 13195 requires federal agencies to protect, connect, promote, and assist trails of all types throughout the Unites States. As discussed in Chapter 7.0 of this PEIR, the proposed Project is limited to replacing existing private septic systems with a sewer conveyance system. The proposed Project would not introduce any residential uses that would increase the use or demand for park or recreational facilities, including trails. There are no trails within the Project site. Therefore, no adverse effects on trails would occur and the proposed Project would comply with EO 13195.

5.14 Executive Order 13007—Indian Sacred Sites

Sacred Sites are defined in EO 13007 as "any specific, discrete, narrowly delineated location on federal land that is identified by an Indian tribe, or Indian individual determined to be an appropriately authoritative representative of an Indian religion, as sacred by virtue of its established religious significance to, or ceremonial use by, an Indian religion; provided that the tribe or appropriately authoritative representative of an Indian religion has informed the agency of the existence of such a site."

As described in Section 4.4 of this PEIR, a Cultural Resources Survey Report was prepared for the proposed Project (see Appendix E). The Cultural Resources Survey Report provides documentation to satisfy a CEQA-Plus investigation, and the requirements of NEPA, including Section 106 of the NHPA. The South Coastal Information Center records search did not identify any prehistoric resources within the Project site. A letter was sent on July 29, 2025, to the NAHC requesting a search of their Sacred Lands File to identify spiritually significant and/or sacred sites or traditional use areas in the

vicinity of the proposed Project. A response was received from the NAHC on August 6, 2025, indicating that their search of the Sacred Lands File was negative.

The pedestrian surveys of the potential footprints of LS-1 did not identify any archaeological resources. Additionally, the potential for discovery of buried archaeological resources within the potential footprints of LS-1 during construction activities is considered low because the soil profile of Lodo soil series indicates a shallow top layer extending approximately eight inches before encountering subsoils. Additionally, no archaeological resources have been recorded within the 24 CP lots, lots for LS-2 through LS-4, and lots for sewer line extensions. However, none of the vacant 24 CP lots, lots for LS-2 through LS-4, and lots for sewer line extensions in which the proposed Project would be constructed have been surveyed for archaeological resources. Therefore, future development of the proposed Project could potentially adversely affect unknown significant archaeological resources. Implementation of **mitigation measures CUL-1 through CUL-3** would minimize, reduce, and avoid adverse effects on tribal cultural resources. Additionally, **mitigation measure CUL-4** would ensure proper procedures are in place if human remains are discovered during construction and for the remains analyzed to determine origin and disposition pursuant to PRC Section 5097.98. Therefore, the District would be in compliance with EO 13007.

5.15 Magnuson-Stevens Fishery Conservation and Management Act

The Magnuson-Stevens Fishery Conservation and Management Act as amended (16 U.S.C. Section 1801 et seq.) is the primary act governing federal management of fisheries in federal waters, from the 3-nautical-mile state territorial sea limit to the outer limit of the U.S. Exclusive Economic Zone. The act establishes exclusive U.S. management authority over all fishing within the U.S. Exclusive Economic Zone, all anadromous fish throughout their migratory range except when in a foreign nation's waters, and all fish on the continental shelf. The act establishes eight Regional Fishery Management Councils responsible for the preparation of fishery management plans to achieve the optimum yield from U.S. fisheries in their regions. The act also requires federal agencies to consult with the NMFS on actions that could damage essential fish habitat, as defined in the 1996 Sustainable Fisheries Act (Public Law No. 104-297). Essential fish habitat includes those habitats that support the different life stages of each managed species. A single species may use different habitats that consist of both the water column and underlying surface (e.g., streambed) throughout its life to support breeding, spawning, nursery, feeding, and protection functions.

The proposed Project would not be located in, nor adversely affect any U.S. federal waters regulated under the Magnuson-Stevens Act. Therefore, the proposed Project would have no adverse effects on resident or migratory fish or fish habitat, and the District would be in compliance with the Magnuson-Stevens Act.

Chapter 6.0
CEQA Mandated Analysis

CEQA Guidelines Section 15126.2(b) and (c) require that the significant unavoidable impacts of the project, as well as any significant irreversible environmental changes that would result from project implementation, be addressed in the EIR. Additionally, CEQA Guidelines Section 15126.2(e) requires that an EIR evaluate the "growth-inducing" effects of a project. These mandated topics associated with implementation of the proposed Project are discussed below.

6.1 Significant Environmental Effects Which Cannot Be Avoided if the Project is Implemented

In accordance with CEQA Guidelines Section 15126.2(b) any significant unavoidable impacts of a project, including those impacts that can be mitigated but not reduced to below a level of significance despite the applicant's willingness to implement all feasible mitigation measures, must be identified in this PEIR. Implementation of the proposed Project would result in significant, unavoidable construction noise impact (Impact NOI-3). Implementation of BMPs presented in Section 3.5.1 would reduce the magnitude of construction noise; however, this impact would remain significant and unavoidable as detailed in Section 4.11, Noise.

A Statement of Overriding Considerations, consistent with CEQA Guidelines Section 15093, will be prepared for certification with the Final PEIR, identifying specific economic, legal, social, technological, or other benefits of the project that would allow approval of the project to outweigh the unavoidable impacts.

6.2 Significant Irreversible Environmental Changes Which Would Result if the Project is Implemented

In accordance with CEQA Guidelines Section 15126.2(d):

> Uses of nonrenewable resources during the initial and continued phases of the project may be irreversible since a large commitment of such resources makes removal or nonuse thereafter unlikely. Primary impacts and, particularly, secondary impacts (such as highway improvements which provide access to a previously inaccessible area) generally commit future generations to similar uses. Also irreversible damage can result from environmental accidents associated with the project. Irretrievable commitments of resources should be evaluated to assure that such current consumption is justified.

For purposes of CEQA, nonrenewable resources are those that cannot be replaced or restored within a human time scale once they are converted or destroyed. These include agricultural land (which may be permanently converted to nonagricultural uses); biological resources such as sensitive

species, wetlands, and wildlife habitat (which may be permanently lost or fragmented); archaeological, tribal cultural, and paleontological resources (which are unique and cannot be recreated once disturbed); mineral deposits (which are finite); and certain water bodies and energy sources that are limited in supply. A significant irreversible impact would occur if implementation of the proposed Project resulted in the permanent loss, conversion, or degradation of these resources such that their functions or values could not be restored, avoided, or substantially reduced through mitigation. However, implementation of the proposed Project would not result in significant irreversible impacts to nonrenewable resources because project activities would be subject to avoidance, minimization, and compensatory mitigation measures, as well as future project-level environmental review, which would ensure that any irreversible commitments of resources are reduced to a less than significant level.

The Project site supports sensitive species, riparian habitat, jurisdictional wetlands, and wildlife corridors and nursery sites. Absent project-level plans for each phase of development required to implement the proposed Project, it is not possible to state whether sensitive species, sensitive natural communities and riparian habitat, jurisdictional wetlands, wildlife corridors and nursery sites would be adequately protected on-site from impacts. Development under the proposed Project would be required to implement applicable mitigation measures identified in Section 4.3 of this PEIR, and to comply with all applicable regulatory requirements. Although some impacts to biological resources may be irreversible, implementation of these measures would reduce impacts to a less than significant level under all scenarios.

The proposed Project would have the potential to disturb archaeological and tribal cultural resources during grading activities. Impacts to archaeological and tribal cultural resources would be mitigated to a less than significant level through implementation of the mitigation measures outlined in Section 4.4 of this PEIR.

Soils within the Project site have a low potential for paleontological sensitivity. Therefore, as evaluated in Section 4.6 of this PEIR, the proposed Project would not result in significant irreversible impacts to paleontological resources.

The Project site does not contain agricultural or forestry resources, nor are there Prime Farmland, Unique Farmland, or Farmland of Statewide Importance present on-site. Land within the Project site has been designated as Urban Area. Therefore, as evaluated in Chapter 7.0 of this PEIR, the proposed Project would not result in significant irreversible impacts to agriculture and forestry resources. Urban areas are not defined as mineral resource zones because mining in these areas is already precluded by urban development. Similarly, there are no active mineral resource recovery sites identified in the City of Menifee General Plan that are located within the proposed Project site. Therefore, as evaluated in Chapter 7.0 of this PEIR, the proposed Project would not result in significant irreversible impacts to mineral resources.

Construction and operation of the proposed Project would not result in the wasteful, inefficient, and unnecessary consumption of energy. Therefore, as evaluated in Section 4.5 of this PEIR, the proposed Project would not result in significant irreversible impacts to energy sources.

6.3 Growth Inducement

CEQA Guidelines Section 15126.2(e) requires that an EIR:

> Discuss the ways in which the proposed Project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Included in this are projects which would remove obstacles to population growth (a major expansion of a waste water treatment plant might, for example, allow for more construction in service areas). Increases in the population might tax existing community services facilities, requiring construction of new facilities that could cause significant environmental effects. Also discuss the characteristic of some projects which may encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively. It must not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment.

A project can directly or indirectly induce growth. Construction of new housing would directly induce population growth. Additionally, if a project creates substantial new permanent employment opportunities, it could indirectly induce growth by stimulating the need for additional housing and services to support the new employment demand. It could also indirectly induce growth by constructing new infrastructure or removing infrastructure limitations or regulatory constraints on a required public service, such as roads or water and wastewater service.

6.3.1 Population and Housing Growth

The proposed Project involves construction/operation of sewer infrastructure needed to replace existing septic systems within Subarea 4 and would not introduce any residential or commercial uses. Future growth within Subarea 4 would be based on the existing land use designations established by the City. As described in Section 4.10.1.1 above, land use designations within Subarea 4 consist of a mix of residential, commercial, public facilities, and specific plan. Although the Santa Ana RWQCB placed a moratorium on septic systems in Quail Valley in 2005 that halted residential development, this did not change any of the land use designations established by the City. Therefore, the moratorium on septic systems within Quail Valley represented a pause in development, and introduction of sewer infrastructure would allow the community to recommence residential development consistent with the land use designations established by the City. As described in Section 4.13.5.1 above, flows from the proposed Project are included in the Perris Valley RWRF's assumed flows and would be accommodated by existing permitted capacity. Consequently, the proposed Project would not require development of new wastewater treatment infrastructure that would create increased capacity and allow for future growth that is currently unplanned. Therefore, the proposed Project would accommodate existing and planned residential development within Subarea 4 and would not induce population growth.

6.3.2 Removal of an Impediment to Growth

Furthermore, the proposed Project would not extend infrastructure into undeveloped areas that would allow for future growth that is currently unplanned. As described in Section 6.3.1 above, future growth within Subarea 4 would be based on the existing land use designations established by the City. Although there are numerous undeveloped parcels within Subarea 4, the City anticipates development of these parcels based on the land use designations established in the general plan. Consequently, the lack of existing sewer infrastructure is not impeding growth within Subarea 4, as future development within the area is anticipated by the general plan, and the project would accommodate planned growth. As described in Section 6.3.1 above, the moratorium on septic systems within Quail Valley represented a pause in development, and introduction of sewer infrastructure would allow the community to recommence residential development consistent with the land use designations established by the City. Therefore, the proposed Project would not remove an impediment to unplanned growth but would instead accommodate planned development anticipated under the general plan.

6.3.3 Foster Economic or Employment Growth

The proposed Project would not introduce any new major retail, commercial, or employment centers that would encourage substantial economic or employment growth. Rather, the proposed Project would provide wastewater services to existing residences within Subarea 4. Therefore, the proposed Project would not foster economic and employment growth.

6.4 Conclusion

The proposed Project would not be growth-inducing as it would provide wastewater services to existing and planned residential development within Subarea 4. The proposed Project would not remove an impediment to growth, nor does it propose to develop, or permit the encroachment into an isolated area adjacent to open space or foster economic and employment expansion. As discussed above, the proposed Project would accommodate projected population growth and would not be considered growth inducing because it would provide sewer infrastructure for existing residences and projected population growth.

Chapter 7.0
Effects Found Not to be Significant

Section 15128 of the CEQA Guidelines requires an EIR to briefly describe potential environmental effects determined not to be significant, and therefore were not discussed in detail in the EIR. Based on an initial environmental review, the District determined that the proposed Project would not have the potential to cause significant impacts associated with the environmental categories discussed below.

