

DRAFT
Program Environmental Impact Report
Highway 74 Community Plan
City of Riverside, Riverside County, California
State Clearinghouse Number 2019059042

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Date: April 26, 2023

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ACRONYMS AND ABBREVIATIONS

°C	degrees Celsius (Centigrade)
°F	degrees Fahrenheit
µg/m ³	micrograms per cubic meter
AAQS	Ambient Air Quality Standards
AB	Assembly Bill
ACHP	Advisory Council on Historic Preservation
ACM	asbestos-containing material
ACP	Alternative Compliance Plan
ADA	Americans with Disabilities Act
ADT	Average Daily Traffic
ADU	accessory dwelling unit
AFB	Air Force Base
AFY	acre-feet per year
AG	Agriculture
AIA	Airport Influence Area
AIC	Archaeological Information Center
AICUZ	Air Installation Compatibility Use Zone
ALUC	Airport Land Use Commission
APCD	Air Pollution Control District
APE	Area of Potential Effect
APN	Assessor's Parcel Number
AQMD	Air Quality Management District
ARB	California Air Resources Board
AST	aboveground storage tank
ATCM	Airborne Toxic Control Measures
BAU	business-as-usual
BCF	billion cubic feet
BERD	California Built Environment Resource Directory
BIOS 5	Biogeographic Information and Observation System
BLM	Bureau of Land Management
BMP	Best Management Practice
BTU	British Thermal Unit
BVOC	biogenic volatile organic compound
C-1/C-P	General Commercial
C ² ES	Center for Climate and Energy Solutions
CAA	Clean Air Act

Acronyms and Abbreviations

CAAQS	California Ambient Air Quality Standards
Cal/EPA	California Environmental Protection Agency
Cal/OSHA	California Occupational Safety and Health Administration
CAL FIRE	California Department of Forestry and Fire Protection
CALGreen	California Green Building Standards Code
CalEEMod	California Emissions Estimator Model
CalRecycle	California Department of Resources Recycling and Recovery
Caltrans	California Department of Transportation
CAP	Climate Action Plan
CBC	California Building Standards Code
CCR	California Code of Regulations
CDC	Center for Disease control and Prevention
CDF	California Department of Finance
CDFW	California Department of Fish and Wildlife
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CESA	California Endangered Species Act
CFC	chlorofluorocarbon
CFR	Code of Federal Regulations
CH ₄	methane
CHBC	California Historic Building Code
CHL	California Historical Landmarks List
CHP	California Highway Patrol
CHWMP	County Hazardous Waste Management Plan
CMP	Congestion Management Plan
CMS	Congestion Management System
CNDDB	California Natural Diversity Database
CNEL	Community Noise Equivalent Level
CNPS	California Native Plant Society
CNPSEI	California Native Plant Society Electronic Inventory
CO	carbon monoxide
CO ₂ e	carbon dioxide equivalent
Connect SoCal	2020-2045 Regional Transportation Plan/Sustainable Communities Strategy
COP	Conference of Parties
CPHI	California Points of Historical Interest
C-P-S	Scenic Highway Commercial
CPUC	California Public Utilities Code

CRHR	California Register of Historical Resources
CSA	Community Service Area
CSD	Community Services District
CTR	California Toxics Rule
CUPA	Certified Unified Program Agency
CWPP	Community Wildfire Protection Plan
dB	decibel
dBA	A-weighted decibel
DBESP	Determination of Biologically Equivalent or Superior Preservation
DBH	diameter at breast height
DDT	dichlorodiphenyltrichloroethane
DPM	diesel particulate matter
DTSC	California Department of Toxic Substances Control
DUC	Disadvantaged Unincorporated Communities
DWR	California Department of Water Resources
EIA	United States Energy Information Administration
EIC	Eastern Information Center
EIR	Environmental Impact Report
EISA	Energy Independence and Security Act of 2007
EJC	Environmental Justice Community
ELAP	Elsinore Area Plan
EMS	Emergency Medical Services
EMWD	Eastern Municipal Water District
EOC	Emergency Operations Center
EOP	Emergency Operations Plan
EPA	United States Environmental Protection Agency
ERH	Emergency Ride Home
ERNS	Emergency Response Notification System
ESA	Environmental Site Assessment
EV	electric vehicle
EVMWD	Elsinore Valley Municipal Water District
FAA	Federal Aviation Administration
FAR	floor area ratio
FCS	FirstCarbon Solutions
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
FIRM	Flood Insurance Rate Map
Flood Control District	Riverside County Flood Control and Water Conservation District

Acronyms and Abbreviations

FMMP	Farmland Mapping and Monitoring Program
FMWC	Farm Mutual Water Company
FTA	Federal Transportation Administration
GHG	greenhouse gas
GIS	Geographic Information System
GPA	General Plan Amendment
GWh	gigawatt-hour
GWh/y	gigawatt-hours per year
GWP	global warming potential
HANS	Habitat Evaluation and Acquisition Negotiation Strategy
HCD	California Department of Housing and Community Development
HCDA	Housing and Community Development Act
HCM	Highway Capacity Manual
HFC	hydrofluorocarbon
HMTA	Hazardous Materials Transportation Act
HOV/HOT	High Occupancy Vehicle/High Occupancy Toll
HRA	Health Risk Assessment
HRI	California Historical Resources Inventory
HUD	United States Department of Housing and Urban Development
HVAC	heating, ventilation, and air conditioning
HVIP	Hybrid and Zero-Emission Truck and Bus Voucher Incentive Project
HWCL	Hazardous Waste Control Law
ICC	International Code Council
IOU	investor-owned utility
I-P	Industrial Park
iPaC	Information for Planning and Consultation
ISO	Independent System Operator
kWh	kilowatt-hour
LBP	lead-based paint
LBPPA	Lead-Based Paint Poisoning Prevention Act
LCFS	low carbon fuel standard
L _{dn}	day/night average sound level
LED	light-emitting diode
L _{eq}	equivalent sound level
LEUSD	Lake Elsinore Unified School District
LEV	Low Emission Vehicle
LID	Low Impact Development
L _{max}	maximum noise level