7.1 Agricultural and Forestry Resources

According to CEQA Guidelines Appendix G, a significant impact on agricultural and forestry resources would occur if the proposed Project would:

1) 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 non-agricultural use;

2) Conflict with existing zoning for agricultural use, or a Williamson Act contract;

3) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in PRC 12220[g]), timberland (as defined by PRC Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104[g]);

4) Result in the loss of forest land or conversion of forest land to non-forest use; or

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

The California Department of Conservation, Division of Land Resource Protection, identifies important farmland throughout the state through its FMMP. The FMMP is non-regulatory and was developed to inventory land and provide categorical definitions of important farmlands and consistent and impartial data to decision-makers for use in assessing present status, reviewing trends, and planning for the future of California's agricultural land resources. The FMMP classifies Subarea 4 as Urban and Built-Up Land and the two potential site options for the regional lift station (LS-1) as Other Land (DOC 2022). Similarly, there are no Williamson Act Contracts or agricultural preserves designated within the Project site, nor are any properties within the Project site zoned for agricultural uses. The City does not have a zoning classification for forestland, timberland, or timberland production zones. The proposed Project site does not contain forest or timberland as defined by PRC Section 12220(g), PRC Section 4526, or Government Code Section 51104(g), and is not zoned as forest or timberland. Additionally, there is no forest land within the Project site. Therefore, the proposed Project would not adversely affect any agricultural and forestry resources. No impact would occur.

7.2 Mineral Resources

According to CEQA Guidelines Appendix G, a significant impact on mineral resources would occur if the proposed Project would:

1) 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; or

2) 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.

The State Mining and Geology Board establishes Mineral Resource Zone designations that quantify the mineral resource potential for specific locations across California. As shown in Figure 5.11-1 of the City's General Plan EIR (City of Menifee 2013), land within the Project site has been designated as Urban Area. Urban areas are not defined as mineral resource zones because mining in these areas is already precluded by urban development. Similarly, there are no active mineral resource recovery sites identified in the City's General Plan that are located within the Project site. Therefore, the proposed Project would not result in the loss of availability of a known mineral resource or a locally important mineral resource recovery site. No impact would occur.

7.3 Population and Housing

According to CEQA Guidelines Appendix G, a significant impact on population and housing would occur if the proposed Project would:

1) 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); or

2) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere.

The proposed Project is limited to replacing existing private septic systems with a gravity sewer system and would not introduce any residential or commercial uses. The proposed Project would accommodate existing and future planned residences within Subarea 4. No infrastructure would be extended into undeveloped areas unplanned for future growth. The proposed Project would require acquisition of vacant properties for the five proposed lift stations. Some of the pipeline work may necessitate the acquisition of vacant properties or easements across parcels. The proposed Project, as designed, would not necessitate acquisition of developed properties. Therefore, the proposed Project would not displace existing housing or residents. The proposed Project would not induce unplanned growth or displace existing people or housing. No impact would occur. The potential for the proposed Project to indirectly induce population growth is further evaluated in Chapter 6, CEQA Mandated Analysis.

7.4 Public Services

According to CEQA Guidelines Appendix G, a significant impact on public services would occur if the proposed Project would:

1) 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
    b. Police Protection
    c. Schools
    d. Parks
    e. Other Public Facilities

The proposed Project replaces existing private septic systems with a sewer conveyance system. The proposed Project would not introduce residential, commercial, or other uses that require fire protection services, police protection services, school facilities, parks, or other public facilities such as libraries and government administrative services. Additionally, the proposed Project has been designed to meet demand for existing uses and planned development and would not provide for excess capacity that could induce growth. Furthermore, the proposed Project would not extend sewer infrastructure into undeveloped, unplanned areas. Therefore, the proposed Project would not result in the need for new or altered public services facilities, and impacts would be less than significant.

7.5 Recreation

According to CEQA Guidelines Appendix G, a significant impact on recreation would occur if the proposed Project would:

1) 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; or

2) Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.

The proposed Project is limited to replacing existing private septic systems with a gravity sewer system. The parcels identified for acquisition or easement needs for the sewer lift stations and connector pipes are not planned or designated for recreational use (see Section 4.10). The proposed Project would not introduce any residential uses that would increase the use or demand for park or recreational facilities. The proposed Project also does not include construction of recreation facilities which could have impacts on the environment. Therefore, no impact related to recreation would occur.

Chapter 8.0
Cumulative Impact Analysis

8.1 Introduction

CEQA Guidelines Section 15130(a) requires an EIR to discuss of cumulative impacts of a project "when the project's incremental effect is cumulatively considerable, as defined in CEQA Guidelines Section 15065(a)(3)." Section 15355 defines cumulative impacts as "two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts."

According to CEQA Guidelines Section 15130(b), the discussion of cumulative effects "need not provide as great detail as is provided for the effects attributable to the project alone. The discussion should be guided by the standards of practicality and reasonableness." In determining whether a project's cumulative effects are significant, two determinations are required:

1. Is the combined impact of the project and other projects cumulatively significant?
2. If the cumulative impact is determined to be significant, is the project's incremental effect cumulatively considerable?

Under the CEQA Guidelines a project's incremental effect may be considered less than cumulatively considerable when feasible mitigation measures are incorporated to reduce cumulative impacts.

The cumulative impact analysis in an EIR must convey both the magnitude of the impacts and the probability that they would occur. This discussion, however, is not required to be as detailed as the analysis of impacts resulting solely from the proposed Project and should be prepared consistent with considerations of practicality and reasonableness.

The geographic scope for evaluating cumulative impacts differs by environmental resource topic. Consistent with CEQA Guidelines Section 15130(b)(3), Table 8-1 identified the geographic areas within which past, present, and reasonably foreseeable future projects could contribute to cumulative impacts when combined with those of the proposed Project.

Table 8-1 Geographic Scope of Cumulative Impact Analyses	
Environmental Topic	Geographic Scope of Cumulative Impact Analyses
Aesthetics	The geographic scope of the cumulative impact analysis for aesthetics is the City.
Air Quality	The geographic scope for the cumulative analysis of criteria pollutant emissions is the South Coast Air Basin. The geographic scope for the cumulative analysis of sensitive receptors is the area in the immediate vicinity of the proposed Project. The geographic scope for the cumulative analysis of odors is the area immediately surrounding potential odor sources. Because odors rapidly disperse beyond their source, associated impacts are generally not cumulative in nature.
Biological Resources	The geographic scope for the cumulative analysis of biological resources includes the localized habitat areas defined generally by topography and man-made features that reduce wildlife movement and generally create a local wildlife ecoregion. This ecoregion includes the entirety of the City.
Cultural and Tribal Cultural Resources	The geographic scope for the cumulative analysis of historic resources, archaeological resources, human remains, and tribal cultural resources is the City, and the traditional use areas of local tribes.
Energy	The geographic scope for the cumulative analysis relative to energy use is the service areas of the energy (electricity and natural gas) providers in the proposed Project area.
Geology/Soils	The geographic scope for the cumulative analysis relative to seismic hazards and other geologic/soil conditions (e.g., fault rupture, groundshaking, ground failure, liquefaction/collapse, landslides, lateral spreading, subsidence, and expansive soils) is generally site-specific and not cumulative in nature. The geographic scope for the cumulative analysis of soil erosion is the watersheds downstream from the Project site. The geographic scope for the cumulative analysis of paleontological resources is the paleontologically sensitive geologic formations within the City.
Greenhouse Gas Emissions	Due to the nature of assessment of GHG emissions and the effects of climate change, impacts can currently only be analyzed from a cumulative context; therefore, the geographic scope for the cumulative analysis of GHG emissions is the global atmosphere.
Hazards and Hazardous Materials	The geographic scope for the cumulative analysis of hazards and hazardous materials is the Project site and any projects in the immediate vicinity.
Hydrology/Water Quality	The geographic scope for the cumulative analysis of hydrology and water quality is the San Jacinto Valley HU of the larger Santa Ana River Watershed.
Land Use and Planning	The geographic scope for the cumulative analysis related to land use and planning includes development adjacent to the proposed Project.
Noise	The geographic scope for the cumulative analysis of noise is the Project site and any projects in the immediate vicinity.
Transportation	The geographic scope for the cumulative analysis related to the circulation system, VMT, traffic hazards, and emergency access is the circulation network in the vicinity of the Project site.

Table 8-1 (cont.) Geographic Scope of Cumulative Impact Analyses	
Environmental Topic	Geographic Scope of Cumulative Impact Analyses
Utilities and Service Systems	The geographic scope for the cumulative analysis of utilities and service systems is the District's service area and the energy (electricity and natural gas) providers in the Project area, which are SCE and SoCalGas.
Wildfire	The geographic scope for the cumulative analysis of wildfire is the Project site and any projects in the immediate vicinity.
City = City of Menifee; proposed Project = Quail Valley Subarea 4 Project; GHG = greenhouse gas; HU = Hydrologic Unit; VMT = vehicle miles traveled; District = Eastern Municipal Water District; SCE = Southern California Edison; SoCalGas = Southern California Gas Company	

8.2 Cumulative Impact Analysis Methodology

CEQA Guidelines Section 15130(b) indicates the following approaches for identifying cumulative projects:

- A list of past, present, and probable future projects producing related or cumulative impacts, including, if necessary, those projects outside the control of the agency; or

- A summary of projections contained in an adopted general plan or related planning document, or in a prior environmental document which has been adopted or certified, which described or evaluated regional or area-wide conditions contributing to the cumulative impact.

This PEIR utilizes both the project list approach and summary of projections approach. Utilizing both approaches together provides for conservative analysis of potential cumulative impacts because it considers impacts generated by regional growth, as well as individual projects that would have the potential to be significant in combination with localized impacts generated by the proposed Project. Construction of the proposed Project is planned to occur in eight phases over an approximately 20-year period; therefore, the analysis considers both overlapping and sequential projects that may contribute to cumulative impacts over time.

8.2.1 Projections

Growth projections from SCAG's 2024-2050 Regional Transportation Plan/Sustainable Communities Strategy were utilized for this cumulative analysis, also known as Connect SoCal 2024 (SCAG 2024). Connect SoCal provides a regional planning framework based on growth forecasts, land use planning, mobility improvements, environmental protection, and economic opportunities. Connect SoCal 2024 addresses a broad range of planning considerations for the broader region in which the proposed Project would be located rather than focusing on specific resources.

Connect SoCal includes the population data only for the 2019 plan base year for the City. Therefore, population growth projections used for this cumulative impact analysis are derived from the City's 2021–2029 Housing Element (City of Menifee 2021). Because the Project site is located within the City, the cumulative impact analysis is based on City-specific projections.

As shown in **Table 8-2**, growth projections for population for the years 2020, 2035, and 2045, and for households and employment for the years 2019, 2035, and 2050. As shown in **Table 8-2**, the population of the City's is forecast to increase by approximately 37.3 percent between 2020 and 2045.

Table 8-2 City of Menifee Forecast of Population, Households, and Employment			
Category	2020	2035	2045
Population	94,518	115,690	129,750
Category	2019	2035	2050
Households	34,000	44,300	49,100
Employment	17,300	25,800	31,300
Sources: City of Menifee 2021; Southern California Association of Governments 2024.			

8.2.2 Cumulative Projects

Cumulative impacts could occur when the effects of the proposed Project in combination with those of other projects in the surrounding area. Whether such combined effects would result in a cumulative impact depends on the location, size, and timing of the projects. The proposed pipelines would be installed completely underground, and the proposed lift stations would be primarily subterranean, with above-ground features including access hatches, electrical control panels, an emergency generator within an enclosure, and other associated equipment. Operation of the proposed lift stations would require periodic maintenance and inspection.

Since the proposed project would have minimal operational impacts, this cumulative impact analysis focuses primarily on potential construction-related impacts, as well as the Project's incremental contribution to longer-term resource degradation. Accordingly, this analysis considers projects in proximity to the proposed Project's components that could contribute to cumulative impacts, including those with overlapping construction activities as well as those occurring at different times but affecting the same resources (e.g., gradual loss of sensitive habitats or impacts to cultural and tribal cultural resources). The proposed Project is located within the Quail Valley community of the City. The City is rapidly developing with residential development. This analysis therefore considers these types of projects proposed within two miles of the Project site and that have potential to be constructed concurrently with the Project. The analysis also includes the Quail Valley Nature Park located on the southern boundary of the Project site. Projects were selected to provide a conservative identification of projects that have potential to meaningfully contribute to cumulative impacts. Construction schedules for future projects are often broadly estimated and can be subject to change. Although the timing of the future cumulative projects is likely to fluctuate due to schedule changes or other factors, this analysis conservatively assumes these projects would be implemented concurrently with the proposed Project.

Cumulative projects considered in this analysis are shown in **Figure 8-1** and identified in **Table 8-3**.

Image Source: USGS Topographic Map

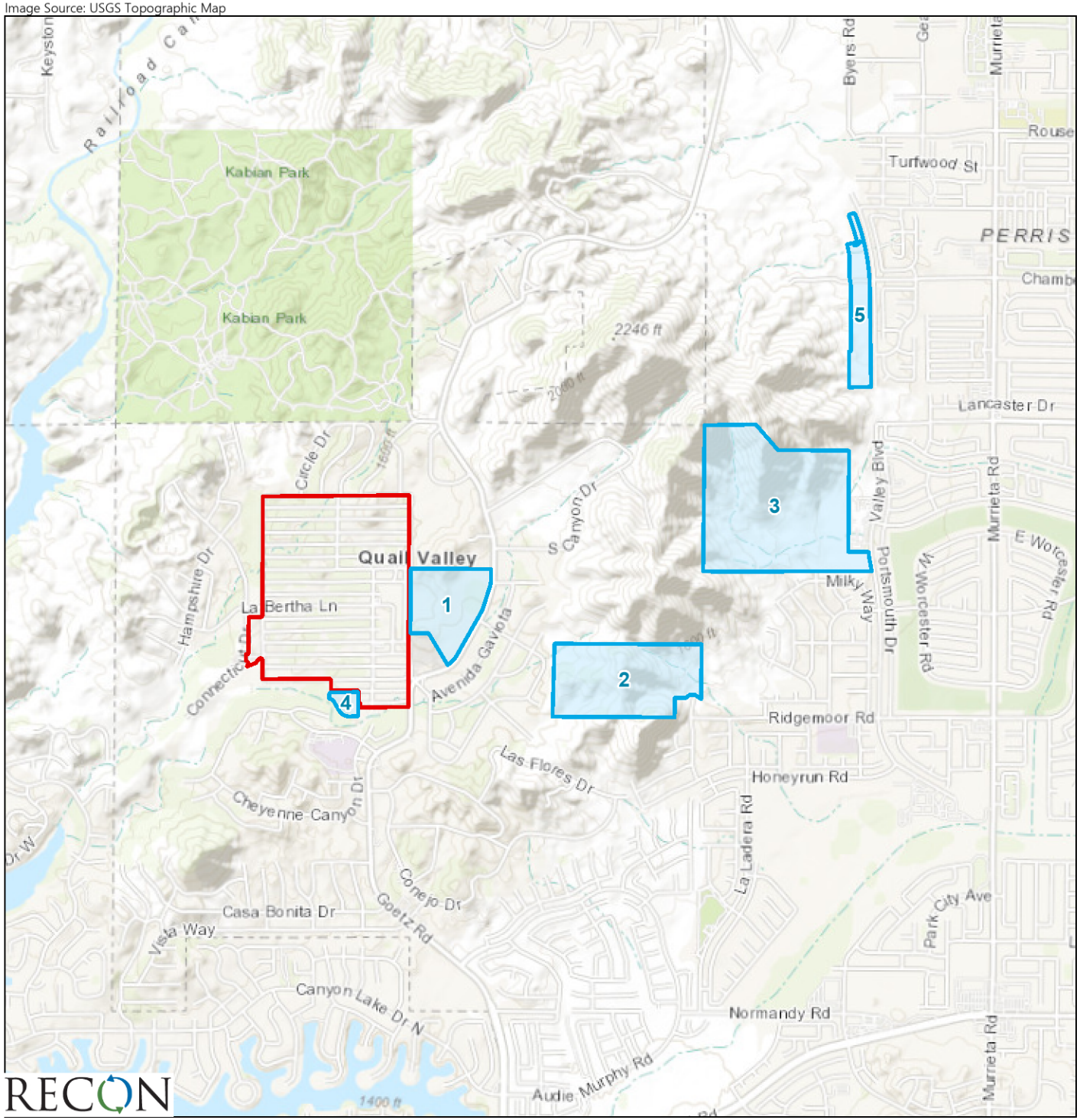

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FIGURE 8-1
Cumulative Project Locations

Table 8-3 List of Cumulative Projects			
Number	Project Name	Development Description	Status
1	Quail Hills	145 residential lots on 43.4 acres.	Approved Planning
2	Oak Hills West	37 lot tract map with up to 74 duplex units.	Approved Planning
3	Enclave	177 residential lots on 161.34 acres.	Approved Planning
4	Quail Valley Nature Park (CIP No. 24-16)	10.45-acre park consisting of active recreation and walking trails throughout the open space.	Design
5	Valley Boulevard Tract Map	68 residential lot on 21.95 acres.	Final Engineering
Source: City of Menifee 2026.			

8.3 Cumulative Impact Analysis

This section addresses potential cumulative impacts associated with each environmental resource topic analyzed in Chapter 4.0. As discussed in Chapter 7.0, the proposed Project would result in negligible effect on the remaining environmental resources topics identified in CEQA Guidelines Appendix G. Therefore, the proposed Project would not have the potential to result in a cumulatively considerable contribution to environmental impacts related to those environmental resource categories and they are not addressed in this chapter.

8.3.1 Aesthetics

8.3.1.1 Impact Analysis

The geographic scope of the cumulative analysis for aesthetics is the City, as cumulative visual effects result from the combined influence of multiple projects and ongoing development over time. Past, present, and reasonably foreseeable development within the City, including projects identified in Table 8-3 and growth anticipated under the City's General Plan and SCAG's Connect SoCal 2024 (see Table 8-2), would incrementally alter visual character primarily through larger scale, above-ground structures and expanded urban development.

Within this cumulative context, the proposed Project would result in minimal long-term visual change and would not substantially degrade scenic vistas or damage scenic resources (Threshold 1 and 2). Project components would be largely subterranean, with wastewater pipelines located underground and disturbed areas restored to pre-project conditions following construction. Aboveground elements would be limited to small lift station facilities. LS-2, LS-3, LS-4, and LS-5 would be enclosed within six-foot-tall concrete masonry unit walls, while retaining walls associated with LS-1 (Options 1 and 2) would extend only approximately eight feet above finished grade, with the majority of wall height located below grade. When considered together with cumulative development, the proposed Project's aboveground features (e.g., access hatches, electrical control panels, and emergency generators) would remain low-profile and consistent with surrounding utility infrastructure and residential development. As a result, the proposed Project would not meaningfully contribute to cumulative changes in visual character or quality (Threshold 3).

Cumulative light and glare impacts in the City would primarily result from residential, commercial, and transportation-related development. The proposed Project would not include large expanses of reflective materials or highly polished surfaces. Operation of the proposed lift stations would include

security lighting designed and installed in compliance with the City's Municipal Code (Chapter 6.01) and Title 24 of the California Building Standards Code, which establishes requirements to minimize glare, light trespass, and light pollution. Cumulative projects within the City would similarly comply with the requirements of the City's Municipal Code (Chapter 6.01) and Title 24 of the California Building Standards Code regarding glare, light trespass, and light pollution. Consequently, the proposed Project would not introduce a new or intensified source of light or glare that would combine with other development to adversely affect daytime or nighttime views (Threshold 4). Overall, the proposed Project's incremental contribution to cumulative aesthetic impacts would not be cumulatively significant.

8.3.2 Air Quality

8.3.2.1 Impact Analysis

The geographic scope for the cumulative analysis related to air quality plans and criteria pollutant emissions would be the Basin. The evaluation of consistency with the AQMP (Threshold 1) is cumulative in nature because it considers project consistency with a regional air quality plan that relies on the land use plans of jurisdictions within the Basin. As discussed in Section 4.2.5, the proposed Project would be consistent with local growth projections and would not result in increased density or changes to existing land uses within the Project site. The proposed Project would not result in any cumulative growth, as it would provide sewer services to existing and planned development. Furthermore, construction and operational emissions would be less than the applicable SCAQMD thresholds for all criteria pollutants (Threshold 2). These thresholds were used to assess the significance of the project-specific and cumulative air quality impacts. Therefore, the proposed Project would not conflict with or obstruct implementation of the applicable air quality plan and would not result in a cumulatively considerable net increase in emissions of ozone, PM_{10}, or $PM_{2.5}$.

The geographic scope for the cumulative analysis of sensitive receptors is the area in the immediate vicinity of the proposed Project. As discussed in Section 4.2.7 (Threshold 3), residential uses within the proposed Project site that would be exposed to DPM concentrations of 0.01465 µg/m^3 or greater during construction would be exposed to a maximum incremental cancer risk greater than 10 in a million, resulting in a potentially significant direct impact. As DPM concentrations decrease rapidly with distance from construction equipment, this is considered a localized impact and would not result in cumulative impacts to sensitive receptors outside the proposed Project site. Furthermore, implementation of **mitigation measure AQ-1** would reduce direct impacts to sensitive receptors during construction activities to a less than significant level. Cumulative projects would be required to implement similar measures during construction to reduce DPM concentrations. Cumulative impacts associated with routine testing of the emergency generators would be less than significant because the generators would be required to meet the conditions specified in Section 4.2.4.2.d. The generators would be equipped with Level 3 DPF systems if necessary to meet SCAQMD emission requirements as determined during the SCAQMD permitting process, which would ensure the equipment meets all applicable air quality requirements. Cumulative projects would be required to meet SCAQMD requirements for emergency generators and other stationary sources of emissions. Furthermore, the proposed Project would not result in the exposure of sensitive receptors to substantial pollutant concentrations from heavily traveled roadways, result in a CO hot spot, or result

in a significant odor impact. Therefore, the proposed Project would not result in a cumulative impact to sensitive receptors.

The geographic scope for the cumulative analysis of odors is the area immediately surrounding potential odor sources. Odors typically do not result in cumulative impacts due to their rapid dispersal beyond their source. As discussed in Section 4.2.8 (Threshold 4), the proposed Project would not result in substantial odor generation during construction and would not generate odors during operation. Therefore, the project would not combine with other cumulative projects to result in a cumulatively significant impact related to objectionable odors.

8.3.3 Biological Resources

8.3.3.1 Impact Analysis

The geographic scope for the cumulative analysis of biological resources includes the localized habitat areas defined generally by topography and man-made features that reduce wildlife movement and generally create a local wildlife ecoregion. This ecoregion includes the entirety of the City.

The proposed Project includes mitigation measures that would ensure that potential significant impacts to sensitive species (Threshold 1), sensitive natural communities and riparian habitat (Threshold 2), jurisdictional wetlands (Threshold 3), and wildlife corridors and nursery sites (Threshold 4) would be reduced to a less than significant level. As detailed in Section 4.3 above, implementation of mitigation measures BIO-1 through BIO-14b would reduce the proposed Project's incremental contribution to cumulative impacts on biological resources. Cumulative projects would be required to implement similar mitigation measures to reduce impacts on biological resources to a level less than significant, thereby avoiding their own contribution to cumulative impacts. Therefore, the proposed Project would avoid a cumulatively considerable contribution to impacts associated with sensitive species, sensitive natural communities and riparian habitat, jurisdictional wetlands, and wildlife corridors and nursery sites. Impacts would be less than cumulatively considerable.

In addition, compliance with applicable local, regional, state, and federal regulations, together with implementation of the identified mitigation measures, would ensure that the proposed Project would not conflict with local policies or ordinances protecting biological resources, including provisions of the City's General Plan and applicable resource protection ordinances (Threshold 5). Cumulative projects within the City would be subject to the same regulations and mitigation requirements to minimize impacts on biological resources. Therefore, the proposed Project would not have the potential to combine with cumulative projects to result in a cumulatively significant impact.