LOS	Level of Service
LRA	Local Responsibility Area
LSE	load-serving entities
LUST	Leaking Underground Storage Tank
M-SC	Manufacturing-Service Commercial
MARB/IPA	March Air Reserve Base/Inland Port Airport
MBTA	Migratory Bird Treaty Act
mgd	million gallons per day
MLD	Most Likely Descendant
MMI	Modified Mercalli Intensity
Mpg	miles per gallon
mph	miles per hour
MPO	Metropolitan Planning Organization
MRZ	Mineral Resources Zone
MS4	Municipal Separate Storm Sewer System
MSHCP	Multiple Species Habitat Conservation Plan
MTBE	methyl tert-butyl ether
MTS	Metropolitan Transportation System
MU	Mixed Use
MUA	Mixed Use Area
MVAP	Mead Valley Area Plan
MWh	megawatt-hour
MXD	mixed-use development
N ₂ O	nitrous oxide
NAAQS	National Ambient Air Quality Standards
NEHRP	National Earthquake Hazards Reduction Program
NAHC	Native American Heritage Commission
NAL	Numeric Action Level
NDC	nationally determined contributions
NEL	Numeric Effluent Limit
NESHAP	National Emissions Standards for Hazardous Air Pollutants
NFPA	National Fire Protection Association
NHPA	National Historic Preservation Act
NHTSA	National Highway Traffic Safety Administration
N ₂ O	nitrous oxide
NO ₂	nitrogen dioxide
NOAA	National Marine Fisheries Service
NOC	Notice of Completion

Acronyms and Abbreviations

NOP	Notice of Preparation
NO _x	nitrogen oxides
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
NTR	National Toxics Rule
O ₃	ozone
OA	Operational Area
OEHHA	California Office of Environmental Health Hazard Assessment
ONAC	Office of Noise Abatement and Control
OPR	Governor’s Office of Planning and Research
OSHA	Occupational Safety and Health Administration
OS-MIN	Open Space-Mineral Resource
PCB	polychlorinated biphenyl
pCi/L	picocuries per liter
PFC	perfluorocarbon
PG&E	Pacific Gas and Electric Company
PM	particulate matter
PM _{2.5}	particulate matter less than 2.5 microns in diameter
PM ₁₀	particulate matter less than 10 microns in diameter
ppb	parts per billion
pph	person per household
ppm	parts per million
PPV	peak particle velocity
PRPA	Paleontological Resources Preservation Act
PVC	polyvinyl chloride
R-A	Residential Agriculture
RCA	Riverside Conservation Authority
RCDWR	Riverside County Department of Waste Resources
RCFD	Riverside County Fire Department
RCIP	Riverside County Integrated Project
RCP	Regional Comprehensive Plan
RCRA	Resource Conservation and Recovery Act
RCTC	Riverside County Transportation Commission
RHNA	Regional Housing Needs Assessment
RivCoParks	Riverside County Regional Park and Open-Space District
RIVTAM	Riverside County Traffic Analysis
RMP	Risk Management Plan

ROG	reactive organic gases
RPS	Renewable Portfolio Standard
PRPA	Paleontological Resources Preservation Act
R-R	Rural Residential
RTA	Riverside Transit Agency
RTP	Regional Transportation Plan
RVLUO	Rural Village Land Use Overlay
RWQCB	Regional Water Quality Control Board
RWRF	Regional Water Reclamation Facility
SARA	Superfund Amendments and Reauthorization Act
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCE	Southern California Edison
SCHWMA	Southern California Hazardous Waste Management Authority
SCS	Sustainable Communities Strategy
SF ₆	sulfur hexafluoride
SFHA	Special Flood Hazard Area
SKR HCP	Stephens' Kangaroo Rat Habitat Conservation Plan
SMARA	Surface Mining and Reclamation Act
SMGB	State Mining and Geology Board
SMVAP	Sun City/Menifee Valley Area Plan
SO ₂	sulfur dioxide
SoCAB	South Coast Air Basin
SoCalGas	Southern California Gas Company
SOON	Surplus Off-Road Opt-In for No _x
South Coast AQMD	South Coast Air Quality Management District
SQG	Small Quantity Generator
SR	State Route
SRA	State Responsibility Area
SRRRA	Santa Rosa Regional Resources Authority
State Water Board	California State Water Resources Control Board
SWFP	Solid Water Facility Permit
SWPPP	Storm Water Pollution Prevention Plan
TAC	toxic air contaminants
TAZ	Traffic Analysis Zone
TCM	Transportation Control Measure
TDM	Transportation Demand Management
TDR	Transfer of Development Rights