Regarding regional conservation plans (Threshold 6) The Western Riverside County MSHCP is the regional planning document designed to preserve biological resources by focusing on the conservation of species and their associated habitats. Projects that are consistent with the Western Riverside County MSHCP would not contribute a cumulative impact to biological resources. The proposed Project is not located within an MSHCP designated criteria cell, nor located within any MSHCP narrow endemic plant species survey area, criteria area plant species survey area, Although small portion of the proposed Project site that is located within the MSHCP survey area for burrowing

owl, the proposed Project would implement the requirements for burrowing owl surveys, if required (see Section 4.3.5.1.b above). Similarly, the proposed project would implement requirements related to preserving adjacent riparian and riverine habitats consistent with the Western Riverside County MSHCP as described in Subsection 4.3.6.1.b above. Consequently, the project would be consistent with the Western Riverside County MSHCP and would not contribute to a regional loss of any biological resources protected by the plan. Cumulative projects would similarly be required to comply with the requirements of the Western Riverside County MSHCP. Similarly, the Project is located within the limits of the Stephens' Kangaroo Rat HCP Area. In accordance with **mitigation measure BIO-9**, the District will pay the Stephens' Kangaroo Rat Mitigation fee of $500 per acre of impact to the RCHCA, which implements the Stephens' Kangaroo Rat HCP. As such, implementation of the proposed Project would not conflict with the Stephens' Kangaroo Rat HCP. Cumulative projects would similarly be required to comply with the requirements of the Stephens' Kangaroo Rat HCP as applicable. Therefore, the proposed Project would not have the potential to combine with cumulative projects to result in a cumulatively significant impact.

8.3.4 Cultural and Tribal Cultural Resources

8.3.4.1 Impact Analysis

The geographic scope for the cumulative analysis of historic resources, archaeological resources, human remains, and tribal cultural resources is the City, and the traditional use areas of local tribes. The proposed Project would not impact any historic resources (Threshold 1), and therefore would not contribute to a cumulative impact. Cumulative projects listed in **Table 8-3** may include demolition and/or ground-disturbing activities with the potential to impact historical resources, archaeological resources, human remains, and tribal cultural resources.

Implementation of **mitigation measures CUL-1 through CUL-4** would reduce the proposed Project's incremental contribution to cumulative impacts on archaeological and tribal cultural resources to a less than significant level. Cumulative projects would be required to implement similar measures during construction to avoid impacts to archaeological and tribal cultural resources. Implementation of **mitigation measure CUL-5** would ensure that the project would not impact human remains. Cumulative projects would also be required to implement similar measures during construction consistent with HSC Section 7050.5 and PRC Section 5097.98, which would prevent cumulative impacts related to human remains (Threshold 3). Through implementation of these mitigation measures, the proposed Project's contribution to a cumulatively significant impact to historic resources and archaeological resources would not be cumulatively considerable.

8.3.5 Energy

8.3.5.1 Impact Analysis

The geographic scope for the cumulative analysis relative to energy is the service areas of the energy (electricity and natural gas) providers for the proposed Project and surrounding area, which are SCE and SoCalGas. When combined, the projects identified in **Table 8-3** could contribute to a regional increase in energy use through their use of gasoline and diesel, electricity, and/or natural gas during

construction and operation. However, each project would be subject to applicable energy efficiency regulations, including Title 24 requirements, CALGreen energy requirements, and vehicle fuel efficiency requirements. Compliance with these requirements would ensure that energy use associated with the cumulative projects would not be excessive, inefficient, or unnecessary.

As described in Section 4.5 (Threshold 1), energy consumption used during construction of the proposed Project would not represent a substantial portion of the available energy supply in terms of equipment and transportation fuels. Furthermore, compliance with anti-idling and emissions regulations (see Section 4.5.2.2.g) would result in a more efficient use of construction-related energy and the minimization or elimination of wasteful and unnecessary consumption of energy. The proposed Project would be required to implement mitigation measure AQ-1, which would require the use of Tier 4 construction equipment. Although this mitigation measure is not necessary to reduce energy-related impacts to a less than significant level, it would further reduce construction-related energy consumption. Cumulative projects would be required to implement similar measures during construction to reduce energy consumption. As such, the combined effects from all projects within the geographic scope related to energy use would not be cumulatively significant.

The proposed Project would comply with the District's CAP, which supports and promote energy efficiency with respect to transportation fuel consumption in line with Connect SoCal 2024. During project operation, maintenance trips would be minimal and would be conducted using the District's fleet, which would include more ZEVs in accordance with the District's CAP. Energy consumption associated with lift station operation would also be minimal. Furthermore, cumulative projects would be required to comply with applicable plans and policies related to energy use, including the Title 24 Building Energy Efficiency Standards, CALGreen energy requirements, and fuel efficiency standards for vehicles. As such, the combined effects from cumulative projects within the geographic scope related to consistency with energy plans would not be cumulatively significant.

8.3.6 Geology/Soils

8.3.6.1 Impact Analysis

The geographic scope relative to seismic and geologic hazards is site-specific, and not cumulative in nature. Impacts associated with one cumulative project would not exacerbate risk associated with a project in another location because risks are associated with site-specific geologic conditions and proposed structure types and designs. As discussed in Section 4.6 (Thresholds 1, 3, and 4), the proposed Project would not result in significant impacts related to seismic hazards, geologic instability, or expansive soils. Therefore, the proposed Project, in combination with other cumulative projects, would not result in a cumulatively significant increase in exposure to seismic and geologic hazards.

The geographic scope for the cumulative analysis of soil erosion (Threshold 2) is the watersheds downstream from the Project site that could be affected by sedimentation through stormwater flows. Ground disturbance generated by cumulative projects would have the potential to incrementally increase sedimentation. However, construction of cumulative projects would be required to comply with applicable local, state, and regional water quality standards and water quality measures. This would entail obtaining a NPDES Construction General Permit and implementing a SWPPP during

construction. Like the proposed Project, cumulative projects would be required to comply with SCAQMD Rule 403 for dust control and implement BMPs during construction, consistent with the requirements of the NPDES Construction General Permit, Therefore, impacts related to loss of top soil and soil erosion would not be cumulatively significant.

The proposed Project would replace existing private septic systems with a gravity sewer system and does not include the use of septic tanks or alternative wastewater disposal systems (Threshold 5). Therefore, the proposed Project would not have the potential to combine with cumulative projects to result in a cumulatively significant impact.

The geographic scope for the cumulative analysis of paleontological resources (Threshold 6) is the paleontologically sensitive geologic formations within the City. Ground disturbance generated by cumulative projects may have the potential to impact paleontological resources. According to Exhibit OSC-4, Paleologic Resource Sensitivity, in City's General Plan, cumulative projects 2, 3, and 5 would be located (at least partially) in areas of high paleontological sensitivity. The Project site has a low potential for paleontological sensitivity and therefore, would not have the potential to combine with cumulative projects to result in a cumulatively significant impact. Overall, the proposed Project would not result in a cumulative impact related to geology and soils.

8.3.7 Greenhouse Gas Emissions

8.3.7.1 Impact Analysis

The issue of global climate change is inherently a cumulative issue, as GHG emissions of individual projects cannot be shown to have a material effect on global climate change. Impacts would be cumulative in nature if they lead to a substantial increase in GHG emissions, when combined with other development. As discussed in Section 4.7.6, EOs S-3-05 and B-30-15 established GHG emission reduction targets for the state, and AB 32 launched the CARB Climate Change Scoping Plan that outlined the reduction measures needed to reach the 2020 target, which the state has achieved. As required by SB 32, CARB's 2017 Scoping Plan outlines reduction measures needed to achieve the interim 2030 target, and the 2022 Scoping Plan outlines the path towards carbon neutrality by 2045.

As detailed in under Section 4.7 (Threshold 1), the proposed Project would result in GHG emissions below the SCAQMD proposed Tier 3 screening threshold of 3,000 MT CO_2E per year. Construction and operation of the proposed Project would not result in emissions that would adversely affect statewide attainment of GHG emission reduction goals as described in AB 32, EOs S-3-05 and B-30-15, and SB 32 (Threshold 2). Therefore, the proposed Project would have a less than cumulatively considerable contribution to global climate change.

8.3.8 Hazards and Hazardous Materials

8.3.8.1 Impact Analysis

The geographic scope for the cumulative analysis of hazards and hazardous materials is the Project site and any projects in the immediate vicinity. The proposed Project is limited to construction of

sewer infrastructure and would not require the routine use, transport, or disposal of hazardous materials (Thresholds 1 and 2). Construction and operation of the proposed Project would comply with applicable federal, state, and local health and safety requirements for the handling, storage, transportation, and disposal of hazardous materials, as summarized in Section 4.8.2. Compliance with these requirements would ensure that the proposed Project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 miles of an existing or proposed school (Threshold 3).

No active Envirostor or Geotracker hazardous materials sites are located within the Project site. While cumulative development could occur on previously contaminated properties, any new development or redevelopment would be required to comply with applicable federal, state, regional, and local regulations, including cleanup and remediation requirements. This would include compliance with requirements of SCAQMD Rule 1403 for the assessment and removal of asbestos-containing material, compliance with Title 22, Division 4.5 of the CCR for the removal of hazardous materials during demolition activities, and compliance with Title 8 of the CCR, regarding limits, exposure monitoring, respiratory protection, and good working practices during demolition, grading, and excavation, as well management and disposal in accordance with the applicable provision of the HSC. Therefore, the proposed Project would not contribute to a cumulative impact related to hazardous materials sites (Threshold 4).

The proposed Project is not located within an airport land use plan or within two miles of a public airport (Threshold 5), and therefore would not contribute to a cumulative impact related to this topic. Each of the proposed Project's eight phases would be required to prepare a TCP for all work within public roadways that would maintain adequate emergency response and emergency evacuation. In the event of an emergency, open trenches would be covered with appropriate materials to restore normal traffic flow. Upon completion of construction, all roadways would be restored to preexisting conditions. In the event cumulative projects would require temporary closures of lanes, or even entire roadway segments, each project would be required to implement a site-specific TCP with measures similar to those described for the proposed Project in Section 4.14.5 to maintain adequate emergency access. Each cumulative project would be required to implement traffic control measures subject to review and approval by the City to ensure compliance with local requirements to maintain emergency access during construction. Similarly, cumulative projects would be required to restore all roadways to preexisting conditions once construction is complete. Therefore, the proposed Project's contribution to the cumulative impairment of emergency response plans would not be cumulatively considerable (Threshold 6). In addition, construction activities associated with both the proposed Project and cumulative projects would comply with PRC Sections 4427, 4428, 4431, and 4442, and applicable fire protection and prevention requirements in the CCR and Cal/OSHA (Threshold 7).

Due to the limited scope of hazardous materials use, and compliance with applicable regulations, the proposed Project would not combine with cumulative projects to result in a cumulatively significant impact related to hazards and hazardous materials. Therefore, the proposed Project's contribution would not be cumulatively considerable.

8.3.9 Hydrology and Water Quality

8.3.9.1 Impact Analysis

The geographic scope for the cumulative analysis of hydrology and water quality is the San Jacinto Valley HU of the larger Santa Ana River Watershed. Cumulative projects have the potential to affect hydrology and water quality in the geographic scope. These projects would be located in the same watersheds and groundwater basins and would be located within or near the same floodplains as the proposed Project. Construction and operation of the cumulative projects could result in erosion or sediment-laden runoff (Threshold 1) and could conflict with water quality control plans (Threshold 5). The projects would have the potential to disrupt existing drainage patterns in a manner that would result in erosion, sedimentation, flooding, increased runoff rates, and increased amounts of polluted runoff (Threshold 3). In addition, the cumulative projects would be at risk of releasing pollutants due to project inundation from a flood event (Threshold 4). Despite these potential effects, cumulative development would be subject to compliance with applicable federal, state, and regional water quality regulations. This would entail obtaining a NPDES Construction General Permit and implementing a SWPPP during construction, as well as adherence to the municipal separate storm sewer systems permit. These watershed-based regulatory measures are designed to prevent individual projects from incrementally contributing to cumulatively considerable impacts. Therefore, cumulative impacts related to water quality (Threshold 1), drainage (Threshold 3), flood hazards (Threshold 4), and consistency with water quality control plans (Threshold 5) would be less than significant.

Regarding groundwater supply (Threshold 2), cumulative projects, including residential development and the Quail Valley Nature Park, would increase impervious surfaces. Cumulative development could reduce groundwater recharge in the area due to additional impervious surfaces; however, cumulative development would be required to comply with applicable groundwater management requirements pursuant to the Sustainable Groundwater Management Act, which is intended to ensure sustainable groundwater use. The proposed Project would introduce limited impervious surfaces associated with the proposed lift stations, while substantial open space would remain within and surrounding Subarea 4, allowing continued groundwater recharge. Therefore, the proposed Project would not substantially decrease groundwater supplies, interfere with groundwater recharge, or obstruct sustainable groundwater management, and it would not combine with cumulative projects to result in a cumulatively significant impact on groundwater supply.

8.3.10 Land Use and Planning

8.3.10.1 Impact Analysis

The geographic scope for the cumulative analysis related to land use and planning includes development adjacent to the proposed Project. Each cumulative project would be evaluated to ensure consistency with the intent and objectives of applicable City planning goals, implementation policies, and zoning requirements. Private development projects would also be required to identify and address any inconsistencies among relevant land use plans. In addition, each development

project would be subject to the City's design review process, which would ensure that projects are compatible with their respective land use designations.

Impacts related to the physical division of a community are generally site-specific. Construction of the proposed Project would be confined to existing rights-of-way and acquired parcels or easements and would not alter the surrounding land use pattern or alter the existing circulation network. Furthermore, each of the proposed Project's eight phases would be required to prepare a TCP for all construction work within public roadways. Ongoing maintenance would not result in a disruption to the surrounding properties. Therefore, the proposed Project, in combination with other cumulative projects, would not physically divide a community (Threshold 1). Implementation of the proposed Project would be exempt from conflicting with the City's land use or zoning designations. Additionally, the proposed Project would be consistent with all applicable land-use policies from the City's General Plan. Therefore, the proposed Project, in combination with other cumulative projects, would not result in a cumulatively significant impact related to land use plans (Threshold 2). Therefore, the project would not contribute to a cumulative impact related to land use.

8.3.11 Noise

8.3.11.1 Impact Analysis

The geographic scope for the cumulative analysis of noise is the Project site and any projects in the immediate vicinity. Noise and vibration attenuate with distance, and cumulative impacts would occur only if construction of nearby projects generated substantial noise simultaneously and in close proximity to sensitive receptors. As identified in Figure 8-1 and Table 8-3, the cumulative projects that border the Project site include the Quail Valley Nature Park project to the south and the Quail Hills residential development project to the east. If construction of the proposed Project and these cumulative projects overlap, cumulative construction noise impacts would occur.

Noise generated by temporary construction-related traffic would be intermittent and confined to specific roadways. In the event that construction workers at a cumulative project would utilize the same roadways as the proposed Project, those vehicles would be subject to the same speed limits, and houses would be located at the same distance from roadway centerlines that would allow for dissipation of noise in a manner that avoid cumulative impacts. Similarly, noise generated by proposed Project emergency generators would be subject to the performance requirements specified in mitigation measure NOI-3, and would also be intermittent and site-specific. Therefore, noise generated by proposed Project emergency generators would not combine with other projects to result in noise levels that exceed the compatibility standards. As outlined in Section 4.11 (Threshold 1), noise impacts due to construction activities at LS-1 (Option 1), LS-1 (Option 2), LS-2, and LS-4 would be less than significant. Noise levels would exceed 80 dB(A) L_{eq} at the residence located closest to LS-3 (Receiver 2) and at the residence located closest to LS-5 (Receiver 1). Noise barriers would be required as mitigation (mitigation measures NOI-1 and NOI-2) in order to reduce potential construction noise impacts to residential receivers. Although noise levels are not anticipated at other lift station locations, due to the close proximity of residential uses to active construction throughout the Project site, BMPs outlined in Section 3.5.1 would be implemented to reduce noise at all lift station sites. Cumulative projects would be required to implement noise

reduction measures tailored to each project site based on site-specific analyses of construction activities. Furthermore, both the proposed Project and cumulative projects would be required to comply with regulations within the City's municipal code related to construction noise. However, the degree to which construction noise levels would be reduced through these types of measures and municipal code compliance for both the proposed Project and cumulative projects cannot be known at a program level of analysis. Due to the close proximity of residential uses throughout the project areas, the proposed Project's incremental contribution to cumulative construction noise impacts would be significant in the event nearby projects were constructed simultaneously.

Vibration impacts (Threshold 2) are limited to the area directly surrounding the source, as vibration attenuates rapidly with distance; therefore, vibration impacts would not be cumulatively significant.

Airport noise impacts (Threshold 3) are limited to areas within mapped airport noise contours. The nearest airport is the Perris Valley Airport, located approximately 3.88 miles northeast of the proposed Project site. The noise contours for the Perris Valley Airport do not extend into the City, and airport noise levels at the proposed Project site are well less than 60 CNEL. As such, the proposed Project would not combine with cumulative projects to result in a cumulatively significant impact related to aircraft noise.

8.3.12 Transportation

8.3.12.1 Impact Analysis

The geographic scope for the cumulative analysis related to the circulation system, VMT, traffic hazards, and emergency access is the circulation network serving the Project site. This includes local roads within Quail Valley Subarea 4, regional serving roadways such as Goetz Road and Newport Road, and regional freeways such as I-215, I-15, and SR-74. Cumulative projects would generate vehicular traffic that could combine to generate vehicular traffic that could affect the circulation network. However, as described in Section 4.12.5, traffic generated by operation of the project would be limited to a maximum of one daily maintenance inspection of the pipelines and lift stations. The addition of one vehicle trip per weekday would represent a negligible increase in traffic, which would not affect roadway or intersection operations on the surrounding roadway network, even in combination with cumulative projects. In the event cumulative projects would require temporary closures of lanes, or even entire roadway segments, each project would be required to implement a site-specific TCP with measures similar to those described for the proposed Project in Section 4.12.5 to maintain adequate roadway circulation. Similarly, cumulative projects would be required to restore all roadways to preexisting conditions once construction is complete. As described in Section 4.12.5, the project would not impact any transit, bicycle, or pedestrian facilities, and therefore would not contribute to a cumulative impact related to these types of facilities. Therefore, the project would not contribute to a cumulative impact related to a conflict within a program, plan, ordinance, or policy addressing the circulation system.

The project's generation of one maximum daily maintenance inspection of the pipelines and lift stations would not represent a meaningful contribution to regional VMT, even in combination with cumulative projects. Because the wastewater pipelines would be underground and the lift stations would be contained within secured sites, the proposed Project would not introduce new geometric

hazards that could contribute to a cumulative impact related to hazards due to design features. Furthermore, the project would not introduce any operational features that would interfere with emergency response, and implementation of TCPs by both the proposed Project and cumulative projects during construction would maintain access. Cumulative projects would be required to implement traffic control measures subject to review and approval by the City to ensure compliance with local requirements to maintain emergency access during construction, thereby avoiding cumulative impacts related to emergency access. Therefore, the proposed Project's contribution to cumulative transportation-related impacts would not be cumulatively considerable.

8.3.13 Utilities and Service Systems

8.3.13.1 Impact Analysis

The geographic scope for the cumulative analysis of utilities and service systems are the service areas for the utilities that would serve the Project site. Cumulative projects could contribute to a regional increase in water, wastewater treatment or stormwater drainage, electrical power, natural gas, or telecommunications facilities during construction and operation (Threshold 1). However, all cumulative projects would be required to receive will serve letters from the District for both water and wastewater, and would be subject to environmental review evaluating the need for relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electrical power, natural gas, or telecommunications facilities. The proposed Project would not require the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electrical power, natural gas, or telecommunications facilities. As such, the combined effects from all projects within the geographic scope related to utility infrastructure would not be cumulatively significant.

Although cumulative projects, which include residential developments and the Quail Valley Nature Park, would result in increased water demand (Threshold 2), the incremental contribution of the proposed Project is negligible. Water supplies are available to serve construction of the proposed Project, including a minimal amount of water required for dust control purposes. Therefore, the proposed Project would not combine with cumulative projects to result in a cumulatively significant impact on water supply.

Although cumulative projects would increase wastewater demand (Threshold 3), the incremental contribution of the proposed Project is negligible. The District has adequate wastewater treatment capacity to serve the proposed Project, which considers development of cumulative projects and other projects throughout the region. Therefore, the proposed Project would not combine with cumulative projects to result in a cumulatively significant impact on wastewater treatment capacity.

Regarding solid waste (Thresholds 4 and 5), the proposed Project would not generate solid waste in excess of the capacity of local infrastructure, and construction waste would be disposed of in compliance with applicable requirements in the City's Municipal Code. Cumulative projects would similarly dispose of waste in compliance with applicable requirements, and the City would review each project to ensure adequate solid waste management and consistency with regional landfill capacity. Therefore, the proposed Project would not combine with cumulative projects to result in a cumulatively significant impact on solid waste.

8.3.14 Wildfire

8.13.14.1 Impact Analysis

The geographic scope for the cumulative analysis of wildfire is the Project site and any projects in the immediate vicinity. Each of the proposed Project's eight phases would be required to prepare a TCP for all work within public roadways that would maintain adequate emergency response and emergency evacuation. In the event of an emergency, open trenches would be covered with appropriate materials to restore normal traffic flow. Upon completion of construction, all roadways would be restored to preexisting conditions. In the event cumulative projects would require temporary closures of lanes, or even entire roadway segments, each project would be required to implement a site-specific TCP with measures similar to those described for the proposed Project in Section 4.14.5 to maintain adequate emergency access. Cumulative projects would be required to implement traffic control measures subject to review and approval by the City to ensure compliance with local requirements to maintain emergency access during construction. Similarly, cumulative projects would be required to restore all roadways to preexisting conditions once construction is complete. Therefore, the proposed Project's contribution to the cumulative impairment of emergency response plans would not be cumulatively considerable (Threshold 1).

Regarding the exacerbation of wildfire risks due to slope, prevailing winds, and other factors (Threshold 2), as well as wildfire risks related to infrastructure (Threshold 3), construction activities associated with both the proposed Project and cumulative projects would comply with PRC Sections 4427, 4428, 4431, and 4442, and applicable fire protection and prevention requirements in the CCR and Cal/OSHA. Compliance with these requirements would ensure consistency with applicable City Municipal Code regulations and General Plan policies, as discussed in Section 4.14.2.3. Cumulative projects would similarly be required to adhere to these standards.

During operation, the proposed Project would not exacerbate wildfire risk in a manner that would expose people to wildfire-related hazards. The proposed Project would not introduce habitable structures, permanent on-site occupancy, or new population growth in fire-prone areas. Risk associated with wildfire would remain unchanged compared to the existing condition. Furthermore, operation of the proposed Project would adhere to the District's standard operating procedures for facility maintenance and fire prevention, which include regular inspection of electrical equipment, vegetation management within and around the facilities, and compliance with CFC requirements established by the local fire authority. Cumulative projects would similarly be required to comply with applicable fire protection and prevention requirements in the CCR and Cal/OSHA, as well as City Municipal Code regulations and General Plan policies. Therefore, the proposed Project would not combine with cumulative projects to result in a cumulatively significant impact related to wildfire risks.

Regarding flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes (Threshold 4), construction of the above-ground components associated with the proposed lift stations would be in accordance with the CBC to meet all seismic design parameters. In addition, future phased development of the proposed Project would be required to implement the recommendations of the Geotechnical Exploration Report (see Appendix F to Appendix B), which includes measures to address slope stability and site-specific geologic constraints. Cumulative projects would be subject to design and engineering review by the City, which would assess potential

flooding and landslide hazards. Therefore, impacts to people or structures from downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes would not be cumulatively significant.

Chapter 9.0
Project Alternatives

The CEQA Guidelines Section 15126.6 requires that an EIR compare the effects of a "reasonable range of alternatives" to the project. The State CEQA Guidelines further specify that the alternatives selected should attain most of the basic project objectives and avoid or substantially lessen one or more significant effects of the project. The "range of alternatives" is governed by the "rule of reason," which requires the EIR to set forth only those alternatives necessary to permit an informed and reasoned choice by the lead agency, and to foster meaningful public participation (CEQA Guidelines Section 15126.6[f]). CEQA generally defines "feasible" to mean an alternative that is capable of being accomplished in a successful manner within a reasonable period of time, while also taking into account economic, environmental, social, technological, and legal factors.

9.1 Selection of Alternatives

Chapter 4.0 provides a detailed analysis of whether the proposed Project could have a significant effect on the environment. The analysis identifies potentially significant impacts that would occur as a result of implementation of the proposed Project prior to mitigation, including temporary significant and unavoidable impacts related to construction noise. With the exception of construction noise, all other potentially significant impacts would be reduced to a less than significant level through implementation of mitigation measures.