Acronyms and Abbreviations

TDS	total dissolved solids
Tg	teragram
therms/y	therms per year
TIA	Transportation Impact Analysis
TMA	Transportation Management Association
TMDL	Total Maximum Daily Load
TOD	Transit Oriented Development
TSCA	Toxic Substances Control Act
UBC	Uniform Building Code
UMTA	Urban Mass Transit Administration
UNFCCC	United Nations Framework Convention on Climate Change
USACE	United States Army Corps of Engineers
USDA	United States Department of Agriculture
USDOT	United States Department of Transportation
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
UST	underground storage tank
UWMP	Urban Water Management Plan
V/C	volume to capacity ratio
VdB	Velocity in Decibels
VIP	Voucher Incentive Program
VMT	Vehicle Miles Traveled
VOC	volatile organic compound
W-1	Watercourse, Watershed, and Conservation Areas
W-2-M	Controlled Development Area with Mobile Homes
WATERS	Watershed Assessment, Tracking, and Environmental Results System
WDR	Waste Discharge Requirement
WIMP	Wind Implementation Monitoring Program
WQMP	Water Quality Management Plan
WRF	Water Reclamation Facility
WRI	World Resources Institute

EXECUTIVE SUMMARY

Purpose

This Draft Program Environmental Impact Report (Draft Program EIR) is prepared in accordance with the California Environmental Quality Act (CEQA) to evaluate the potential environmental impacts associated with the implementation of the Highway 74 Community Plan Project (State Clearinghouse [SCH] No. 2019059042). This document is prepared in conformance with CEQA (California Public Resources Code [PRC] § 21000, *et seq.*) and the CEQA Guidelines (California Code of Regulations [CCR] Title 14, § 15000, *et seq.*).

The purpose of this Draft Program EIR is to inform decision-makers, representatives of affected and responsible agencies, the public, and other interested parties of the potential environmental effects that may result from implementation of the proposed project. This Draft Program EIR describes potential impacts relating to a wide variety of environmental issues and methods by which these impacts can be mitigated or avoided.

Project Summary

Project Location

The Highway 74 Community Plan (proposed project) is located on a 6.8-mile long noncontiguous corridor of Highway 74 in the unincorporated area between Interstates 15 and 215 (I-15, and I-215), between the cities of Lake Elsinore and Perris, in western Riverside County. The proposed project encompasses approximately 2,220 acres of unincorporated lands. Portions of the unincorporated communities of Good Hope, Meadowbrook, and Warm Springs are within the proposed project boundary.

Existing land uses along the Highway 74 corridor consist primarily of large parcels and rural residential uses, scattered commercial and industrial uses. The primary land use in the planning area is very low density residential, rural residential, and mixed use. Additional land uses that exist include medium-density residential, medium-high density residential, very high density residential, highest density residential, business park, commercial retail, community center, light industrial, rural mountainous, conservation habitat, and recreation. The planning area is relatively rural, with existing single-family residential neighborhoods scattered throughout the corridor surrounded by low hilly terrain and large boulders. The planning area has existing local businesses such as auto/tire repair shops, nursery, landscape and fencing supply, trailer supply, home businesses, towing services, truck repair/rental, neighborhood markets, storage facilities, and warehouses. In addition, there are churches and a Caltrans maintenance facility. Overall, many of the properties along Highway 74 are undeveloped or underutilized. Additionally, much of the infrastructure within the planning area (e.g., County roads, storm drainage facilities, bicycle/pedestrian facilities) is limited in terms of extent and size.

Project Description

The County has prepared the proposed project to support planned future development within the planning area. The proposed project includes a General Plan Amendment (GPA No. 1205) to guide the development of residential neighborhoods of varying densities, commercial retail, mixed use, light industrial, business park, public facilities, rural, open space, and recreation areas. Existing land use designations would be updated as part of the proposed project, which would alter the General Plan Foundations primarily from the Rural and Rural Community Foundations to Community Development and corresponding land use designations. The proposed project would also alter other land use designations within their current Foundation Component and provide guiding policies that support the modification of the planning area's structure.

In summary, GPA No. 1205 would involve the following amendments:

- Modify the existing General Plan Land Use Designations, Policy Areas, and policies within the Highway 74 Community Plan planning area.
- Removal the Rural Village Land Use Overlay (RVLUO) for all sites within the planning area.
- Either update both the foundational components and land use designations, or only land use designation of sites.
- Remove the Perris Policy Area, Good Hope Policy Area, and the Good Hope and Meadowbrook RVLUO's.
- Remove the Warm Springs Policy Area that overlaps Neighborhood 3.

General Plan Amendment No. 1205

GPA No. 1205 involves amendments to the existing Foundation Components and land use designations in support of the proposed Highway 74 Community Plan. GPA No. 1205 would modify the existing General Plan Land Use Designations, RVLUO, Policy Areas, and policies to progress opportunities for residential, commercial, public facility, mixed-use areas, light industrial, and business park developments. GPA No. 1205 would update the foundational components and land use designations of certain sites and only land use designation of other sites and completely remove the RVLUO. Table 2-3 summarizes the proposed land use designations compared to the existing land use designations currently in effect.

The proposed planning area is composed of three neighborhoods that are part of the Mead Valley Area Plan (MVAP) and Elsinore Area Plan (ELAP). Within the MVAP, approximately 184 acres of the planning area are within the Highway 74 Perris and Good Hope Policy Areas, which allow relocation of businesses due to the planned expansion of Highway 74. The Perris Policy Area, Good Hope Policy Area, along with the Good Hope and Meadowbrook RVLUO's, would be removed as part of the proposed project. Within the ELAP, approximately 192 acres of the planning area is within the Warm Springs Policy Area, which includes policies protecting the visual and biological assets of the Warm Springs area. The Warm Springs Policy Area overlapping Neighborhood 3 will be removed.

The proposed project would support the General Plan criteria of clustered development in order to create appropriate built environments that promote economic development. Additionally, the

proposed project would promote more Community Development land uses and fewer Rural, Rural Community, and Open Space land uses, and would include policies addressing character, design, and environmental impacts.

In summary, the proposed project would lead to an increase of the following uses:

- Approximately 3,970 multi-family residential dwelling units¹.
- Approximately 2,081,150 square feet of commercial retail uses.
- Approximately 1,506,217 square feet of business park uses.
- Approximately 740,903 square feet of light industrial uses.
- Approximately 21.6 acres of public facility uses.
- Approximately 4.28 acres of open space uses.

Project Objectives

The underlying purpose of the proposed project is to stimulate economic development, provide housing opportunities, facilitate the development of infrastructure, and address environmental justice.

To advance the underlying purpose, the project objectives are as follows:

1. Accommodate the development of a balance of land uses that maintain and enhance Riverside County's fiscal viability, economic diversity, and environmental integrity.
2. Update policies to be consistent with current legal requirements and legislation.
3. Encourage consolidation of parcels to promote better land use development and project design and maximize density of residential, commercial, and industrial uses.
4. Facilitate access from Highway 74 to residential, commercial, and industrial sites where feasible the development of frontage/service roads should be encouraged to increase.
5. Support economic vitality by maximizing the availability of a wide variety of employment opportunities within the planning area.
6. Provide live-work spaces within the MUAs where appropriate.
7. Promote livable and resilient neighborhoods that provide housing, goods and services, open space, and multi-modal transportation options within proximity to each other and that reduce reliance on the automobile.
8. Promote healthy neighborhoods that incorporate best practices related to land use, mobility, air quality, housing, affordability, safety, environmental justice, community services, and design. Encourage complete streets, which include sidewalks, greenbelts, and trails to facilitate use by pedestrians and bicyclists where such facilities are well separated from parallel or cross through traffic to ensure pedestrian and cyclist safety.

¹ The proposed project would lead to a decrease of approximately 383 single-family detached residential units (<5 dwelling units per acre [DU/acre]). However, given the potential increase of 3,970 multi-family dwelling units listed above, the proposed project would lead to a net increase of 3,587 residential units.

9. Preserve outstanding scenic vistas and features and encourage underground placement of electric or communication distribution lines.
10. Encourage trees, signage, landscaping, street furniture, public art, and other aesthetic elements in development.
11. Incorporate policies that promote the health and welfare of the community by encouraging development to include convenient pedestrian and bicycle connections, bus, or shuttle connections, that increase connections to adjacent and nearby communities and cities, businesses, parks and open space areas, and new transit access opportunities into the planning process.
12. Maintain the rural and open space character of Riverside County by implementing policies that concentrate growth near or within existing urban and suburban areas to the greatest extent possible. Preserve and maintain the environment by developing policies to reduce illegal dumping, including hazardous waste, and increase access to affordable composting and recycling facilities; encourage the appropriate permitting of waste sites and reclamation of cleanup sites.
13. Encourage the connection of municipal water and wastewater services to community residents and facilities to reduce reliance on septic systems in order to limit groundwater contamination.

Significant Unavoidable Adverse Impacts

The proposed project would result in the following significant unavoidable impacts:

Conflict with the applicable Air Quality Plan

The proposed project would conflict with implementation of the applicable Air Quality Plan (2022 AQMP for the South Coast Air Basin [SoCAB]). The proposed project would generate regional or localized construction or operational emissions that would exceed the South Coast Air Quality Management District (SCAQMD) thresholds of significance. Additionally, the proposed project has the potential to significantly alter the demographic projections beyond what is accounted for in the current AQMP. Since the proposed project would include a General Plan Amendment, the proposed project would not be consistent with the growth assumptions within the current AQMP. Components of and improvements proposed under the proposed project would contribute to minimize criteria air pollutant emissions from transportation and energy use. However, given the potential increase in growth and associated increase in criteria air pollutant emissions, the project would continue to be potentially inconsistent with the assumptions in the AQMP. Implementation of Mitigation Measures (MM) AIR-6a-1 through MM AIR-6a-15 would be required to reduce regional and localized emissions to the extent feasible. However, the estimated construction emissions and long-term emissions generated under full buildout of the proposed project are estimated to continue to exceed the SCAQMD's regional significance thresholds after the implementation of mitigation, and would cumulatively contribute to the nonattainment designations in the SoCAB. In addition, implementation of the proposed project would contribute to exceedances of the current population and employment estimates for the planning area. Therefore, the proposed project would be

considered inconsistent with the AQMP, resulting in a significant impact in this regard. Therefore, Impact AIR-6a would remain significant and unavoidable.