Alternatives considered were those that met basic objectives of the Project and eliminated or substantially reduced significant environmental impacts. As identified in Chapter 3.0, Project objectives include the following:

- Establish a robust and comprehensive wastewater collection and conveyance system that provides consistent and reliable service to all Quail Valley Subarea 4 residences consistent with established District standards; and

- Safeguard public health, public water resources, and enhance the overall well-being of the Quail Valley and Canyon Lake communities.

A robust and comprehensive wastewater collection and conveyance system would (1) fully replace existing private septic systems; (2) comply with established District design, capacity, and operational standards; (3) provide long-term service reliability under both normal and peak flow conditions; and (4) minimize the potential for system failures, sanitary sewer overflows, and risks to public health and water quality.

To meet these objectives, installation of wastewater conveyance pipelines, lift stations, and associated pumping infrastructure is required. While alternative "build" approaches were considered, including variations in pipeline alignments, conveyance configurations, and lift station siting, all such alternatives would require similar construction activities, such as trenching, equipment operation, and temporary site disturbance. As a result, these alternatives would not substantially reduce

construction-related noise impacts or other temporary construction impacts identified for the proposed Project.

Conceptual alternatives involving non-traditional or above-ground conveyance methods were also considered but rejected because they would not meet District design or operational standards, would present long-term reliability and public health concerns, and would still require construction activities that would result in similar environmental impacts. In addition, alternatives that would reduce connector pipes by increasing the number of lift stations were considered; however, these alternatives could require additional lift station sites and expanded construction footprints, potentially increasing impacts to biological resources and adjacent land uses, and would not result in a net reduction of the Project's significant impacts prior to mitigation.

Based on this evaluation, and further discussed in Section 9.2, no feasible build alternatives were identified that would meet the Project objectives while avoiding or substantially reducing the Project's significant environmental impacts prior to mitigation. Accordingly, the No Project Alternative was selected for detailed analysis. As required under CEQA Guidelines Section 15126.6 (e)(2), an EIR must identify the environmentally superior alternative. Pursuant to the CEQA Guidelines, if the No Project Alternative is determined to be the most environmentally superior project, another alternative among the alternatives evaluated must be identified as the environmentally superior project. Section 9.3 addresses the environmentally superior alternative selected.

Chapter 4.0 of this PEIR identifies the environmental issue areas for which the proposed Project could result in potentially significant impacts. These issue areas are addressed within the context of the alternatives, and a comparison is summarized in Table 9-1. Based on an initial environmental review, it was determined that the remaining environmental issue areas listed in Appendix G of the CEQA Guidelines would not have the potential to cause significant impacts (see Chapter 7.0), and are therefore not included in the alternatives analysis, consistent with CEQA Guidelines Section 15126.6(a).

Table 9 1
Alternatives Comparison

Environmental Issue Area	Proposed Project	No Project Alternative
Aesthetics	LTS	NI
Air Quality	S/M	NI
Biological Resources	S/M	NI
Cultural and Tribal Cultural Resources	S/M	NI
Energy	LTS	NI
Geology and Soils	LTS	NI
Greenhouse Gas Emissions	LTS	NI
Hazards and Hazardous Materials	LTS	NI
Hydrology and Water Quality	LTS	S/U
Land Use and Planning	LTS	S/U
Noise	S/U	NI
Transportation	LTS	NI
Utilities and Service System	LTS	NI
Wildfire	LTS	NI
NI: No Impact; LTS: Less than Significant; S/M: Significant and Mitigated; S/U: Significant and Unavoidable		

9.2 Project Alternatives

9.2.1 No Project Alternative

According to CEQA Guidelines Section 15126.6(e), an EIR is required to include a discussion of a no project scenario. The No Project Alternative must include a description of existing conditions and reasonably foreseeable future conditions that would exist if the project were not approved. Under the No Project Alternative, the District would not convert Subarea 4 from septic to sewer, and existing private septic systems would remain in use. As discussed in Chapter 3.0, these septic systems are aging and, due to small lot sizes and existing soil and groundwater conditions, are prone to system failures. Under reasonably foreseeable future conditions, continued reliance on private septic systems would likely perpetuate ongoing public health and water quality concerns within the Quail Valley community and could contribute to adverse effects on downstream receiving waters, including Canyon Lake, which serves as a potable water source, residential area, and recreational resource.

In addition, continued septic system use under the No Project Alternative could result in ongoing land use constraints, including continuation of the existing building moratorium for Quail Valley issued by the Santa Ana RWQCB in 2005 to prevent further degradation of public health and water quality generated by the conditions described above. Continued reliance on septic systems could also result in the potential for localized wastewater discharged associated with septic system failures. While such conditions would continue to be addressed through existing regulatory oversight and enforcement by responsible agencies, the underlying constraints and risks associated with reliance on individual septic systems would remain.

9.2.1.1 Description of the No Project Alternative

Under the No Project Alternative, the District would not construct approximately 10 miles gravity main pipe, approximately 1.1 miles of force mains, 247 manholes, 24 connector pipes, 1 regional lift station (LS-1), and 4 smaller lift stations (LS-2, LS-3, LS-4, and LS-5). The existing conditions would remain as described in Chapter 2.0 and throughout Chapter 4.0 of this PEIR.

9.2.1.2 Environmental Analysis of the No Project Alternative

a. Aesthetics

The No Project Alternative would not construct the proposed wastewater collection system, and the visual environment within Subarea 4 and the footprint of LS-1 would remain unchanged compared to the existing condition. The No Project Alternative would not introduce any above ground structures nor introduce any new sources of light and glare. No impact would occur.

b. Air Quality

The No Project Alternative would not construct the proposed wastewater collection system, and therefore would not generate any emissions that could impact air quality. The No Project Alternative would be consistent with growth forecasting for the 2022 AQMP. The No Project Alternative would

not generate any vehicle trips that would produce mobile source emissions, nor would it generate any substantial pollutant concentrations, or generate any odors. No impact would occur.

c. Biological Resources

The No Project Alternative would not construct the proposed wastewater collection system, and therefore would not alter the existing conditions within the Project site. The No Project Alternative would not impact any sensitive species, sensitive riparian habitats, wetlands, or wildlife corridors, and would completely avoid impacts to biological resources. No impact would occur.

d. Cultural and Tribal Cultural Resources

The No Project Alternative would not construct the proposed wastewater collection system, and therefore would not impact any historic resources. Similarly, the No Project Alternative would not result in ground disturbance that could affect any buried archeological resources, human remains, or tribal cultural resources, and would completely avoid impacts to cultural and tribal cultural resources. No impact would occur.

e. Energy

The No Project Alternative would not construct the proposed wastewater collection system, and therefore would not consume any energy resources. No impact would occur.

f. Geology and Soils

The No Project Alternative would not construct the proposed wastewater collection system, and therefore would not alter the existing conditions within the Project site. No impact would occur. The No Project Alternative would not potentially expose people to risks associated with ground shaking, landslide/liquefaction, soil erosion, subsidence, or expansive soils. Similarly, the No Project Alternative would not result in ground disturbance that could affect any buried paleontological resources. No impact would occur.

g. Greenhouse Gas Emissions

The No Project Alternative would not construct the proposed wastewater collection system, and therefore would not generate any GHG emissions. The No Project Alternative would be consistent with growth forecasting for the 2022 AQMP. The No Project Alternative would not generate any vehicle trips that would produce mobile source emissions, nor would it conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emission of GHGs. No impact would occur.

h. Hazards and Hazardous Materials

The No Project Alternative would not construct the proposed wastewater collection system, and therefore would not routinely transport or use any potentially hazardous materials. The No Project Alternative 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, nor emit hazardous materials within 0.25 miles of a school. Existing conditions within Subarea 4 would remain unchanged, and the No Project Alternative would not increase risks associated with wildfire, nor would it affect emergency access. No impact would occur.

i. Hydrology and Water Quality

The No Project Alternative would not construct the proposed wastewater collection system, and therefore would not result in new ground disturbance, impervious surfaces, or changes to flooding conditions relative to existing conditions. However, continued reliance on private sceptic systems could perpetuate ongoing water quality and public health concerns, including localized raw sewage discharges. Therefore, impacts to hydrology and water quality under the No Project Alternative would be significant and unavoidable.

j. Land Use and Planning

The No Project Alternative would not construct the proposed wastewater collection system, and therefore would not alter the existing conditions within the Project site. The No Project Alternative would not alter the surrounding land use pattern or the existing circulation and would not conflict with applicable land use and zoning designations or the City's General Plan policies. However, existing private septic systems would remain in use, and the associated building moratorium issued by the Santa Ana RWQCB in 2005 to prevent further degradation of public health and water quality would continue, constraining new development within Subarea 4 and limiting the area's growth potential. Therefore, impacts related to land use under the No Project Alternative would be significant and unavoidable.

k. Noise

The No Project Alternative would not construct the proposed wastewater collection system, and therefore would not generate any noise. The No Project Alternative would not generate any vehicle trips that would generate noise, nor would it generate any vibration. No impact would occur.

l. Transportation

The No Project Alternative would not construct the proposed wastewater collection system, and therefore would not generate any vehicle trips. The No Project Alternative would not alter the existing transportation network within Subarea 4, nor would it alter emergency access or increase hazards due to a geometric design feature. No impact would occur.

m. Utilities and Service Systems

The No Project Alternative would not construct the proposed wastewater collection system. Existing conditions within Subarea 4 would remain unchanged, and the No Project Alternative would not increase demand for water, wastewater, stormwater, electricity, natural gas, or telecommunications services. Nor would the No Project Alternative generate any solid waste. No impact would occur.

n. Wildfire

The No Project Alternative would not construct the proposed wastewater collection system. Existing conditions within Subarea 4 would remain unchanged, and the No Project Alternative would not increase risks associated with wildfire, nor would it affect emergency access. No impact would occur.

9.2.1.3 Conclusion Regarding the No Project Alternative

As shown in **Table 9-1**, compared to the proposed Project, the No Project Alternative would have greater impacts. Continued reliance on private sceptic systems could perpetuate ongoing water quality and public health concerns, including localized raw sewage discharges associated with septic system failures. The continued use of existing septic systems under this alternative could also perpetuate ongoing land use constraints, including the continuation of the existing building moratorium issued by the Santa Ana RWQCB in 2005 to prevent further degradation of public health and water quality. Additionally, the No Project Alternative would not meet any of the project objectives.

9.3 Environmentally Superior Alternative

CEQA Guidelines Section 15126.6(e)(2) requires an EIR to identify the environmentally superior alternative. Typically, if the No Project Alternative is the environmentally superior alternative, the EIR must identify an environmentally superior alternative from the other alternatives. The project itself may not be identified as the environmentally superior alternative. However, as explained above, there are no feasible build alternatives to the proposed Project. While the No Project Alternative would avoid some construction-related impacts, it would result in greater impacts related to hydrology and water quality and land use as continued use of aging septic systems and associated water quality and land use constraints, would remain. Furthermore, this alternative would not meet any of the project objectives. The proposed Project, by providing a gravity sewer system supported by lift stations, would address these issues and meet the project objectives. Therefore, due to the unique situation associated with the proposed Project, it is identified as the environmentally superior alternative because it provides the greatest overall environmental benefit by eliminating the ongoing risks associated with existing septic systems while achieving the project objectives.

Chapter 10.0
References Cited

2.0 Environmental Setting

Bean, Lowell John, and C. R. Smith
1978 Gabrielino. In *California,* edited by Robert F. Heizer. *Handbook of North American Indians*, vol. 8, William G. Sturtevant, general editor. Smithsonian Institution.

City of Menifee
2013 Menifee General Plan Final Environmental Impact Report, State Clearinghouse #2012071033. https://www.cityofmenifee.us/DocumentCenter/View/10782/Resolution-No-13-347-Certifying-FEIR-for-General-Plan-Adoption.

Kroeber, A. L.
1925 Handbook of the Indians of California. *Bureau of American Ethnology Bulletin* 78. Washington, DC.

U.S. Geological Survey (USGS)
2003 Romoland quadrangle 7.5-minute topographic map.

Western Regional Climate Center
2025 Western U.S. Climate Historical Summaries. Accessed September 8, 2025. https://wrcc.dri.edu/cgi-bin/cliMAIN.pl?ca2805.