Cumulative Air Quality

The proposed project would result in a cumulatively considerable net increase of a criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard. Operation of the proposed project at buildout would generate air pollutant emissions that exceed SCAQMD's regional significance thresholds for volatile organic compound (VOC), nitrogen oxide (NO_x), CO, PM₁₀, and PM_{2.5} at full buildout. Emissions of VOC and NO_x that exceed the SCAQMD regional threshold would cumulatively contribute to the O₃ nonattainment designation of the SoCAB. Emissions of NO_x that exceed SCAQMD's regional significance thresholds would cumulatively contribute to the O₃ and particulate matter nonattainment designations of the SoCAB. Emissions of direct PM₁₀ and PM_{2.5} would contribute to the PM_{2.5} nonattainment designations. Therefore, the project would result in a potentially significant impact because it would significantly contribute to the nonattainment designations of the SoCAB.

Combined with the Riverside County General Plan policies and the implementation of existing mitigation measures developed as part of the Final EIR for the General Plan, the implementation of MM AIR-6a-1 through MM AIR-6a-7 would reduce criteria air pollutant emissions from construction-related activities to the extent feasible. However, specific construction time frames and equipment for individual site-specific projects are not available and there is a potential for multiple developments to be constructed at any one time, resulting in potentially significant cumulative construction-related emissions.

Buildout in accordance with the proposed project would generate long-term emissions that would exceed SCAQMD's regional significance thresholds and cumulatively contribute to the nonattainment designations of the SoCAB. To reduce emissions from the operation of future projects envisioned in the proposed project, MM AIR-6a-8 through MM AIR-6a-15 are required to reduce emissions to the extent feasible, in combination with the existing General Plan policies and associated mitigation. However, due to the magnitude of emissions generated by residential, office, commercial, and light industrial land uses proposed as part of the project, no mitigation measures are available that would reduce cumulative impacts below SCAQMD's thresholds. Therefore, despite adherence to the applicable mitigation measures, Impact AIR-6b would remain significant and unavoidable.

Expose sensitive receptors to substantial pollutant concentrations

The proposed project would expose sensitive receptors, which are located within 1 mile of the project site, to substantial pollutant concentrations. Known sensitive receptors located within 1 mile of the planning area include numerous residences, childcare centers, parks, and nine public schools. Construction equipment exhaust combined with fugitive particulate matter emissions have the potential to expose sensitive receptors to substantial concentrations of criteria air pollutant emissions and result in a significant impact. Furthermore, the proposed project would permit commercial and light industrial land uses, which could potentially generate substantial quantities of criteria air pollutants and toxic air contaminants (TACs) from land uses such as stationary sources and warehouses once the proposed project is operational. These emissions could potentially impact nearby sensitive receptors. to accurately analyze the potential impacts of potential future

development projects, MM AIR-1 is required. Compliance with this mitigation measure will ensure that specific project-level construction impacts are analyzed, and further mitigation measures are considered, as appropriate. Even after complying with regulations, existing policies, and mitigation measures, as well as new mitigation measures, the impacts cannot be guaranteed to be reduced to below applicable agency thresholds, resulting in a potentially significant impact from construction toxic air pollutants to sensitive receptors. Additionally, development of the commercial land uses that are allowed under the proposed project may result in stationary sources of TAC emissions. Mitigation measures included as part of EIR No. 521 would further serve to reduce the impacts of operational emissions on sensitive receptors within the General Plan area. Required General Plan mitigation includes EIR No. 441 MM 2.51A, MM 4.51B, and MM 4.5.1C, and EIR No. 521 MM 4.6.B-N1, MM 4.6.B-N2, MM 4.6.B-N3, MM 4.6.D-N1, and MM 4.6.D-N2. To accurately analyze the potential impacts of potential future development projects that include trucking emissions, MM AIR-6a-8 and MM AIR-6a-9 are required. Compliance with MM AIR-6a-8 and MM AIR-6a-9 will ensure that localized and regional project-level emissions are analyzed, and further mitigation measures are considered, as appropriate. Additionally, the proposed project would locate new sensitive receptors (residents) that could be subject to existing sources of TACs within the project boundary. Therefore, MM AIR-6a-16 has been included to relay information to the residents in order for them to make their own informed decisions. Because the construction and operation of future developments envisioned under the proposed project could expose sensitive receptors to significant quantities of criteria and toxic air contaminants even with the implementation of mitigation, the impacts of the proposed project remain significant and unavoidable.

Conflict with circulation system program, plan, ordinance, or policy

The proposed project would result in an increase in project-generated VMT from No Project baseline conditions, which is considered a significant impact. Projects that exceed VMT threshold(s) are required to mitigate transportation impacts to the extent feasible. VMT reduction strategies for large projects and community plans/specific plans may include altering a project's density, land use mix, site design, and availability of transit, bicycle, and pedestrian facilities. Mitigation measures MM TRANS-37b-1 through MM TRANS-37b-5, would be required for future implementing projects to reduce impacts related to increase in VMT. Given the uncertainty in some components of the measure that influence VMT (such as the cost of fuel) combined with the County's inability to influence other measures that would have the largest effect on VMT (such as implementation of a VMT tax or an increase in the fuel tax), the effectiveness of these Transportation Demand Management (TDM) measures cannot be guaranteed to reduce impacts and the impact is considered significant and unavoidable. Implementation of mitigation measures would reduce this impact, but not to less than significant levels.

Summary of Project Alternatives

Below is a summary of the alternatives to the proposed project considered in Section 5, Alternatives to the proposed project.

Alternative 1: No Project Alternative

Under this alternative, land use changes as per the proposed project would not occur. The Highway 74 Community Plan would not be implemented, and the existing land use activities within the

planning area would continue for the foreseeable future until they are developed or redeveloped according to their General Plan Land Use Designations. This alternative assumes the breakdown of land use acreages listed in the Existing General Plan Land Use Designation table (Table 2-1). No changes in buildout potential would occur.

Alternative 2: Reduced Density Alternative

The purpose of this alternative is to reduce impacts from the proposed project related to the number of residential units and the intensity of commercial and industrial development. Under this alternative, the total number of residential dwelling units anticipated is assumed to be reduced from 3,587 to 2,691, representing a reduction of 896 units, or approximately 25 percent. The amount of commercial and industrial development would also be reduced by 25 percent, from 4,328,270 to 3,246,203 (a reduction of 1,082,067 square feet).

Alternative 3: Increased Industrial Use Alternative

In addition to the land use changes proposed by the proposed project, this alternative would also change the existing residential, mixed-use, and community center designations within the Colinas del Oro Specific Plan area to light industrial (LI). This would represent an increase of 72.0 acres of LI use and reduction of residential, mixed-use, and community center uses compared to the proposed project. The proposed land use changes in the Colinas del Oro Specific Plan area as part of Alternative 3 is shown in Exhibit 05-01.

Areas of Controversy

Pursuant to CEQA Guidelines Section 15123(b), a summary section must address areas of controversy known to the lead agency, including issues raised by agencies and the public, and it must also address issues to be resolved, including the choice among alternatives and whether or how to mitigate the significant effects.

A Notice of Preparation (NOP) for the proposed project was issued on May 3, 2019. The NOP describing the original concept for the proposed project and issues to be addressed in the Program EIR was distributed to the State Clearinghouse, responsible agencies, and other interested parties for a 30-day public review period extending from May 9, 2019, and June 10, 2019. The NOP identified the potential for significant impacts on the environment related to the following topical areas:

- Aesthetics
- Agriculture and Forest Resources
- Air Quality
- Biological Resources
- Cultural Resources and Tribal Cultural Resources
- Geology and Soils
- Greenhouse Gas Emissions
- Energy
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Mineral Resources
- Noise
- Paleontological Resources
- Population and Housing
- Public Services
- Recreation
- Transportation
- Utilities and Service Systems
- Wildfire

Disagreement Among Experts

This Draft Program EIR contains substantial evidence to support all the conclusions presented herein. It is possible that there will be disagreement among various parties regarding these conclusions, although the County of Riverside is not aware of any disputed conclusions at the time of this writing. Both the CEQA Guidelines and case law clearly provide the standards for treating disagreement among experts. Where evidence and opinions conflict on an issue concerning the environment, and the lead agency knows of these controversies in advance, the Program EIR must acknowledge the controversies, summarize the conflicting opinions of the experts, and include sufficient information to allow the public and decision-makers to make an informed judgment about the environmental consequences of the proposed project.

Potentially Controversial Issues

Below is a list of potentially controversial issues that may be raised during the public review and hearing process of this Draft Program EIR:

- Cumulative air quality impacts
- Emissions from heavy-duty fueled vehicles
- Population growth
- Land use compatibility
- Cumulative transportation impacts
- Water and wastewater facility capacities
- Tribal cultural resources potentially affected by the proposed project
- Project Distance from Riverside County Habitat Conservation Agency -owned conservation lands

It is also possible that evidence will be presented during the 45-day, statutory Draft Program EIR public review period that may create disagreement. Decision-makers would consider this evidence during the public hearing process.

In rendering a decision on a project where there is disagreement among experts, the decision-makers are not obligated to select the most environmentally preferable viewpoint. Decision-makers are vested with the ability to choose whatever viewpoint is preferable and need not resolve a dispute among experts. In their proceedings, decision-makers must consider comments received concerning the adequacy of the Draft Program EIR and address any objections raised in these comments. However, decision-makers are not obligated to follow any directives, recommendations, or suggestions presented in comments on the Draft Program EIR, and can certify the Final Program EIR without needing to resolve disagreements among experts.

Public Review of the Draft Program EIR

Upon completion of the Draft Program EIR, the County of Riverside filed a Notice of Completion (NOC) with the State Office of Planning and Research to begin the public review period (Public Resources Code, Section 21161). Concurrent with the NOC, this Draft Program EIR has been distributed to responsible and trustee agencies, other affected agencies, surrounding cities, and interested parties, as well as all parties requesting a copy of the Draft Program EIR in accordance with Public Resources Code 21092(b)(3). During the public review period, the Draft Program EIR, including the technical appendices, is available for review at the Riverside County Planning Department offices. The address is provided below:

Riverside County Planning Department
4080 Lemon Street, 12th Floor
Riverside, CA 92502-1409
Hours:
Monday–Friday: 8:00 a.m. to 5:00 p.m.

Agencies, organizations, and interested parties have the opportunity to comment on the Draft Program EIR during the 45-day public review period. Written comments on this Draft Program EIR should be addressed to:

Andrew Svitek, Project Planner
County of Riverside
4080 Lemon Street 12th Floor
Riverside, CA 92501
Phone: 951.955.8514
Email: asvitek@rivco.org

Submittal of electronic comments in Microsoft Word or Adobe PDF format is encouraged. Upon completion of the public review period, written responses to all significant environmental issues raised will be prepared and made available for review by the commenting agencies at least 10 days prior to the public hearing before the County of Riverside on the proposed project, at which the certification of the Final Program EIR will be considered. Comments received and the responses to comments will be included as part of the record for consideration by decision-makers for the proposed project.