3.0 Project Description

Eastern Municipal Water District
2005 Quail Valley Sewer Improvements Alternatives Study. Prepared by PBS&J. October. https://content.emwd.org/sites/default/files/2024-08/SW%20OCT05%20Quail%20Valley%20Report%20FINAL.pdf.

2021 Small Sewage Lift Station Guidelines, Standard Drawings, and Specifications. https://content.emwd.org/sites/default/files/migrate-documents/emwdsmallliftstationdesign.pdf.

U.S. Geological Survey (USGS)
2003 Romoland quadrangle 7.5-minute topographic map.

4.1 Aesthetics

California Department of Transportation (Caltrans)
2025 California State Scenic Highways. https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways.

City of Menifee
2013a Menifee General Plan Final Environmental Impact Report, State Clearinghouse #2012071033. https://www.cityofmenifee.us/DocumentCenter/View/10782/Resolution-No-13-347-Certifying-FEIR-for-General-Plan-Adoption.

2013b General Plan. https://www.cityofmenifee.us/221/General-Plan.

4.2 Air Quality

Bay Area Air Quality Management District
2022 Justification Report: CEQA Thresholds for Evaluating the Significance of Climate Impacts from Land Use Projects and Plans. April.

California Air Pollution Control Officers Association (CAPCOA)
2022 California Emissions Estimator Model (CalEEMod). User's Guide Version 2022.1. April.

California Air Resources Board (CARB)
2000 Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles. California Air Resources Board. Stationary Source Division, Mobile Source Control Division. October.

2005 *Air Quality and Land Use Handbook: A Community Health Perspective*. California Air Resources Board. April.

2021 2021 Emissions Factors Web Database model. https://arb.ca.gov/emfac/emissions-inventory.

2024 Ambient Air Quality Standards. California Air Resources Board. Updated July 16, 2024.

Southern California Association of Governments (SCAG)
2024 Connect SoCal–The 2024-2045 Regional Transportation Plan/Sustainable Communities Strategy. Adopted April 4, 2024.

South Coast Air Quality Management District (SCAQMD)
1993 *SCAQMD CEQA Air Quality Handbook*. November.

2008 Final Localized Significance Threshold Methodology. July.

2021 MATES V: Multiple Air Toxics Exposure Study in the South Coast AQMD. Final Report August 2021.

2023 SCAQMD Air Quality Significance Thresholds. Updated March 2023.

Urban Crossroads
2022 Quail Hill (TTM No. 37692) Traffic Study. Revised February 22. https://ceqanet.opr.ca.gov/2022100107.

Western Regional Climate Center
2025 Western U.S. Climate Historical Summaries. Accessed September 8, 2025. https://wrcc.dri.edu/cgi-bin/cliMAIN.pl?ca2805.

4.3 Biological Resources

California Department of Fish and Wildlife (CDFW)
2012 Staff Report on Burrowing Owl Mitigation. https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=83843.

2023 Memorandum of Understanding or Scientific Collecting Permit pursuant to CDFW Survey Considerations for CESA Candidate Bumble Bee Species.

2025a Special Vascular Plants, Bryophytes, and Lichens List. July. https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=109383&inline.

2025b Special Animals List. Periodic Publication. July.

2025c California Natural Diversity Database. RareFind Version 5. Accessed August.

2025d California Sensitive Natural Communities. February 27. https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=153609&inline.

California Native Plant Society (CNPS)
2025 Rare Plant Inventory (online edition, v9-.5). May. http://www.rareplants.cnps.org.

Conservation Biology Institute (CBI)
2019 SKR Habitat Suitability Version 1. GIS data from Data Basin. https://databasin.org/datasets/4be1376fe7b14aaa92aa1425f93c073a/.

Oberbauer, T., M. Kelly, and J. Buegge
2008 Draft Vegetation Communities of San Diego County. Based on "Preliminary Descriptions of the Terrestrial Natural Communities of California," Robert F. Holland, Ph.D., October 1986.

Riverside County Habitat Conservation Agency (RCHCA)
1996 SKR Habitat Conservation Plan. https://www.rchca.us/187/SKR-Habitat-Conservation-Plan.

2025 Stephen's Kangaroo Rat Mitigation Fee. Online. Accessed August 25, 2025. https://www.rchca.us/185/Stephens-Kangaroo-Rat-Mitigation-Fee.

U.S. Department of Agriculture
2025 Official Soil Series Descriptions. https://soilseries.sc.egov.usda.gov/.

U.S. Fish and Wildlife Service (USFWS)
2025 Information for Planning and Consultation. https://ipac.ecosphere.fws.gov/.

Unitt, P. A.
2004 San Diego County Bird Atlas. San Diego Natural History Museum.

Western Riverside County Regional Conservation Authority (WRCRCA)
2003 *Final Western Riverside County Multiple Species Habitat Conservation Plan.*

4.4 Cultural and Tribal Cultural Resources

Bean, Lowell John
1978 Cahuilla. In *California*, edited by Robert F. Heizer: 575–587. *Handbook of North American Indians*, vol. 8, William G. Sturtevant, general editor. Smithsonian Institution.

Bean, L., and F. Shipek
1978 Luiseño. In *California*, edited by Robert F. Heizer: 550-563. *Handbook of North American Indians*, vol. 8, W.C. Sturtevant, general editor. Smithsonian Institute.

Bean, Lowell John, and C. R. Smith
1978 Gabrielino. In *California,* edited by Robert F. Heizer. *Handbook of North American Indians*, vol. 8, William G. Sturtevant, general editor. Smithsonian Institution.

Bedwell, S. F.
1970 *Prehistory and Environment of the Pluvial Fork Rock Lake Area, South Central Oregon.* Doctoral dissertation, Department of Anthropology, University of Oregon, Eugene.

Bryant Jr., Keith L. and Fred W. Frailey
2020 *History of the Atchison, Topeka, and Santa Fe Railway*. Board of the University of Nebraska, Lincoln. Accessed July 29, 2025. https://www.google.com/books/edition/History_of_the_Atchison_Topeka_and_Santa/elrtDwAAQBAJ?hl=en&gbpv=1.

Byrd, Brian F. and L. Mark Raab
2007 Prehistory of the Southern Bight: Models for a New Millennium. In *California Prehistory: Colonization, Culture, and Complexity*, edited by Terry L. Jones and Kathryn A. Klar. Rowman Altamira Press.

Glischinksi, Steve
2008 *Santa Fe Railway*. Voyageur Press. Accessed July 29, 2025. https://www.google.com/books/edition/Santa_Fe_Railway/r8IwAWpiO2cC?hl=en&gbpv=1&dq=construction+santa+fe+railroad+temecula+1888&pg=PA38&printsec=frontcover.

Guinn, J.M.
1907 *A History of California and an Extended History of Its Southern Coast Counties, Volume I*. Historic Record Company.

Holmes, E. W.
1912 *History of Riverside County, California*. Historic Record Company.

Hooper, Lucille
1920 The Cahuilla Indians. *American Archaeology and Ethnology*. University of California Press, Berkeley.

Hoover, Mildred Brooke, Douglas E. Kyle, and Ethel G. Rensch
2002 *Historic Spots in California*. Stanford University Press.

Johnson, Kim Jarrell
2013 Back in the Day: Quail Valley Has a Long History. *The Press-Enterprise*. Accessed July 29, 2025. https://www.pressenterprise.com/2013/04/06/back-in-the-day-quail-valley-has-long-history/.

Kowta, M.
1969 The Sayles Complex: A Late Milling Stone Assemblage from Cajon Pass and the Ecological Implications of Its Scraper Planes. *University of California Publications in Anthropology*, no. 6.

Kroeber, A. L.
1925 Handbook of the Indians of California. *Bureau of American Ethnology Bulletin* 78. Washington, DC.

Meighan, C. W.
1954 A Late Complex in Southern California Prehistory. *Southwestern Journal of Anthropology* 10: 215–227.

Moratto, Michael J.
1984 *California Archaeology*. Academic Press.

Nationwide Environmental Title Research LLC (NETR)
2025 Historic Aerials. Accessed August 18, 2025. http://www.historicaerials.com/.

Oxendine, Joan
1983 The Luiseno Village During the Late Prehistoric Era. Doctoral dissertation, University of California, Riverside.

Rogers, Malcolm J.
1938 Archaeological and Geological Investigations of the Culture Levels in an Old Channel of San Dieguito Valley. *Carnegie Institution of Washington Yearbook* 37: 344–45.

1945 An Outline of Yuman Prehistory. *Southwestern Journal of Anthropology* 1 (2): 167–198.

Rolle, Andrew and Arthur Verge
2008 *California: A History*. Harlan Davidson.

Sutton, Mark
2009 People and Language: Defining Takic Expansion into Southern California. *Pacific Coast Archaeological Society Quarterly 41*(2-3):31-93.

Sutton, Mark Q., Mark E. Basgall, Jill K. Gardner, and Mark W. Allen
2007 Advances in Understanding Mojave Desert Prehistory. In *California Prehistory: Colonization, Culture, and Complexity*, edited by Terry L. Jones and Kathryn A. Klar. Rowman Altamira Press.

Sutton, Mark Q., and Jill K. Gardner
2010 Reconceptualizing the Encinitas Tradition of Southern California. *Pacific Coast Archaeological Society Quarterly* 42(4):1-64.

Strong, William D.
1929 Aboriginal Society in Southern California. *UC (Berkley) Publications in American Archaeology and Ethnology* 26 (1): 1–358. University of California, Berkeley.

True, D. L.
1958 An Early Complex in San Diego County, California. *American Antiquity* 23 (3): 255–263.

True, D. L., C. Meighan, and H. Crew
1974 Archaeological Investigations at Molpa, San Diego County, California. *University of California Publications in Anthropology*, No. 11.

True, D. L., and G. Waugh
1981 Archaeological Investigations in Northern San Diego County, California: Frey Creek. *Journal of California and Great Basin Anthropology* 3 (1): 84–115.

U.S. Department of Agriculture
1971 *Soil Survey, Western Riverside Area, California. Arnold A. Knecht, Soil Scientist, Soil Conservation Service.* November.

Vilchis, Martha, Water Resources Specialist Assistant I (Eastern Municipal Water District)
2025 Personal communication (email). November 3, 2025.

4.5 Energy

California Energy Commission (CEC)

2008 Energy Action Plan Update. February. https://www.cpuc.ca.gov/-/media/cpuc-website/files/uploadedfiles/cpuc_public_website/content/utilities_and_industries/energy_-_electricity_and_natural_gas/2008-energy-action-plan-update.pdf.

2025a Integrated Energy Policy Report-IEPR. https://www.energy.ca.gov/data-reports/reports/integrated-energy-policy-report-iepr.

2025b California Annual Retail Fuel Outlet Report Results (CEC-A15). Energy Assessments Division. August 26.

California Gas and Electric Utilities

2024 2024 California Gas Report. https://www.socalgas.com/regulatory/cgr.

2025 2025 California Gas Report Supplement. https://www.socalgas.com/regulatory/cgr.

California Public Utilities Commission (CPUC)

2024 2024 California Renewables Portfolio Standard Annual Report. November 2024.

Eastern Municipal Water District

2022 Climate Action Plan. September.

National Highway Traffic Safety Administration (NHTSA)

2025 *Resetting the Corporate Average Fuel Economy Program; Interpretive Rule.* Federal Register, June 11, 2025. https://www.federalregister.gov/documents/2025/06/11/2025-10586/resetting-the-corporate-average-fuel-economy-program.

Southern California Association of Governments (SCAG)

2024 Connect SoCal. Adopted April 4, 2024. https://scag.ca.gov/connect-socal.

Southern California Edison (SCE)

2023 2023 Power Content Label. Accessed at https://www.energy.ca.gov/programs-and-topics/programs/power-source-disclosure-program/power-content-label.

2024 Financial & Statistical Report. Edison International and Southern California Edison. https://download.edison.com/406/files/20259/2024-financial-statistical-report.pdf?Signature=01BkljfLCBkzAhBmjzTfiZt5vqo%3D&Expires=1762620664&AWSAccessKeyId=AKIATACLJRQCT2IBV7MN&versionId=8mYb4gDSno4NWZne_o4vNnjDcv3MDk0h&response-content-disposition=attachment.