Executive Summary Matrix

Table ES-1 below summarizes the impacts, mitigation measures, and resulting level of significance after mitigation for the relevant environmental issue areas evaluated for the proposed project. The table is intended to provide an overview; narrative discussions for the issue areas are included in the corresponding section of this EIR. Table ES-1 is included in the Program EIR as required by CEQA Guidelines Section 15123(b)(1).

Table ES-1: Executive Summary Matrix

Impacts	Mitigation Measures	Level of Significance After Mitigation	Monitoring
Section 3.1—Aesthetics, Light, and Glare			
Impact AES-1(a): The project would not have a substantial adverse effect upon a scenic highway corridor within which it is located.	No mitigation measures are required.	Less than significant impact.	None.
Impact AES-1(b): The project would not substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and unique or landmark features; obstruct any prominent scenic vista or view open to the public; or result in the creation of an aesthetically offensive site open to public view.	No mitigation measures are required.	Less than significant impact.	None.
Impact AES-1(c): In non-urbanized areas, the project would not substantially degrade the existing visual character or quality of public views of the site and its surroundings (public views are those that are experienced from publicly accessible vantage point). In an urbanized area, the project would not conflict with applicable zoning and other regulations governing scenic quality.	No mitigation measures are required.	Less than significant impact.	None.
Impact AES-2(a): The project would not interfere with the nighttime use of the Mt. Palomar Observatory, as protected through Riverside County Ordinance No. 655.	No mitigation measures are required.	Less than significant impact.	None.
Impact AES-3(a): The project would not create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.	No mitigation measures are required.	Less than significant impact.	None.
Impact AES-3(b): The project would not expose residential property to unacceptable light levels.	No mitigation measures are required.	Less than significant impact.	None.
Section 3.2—Agriculture Resources and Forest Resources			

Impacts	Mitigation Measures	Level of Significance After Mitigation	Monitoring
Impact AG-4(a): The project would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to nonagricultural use.	No mitigation measures are required.	No impact.	None.
Impact AG-4(b): The project would not conflict with existing agricultural zoning, agricultural use or with land subject to a Williamson Act contract or land within a Riverside County Agricultural Preserve.	No mitigation measures are required.	No impact.	None.
Impact AG-4(c): The project would not cause development of nonagricultural uses within 300 feet of agriculturally zoned property (Ordinance No. 625 “Right-to-Farm”)	No mitigation measures are required.	No impact.	None.
Impact AG-4(d): The project would not involve other changes in the existing environment, which due to their location or nature, could result in conversion of Farmland, to nonagricultural use.	No mitigation measures are required.	No impact.	None.
Impact FOR-5(a): The project would not conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g)).	No mitigation measures are required.	No impact.	None.
Impact FOR-5(b): The project would not result in the loss of forest land or conversion of forest land to non-forest use.	No mitigation measures are required.	No impact.	None.
Impact FOR-5(s): The project would not involve other changes in the existing environment, which due to their location or nature, could result in conversion of forest land to non-forest use.	No mitigation measures are required.	No impact.	None.

Impacts	Mitigation Measures	Level of Significance After Mitigation	Monitoring
Section 3.3—Air Quality			
<p>Impact AIR-6(a): The project would not conflict with or obstruct implementation of the applicable air quality plan with implementation of mitigation.</p>	<p>Measures required to reduce the impact of construction-related emissions from future development projects included in the planning area include MM AIR-6a-1–MM AIR-6a-7.</p> <p>MM AIR-6a-1: To identify potential implementing development project-specific impacts resulting from construction activities, proposed development projects that are subject to CEQA shall have construction-related air quality impacts analyzed using the latest available CalEEMod model, or other analytical method determined in conjunction with the SCAQMD. The results of the construction-related air quality impacts analysis shall be included in the development project’s CEQA documentation. To address potential localized impacts, the air quality analysis may incorporate SCAQMD’s Localized Significance Threshold analysis or other appropriate analyses as determined in conjunction with SCAQMD. If such analyses identify potentially significant regional or local air quality impacts, the City shall require the incorporation of appropriate mitigation to reduce such impacts.</p> <p>MM AIR-6a-2: As part of a standard building permit submittal, prior to the issuance of building or grading permits, the project applicant shall provide the County of Riverside with documentation demonstrating that project construction</p>	<p>Significant and unavoidable.</p>	<p>County review.</p>

Impacts	Mitigation Measures	Level of Significance After Mitigation	Monitoring
	<p>will use “super-compliant” low-volatile organic compound (VOC) Architectural Coatings, as defined by SCAQMD, with VOC content of 10 grams per liter (g/L) or less.</p> <p>MM AIR-6a-3: Each individual implementing development project shall apply paints using either high volume low pressure (HVLP) spray equipment with a minimum transfer efficiency of at least 65 percent or other application techniques with equivalent or higher transfer efficiency.</p> <p>MM AIR-6a-4: As part of a standard grading permit submittal, the project applicant shall submit documentation to the County of Riverside that demonstrates that all off-road construction equipment in excess of 50 horsepower is equipped with engines meeting the United States Environmental Protection Agency (EPA) Tier IV Final off-road engine emission standards or cleaner. The construction contractor shall maintain records concerning its efforts to comply with this requirement during construction, including equipment lists. Off-road equipment descriptions and information may include but are not limited to equipment type, equipment manufacturer, equipment identification number, engine model year, engine certification (Tier rating), horsepower, and engine serial number. The project applicant and/or construction contractor shall submit the construction operations plan and records of compliance to the County of Riverside.</p>		