U.S. Environmental Protection Agency (EPA)

2011 *Greenhouse Gas Emissions Standards and Fuel Efficiency Standards for Medium- and Heavy-Duty Engines and Vehicles; Final Rule.* https://www.epa.gov/regulations-emissions-vehicles-and-engines/final-rule-phase-1-greenhouse-gas-emissions-standards.

2016 *Greenhouse Gas Emissions and Fuel Efficiency Standards for Medium- and Heavy-Duty Engines and Vehicles – Phase 2; Final Rule.* https://www.epa.gov/regulations-emissions-vehicles-and-engines/regulations-greenhouse-gas-emissions-commercial-trucks.

2024 *Greenhouse Gas Emissions Standards for Heavy-Duty Vehicles – Phase 3; Final Rule (April 22, 2024).* https://www.epa.gov/regulations-emissions-vehicles-and-engines/final-rule-greenhouse-gas-emissions-standards-heavy-duty.

United States Code (U.S.C.)

1975 *Energy Policy and Conservation Act of 1975, 49 U.S.C. § 32902.* https://www.law.cornell.edu/uscode/text/49/32902.

4.6 Geology and Soils

California Department of Conservation (DOC)

2024 California Geological Survey. Earthquake Zones of Required Investigation. https://maps.conservation.ca.gov/cgs/EQZApp/app/.

2025a California Geological Survey. Compilation of Quaternary Surficial Deposits. 217. https://maps.conservation.ca.gov/cgs/QSD/.

2025b California Geological Survey. Landslide Maps. https://maps.conservation.ca.gov/cgs/informationwarehouse/index.html?map=landslides.

Society of Vertebrate Paleontology

2010 Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources.

Southern California Earthquake Data Center

2026 Historical Earthquakes & Significant Faults in Southern CA. https://local.scedc.caltech.edu/earthquake/significant.html.

U.S. Geological Survey (USGS)

2003 Romoland quadrangle 7.5-minute topographic map.

4.7 Greenhouse Gas Emissions

California Air Pollution Control Officers Association (CAPCOA)

2022 California Emissions Estimator model (CalEEMod). Version 2022.1. April 2022.

California Air Resources Board (CARB)
2007 California Greenhouse Gas Inventory–Summary by Economic Sector. Last updated November 19.

2008 Climate Change Scoping Plan: A Framework for Change. December. http://www.arb.ca.gov/cc/scopingplan/document/adopted_scoping_plan.pdf.

2017 The 2017 Climate Change Scoping Plan Update: The Proposed Strategy for Achieving California's 2030 Greenhouse Gas Target. January 20.

2021 2021 Emission Factors Web Database model. https://arb.ca.gov/emfac/emissions-inventory.

2022 Scoping Plan Update for Achieving Carbon Neutrality.

2024 Greenhouse Gas Inventory Data—2000 to 2022 (last updated September 20, 2024). https://ww2.arb.ca.gov/ghg-inventory-data.

Eastern Municipal Water District
2022 Climate Action Plan. September 2022.

Intergovernmental Panel on Climate Change
2007 *Fourth Assessment Report (AR4), Climate Change 2007: Synthesis Report*.

2014 *Fifth Assessment Report (AR5), Climate Change 2014: Synthesis Report.*

South Coast Air Quality Management District (SCAQMD)
2008 Draft Guidance Document – *Interim CEQA GHG Significance Thresholds for Stationary Sources, Rules, and Plans*. October.

2009 Greenhouse Gas CEQA Significance Threshold Stakeholder Working Group 14. November 19.

2010 Greenhouse Gas CEQA Significance Thresholds Stakeholder Working Group 15. September 28, 2010.

Southern California Association of Governments (SCAG)
2024 Connect SoCal. Adopted April 4, 2024. https://scag.ca.gov/connect-socal.

U.S. Environmental Protection Agency (U.S. EPA)
2010 Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2008. U.S. Greenhouse Gas Inventory Program, Office of Atmospheric Programs. 430-R-10-006. April 15.

2025 Climate Change Regulatory Actions and Initiatives. Updated September 25, 2025. https://www.epa.gov/climate-change/climate-change-regulatory-actions-and-initiatives.

Western Riverside Council of Governments (WRCOG)
2014 *Subregional Climate Action Plan*. Final Report. September.

2022 *Subregional Climate Action Plan*. Draft. February.

4.8 Hazards and Hazardous Materials

California Department of Forestry and Fire Prevention (CAL FIRE)
2025 Fire Hazard Severity Zone Viewer. Accessed September 30, 2025. https://osfm.fire.ca.gov/what-we-do/community-wildfire-preparedness-and-mitigation/fire-hazard-severity-zones.

California Department of Toxic Substances Control (DTSC)
2025 EnviroStor. Accessed September 23, 2025. https://www.envirostor.dtsc.ca.gov/public/.

City of Menifee
2013 General Plan. https://www.cityofmenifee.us/221/General-Plan.

Riverside County Airport Land Use Commission
2025 Riverside County Airport Land Use Compatibility Plan. Accessed September 23, 2025. https://rcaluc.org/new-compatibility-plan.

State Water Resources Control Board (SWRCB)
2025 Geotracker. Accessed September 23, 2025. https://geotracker.waterboards.ca.gov/.

4.9 Hydrology and Water Quality

City of Menifee
2013 Menifee General Plan Final Environmental Impact Report, State Clearinghouse #2012071033. https://www.cityofmenifee.us/DocumentCenter/View/10782/Resolution-No-13-347-Certifying-FEIR-for-General-Plan-Adoption.

Eastern Municipal Water District
2024 Water Year 2024 Annual Report. San Jacinto Groundwater Basin Groundwater Sustainability Plan. https://content.emwd.org/sites/default/files/2025-07/8-005_WY_2024_Final.pdf.

2025 Sustainable Groundwater Management Act. Accessed October 7, 2025. https://www.emwd.org/what-we-do/water-supply/groundwater/sustainable-groundwater-management-act.

Federal Emergency Management Agency (FEMA)
2020 National Flood Hazard Layer (NFHL). https://www.fema.gov/flood-maps/national-flood-hazard-layer.

Santa Ana Regional Water Quality Control Board (RWQCB)
2025 Water Quality Control Plan for the Santa Ana Region. October. https://www.waterboards.ca.gov/santaana/water_issues/programs/basin_plan/index.html.

State Water Resources Control Board (SWRCB)
2022 NPDES 2022 Construction Stormwater General Permit. https://www.waterboards.ca.gov/water_issues/programs/stormwater/construction/general_permit_reissuance.html.

U.S. Environmental Protection Agency (U.S. EPA)
2024 NPDES Permit Basics. November 26. Accessed October 7, 2025. https://www.epa.gov/npdes/npdes-permit-basics#:~:text=A%20National%20Pollutant%20Discharge%20Elimination,that%20discharger%20whereas%20an%20NPDES.

4.10 Land Use and Planning

City of Menifee
2013 General Plan. https://www.cityofmenifee.us/221/General-Plan.

4.11 Noise

California Department of Transportation
2013 Technical Noise Supplement. November.

2020 Transportation and Construction Vibration Guidance Manual. April.

Federal Highway Administration
2006 Federal Highway Administration Roadway Construction Noise Model User's Guide, Final Report. January.

2008 Roadway Construction Noise Mode, V1.1. Washington, DC.

Federal Transit Administration (FTA)
2018 Transit Noise and Vibration Impact Assessment Manual. Prepared by John A. Volpe National Transportation Systems Center. FTA Report No. 0123. September.

Riverside County Airport Land Use Commission
2004 Riverside County Airport Land Use Compatibility Plan. October 14, 2004. https://rcaluc.org/current-compatibility-plans.

4.12 Transportation

California Department of Transportation (Caltrans)
2024 Caltrans GIS Data, Annual Average Daily Traffic. Accessed November 1, 2025. https://gisdata-caltrans.opendata.arcgis.com/datasets/d8833219913c44358f2a9a71bda57f76_0/explore?location=33.685339%2C-117.174505%2C16.63.

City of Menifee
2013 General Plan. https://www.cityofmenifee.us/221/General-Plan.

Southern California Association of Governments (SCAG)
2024 Connect SoCal 2024 Demographic and Growth Forecast Technical Report. April 4. SCAG 2050 demographics-growth-forecast-final-040424.pdf.

Urban Crossroads
2022 Quail Hill (TTM No. 37692) Traffic Study. Revised February. https://ceqanet.opr.ca.gov/2022100107.

4.13 Utilities and Service Systems

California Department of Resources Recycling and Recovery (CalRecycle)
2025a Solid Waste Information System (SWIS) Facility/Site Summary: El Sobrante Landfill (33-AA-0217). Accessed September 22, 2025. https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/2280?siteID=2402.

2025b Solid Waste Information System (SWIS) Facility/Site Summary: Badlands Sanitary Landfill (33-AA-0006). Accessed September 22, 2025. https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/2245?siteID=2367.

2025c Solid Waste Information System (SWIS) Facility/Site Summary: Lamb Canyon Sanitary Landfill (33-AA-0007). Accessed September 22, 2025. https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/2246?siteID=2368.

Eastern Municipal Water District (EMWD)
2021 2020 Urban Water Management Plan. Accessed September 22, 2025. https://content.emwd.org/sites/default/files/2024-07/urbanwatermanagementplan_0.pdf.

City of Menifee
2013 Menifee General Plan Final Environmental Impact Report, State Clearinghouse #2012071033. https://www.cityofmenifee.us/DocumentCenter/View/10782/Resolution-No-13-347-Certifying-FEIR-for-General-Plan-Adoption.

Riverside County Flood Control and Water Conservation District (RCFCWCD)
2025 District Zones. Acessed September 22, 2025. https://rcflood.org/district-zones.

4.14 Wildfire

California, State of, Office of the Attorney General
2022 Best Practices for Analyzing and Mitigating Wildfire Impacts of Development Projects Under the California Environmental Quality Act Memorandum (Bonta Memo).

California Department of Forestry and Fire Prevention (CAL FIRE)
2025a Fire Hazard Severity Zone Viewer. Accessed September 30, 2025. https://osfm.fire.ca.gov/what-we-do/community-wildfire-preparedness-and-mitigation/fire-hazard-severity-zones.

2025b Fire and Resource Assessment Program. Historical Fire Perimeteres. Accessed October 14, 2025. https://www.fire.ca.gov/what-we-do/fire-resource-assessment-program/fire-perimeters.

5.0 Federal Crosscutters

California Department of Conservation (DOC)
2022 California Important Farmland Finder. Accessed September 19, 2025. https://maps.conservation.ca.gov/DLRP/CIFF/.

California Department of Water Resources
2023 DAC and EDA Mapping Tools. https://gis.water.ca.gov/app/dacs/?page=DAC-Mapping-Tool.

U.S. Environmental Protection Agency (U.S. EPA)
2020 Environmental Justice 2020 Glossary. Accessed November 14, 2025. https://19january2021snapshot.epa.gov/environmentaljustice/ej-2020-glossary_.html.

2025a Pacific Southwest Region 9. https://19january2017snapshot.epa.gov/www3/region9/water/groundwater/ssa.html.

2025b Environmental Justice Screening and Mapping Tool (EJScreen). https://pedp-ejscreen.azurewebsites.net/.

7.0 Effects Found Not to be Significant

California Department of Conservation (DOC)
2022 California Important Farmland Finder. Accessed September 19, 2025. https://maps.conservation.ca.gov/DLRP/CIFF/.

City of Menifee
2013 Menifee General Plan Final Environmental Impact Report, State Clearinghouse #2012071033. https://www.cityofmenifee.us/DocumentCenter/View/10782/Resolution-No-13-347-Certifying-FEIR-for-General-Plan-Adoption.

8.0 Cumulative Impact Analysis

City of Menifee

2021 City of Menifee 2021-2029 Housing Element. https://www.cityofmenifee.us/904/Housing-Element.

2026 CIP/Land Development Dashboard. Accessed January 19, 2026. https://experience.argis.com/experience/1b85100befaf4a78b3be107b458b5656.

Southern California Association of Governments (SCAG)

2024 Conenct SoCal 2024. The 2024 – 2050 Regional Transportation Plan/Sustainable Communities Stratergy. Demographic & Growth Forecast Technical Report. https://www.scag.ca.gov/sites/default/files/2024-05/23-2987-tr-demographics-growth-forecast-final-040424.pdf.

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