Impacts	Mitigation Measures	Level of Significance After Mitigation	Monitoring
	<p>If engines that comply with Tier IV Final off-road emission standards are not commercially available, then the construction contractor shall use the next cleanest piece of off-road equipment (e.g., Tier IV Interim) available. For purposes of this mitigation measure, “commercially available” shall mean the availability of Tier IV Final engines taking into consideration factors such as (i) critical-path timing of construction; and (ii) geographic proximity to the project site of equipment. The contractor can maintain records for equipment that is not commercially available by providing letters from at least two rental companies for each piece of off-road equipment where the Tier IV Final engine is not available.</p> <p>MM AIR-6a-5: Building and grading permits shall include a restriction that limits idling of construction equipment on-site to no more than five minutes.</p> <p>MM AIR-6a-6: Electricity from power poles shall be used instead of temporary diesel or gasoline-powered generators to reduce associated emissions. Approval will be required by the County of Riverside prior to issuance of grading permits.</p> <p>MM AIR-6a-7: Prior to issuance of any grading permits, the developer shall provide a traffic control plan to the County of Riverside that describes in detail the location of equipment staging areas, stockpiling/storage areas, construction</p>		

Impacts	Mitigation Measures	Level of Significance After Mitigation	Monitoring
	<p>parking areas, safe detours around the project construction site, as well as provide temporary traffic control (e.g., flag person) during construction-related truck hauling activities. The traffic control plan is intended to minimize traffic congestion and delays that increase idling and acceleration emissions. The applicant shall maintain one copy on-site in the construction trailer to the satisfaction of the County of Riverside.</p> <p>Measures designed to reduce the impact of operational emissions from future projects included in the planning area, especially from light industrial uses including stationary sources and warehouses, include MM AIR-6a-8–MM AIR-6a-15.</p> <p>MM AIR-6a-8: To identify potential implementing development project-specific impacts resulting from operational activities, proposed development projects that are subject to CEQA shall have long-term operational-related air quality impacts analyzed using the latest available California Emissions Estimator Model (CalEEMod) model, or other analytical method determined by the County of Riverside as lead agency in conjunction with the SCAQMD. The results of the operational-related air quality impacts analysis shall be included in the development project’s CEQA documentation. To address potential localized impacts, the air quality analysis may incorporate SCAQMD’s Localized Significance Threshold analysis, CO Hot Spot analysis, or other appropriate analyses as</p>		

Impacts	Mitigation Measures	Level of Significance After Mitigation	Monitoring
	<p>determined by the County of Riverside in conjunction with SCAQMD. If such analyses identify potentially significant regional or local air quality impacts, the County shall require the incorporation of appropriate mitigation to reduce such impacts.</p> <p>MM AIR-6a-9: To identify potential implementing development project-specific impacts resulting from the use of diesel trucks, proposed implementing development projects that include an excess of 10 dock doors for a single building, a minimum of 100 truck trips per day, 40 truck trips with Transport Refrigeration Units (TRUs) per day, or TRU operations exceeding 300 hours per week, and that are subject to CEQA and are located adjacent to sensitive land uses; shall have a facility-specific Health Risk Assessment performed to assess the diesel particulate matter impacts from mobile source traffic generated by that implementing development project. The results of the Health Risk Assessment shall be included in the CEQA documentation for each implementing development project.</p> <p>MM AIR-6a-10: In order to promote alternative fuels, and help support “clean” truck fleets, the developer/successor-in-interest shall provide building occupants and businesses with information related to SCAQMD’s Carl Moyer Program, or other state programs that restrict operations to “clean” trucks, such as 2007 or newer model year or 2010 compliant vehicles and information including, but not limited to, the</p>		

Impacts	Mitigation Measures	Level of Significance After Mitigation	Monitoring
	<p>health effect of diesel particulates, benefits of reduced idling time, California Air Resource Board (ARB) regulations, and importance of not parking in residential areas. If trucks older than 2007 model year will be used at a facility with three or more dock-high doors, the developer/ successor-in-interest shall require, within one year of signing a lease, future tenants to apply in good-faith for funding for diesel truck replacement/retrofit through grant programs such as the Carl Moyer, Prop 1B, Voucher Incentive Program (VIP), Hybrid and Zero-Emission Truck And Bus Voucher Incentive Project (HVIP), and Surplus Off-Road Opt-In for NO_x (SOON) funding programs, as identified on SCAQMD's website (http://www.aqmd.gov). Tenants will be required to use those funds, if awarded.</p> <p>MM AIR-6a-11: Prior to the approval of each implementing development project, the Riverside Transit Agency (RTA) shall be contacted to determine whether the RTA has plans for the future provision of bus routing within any street that is adjacent to the implementing development project that would require bus stops at the project access points. If the RTA has future plans for the establishment of a bus route that will serve the implementing development project, road improvements adjacent to the project site shall be designed to accommodate future bus turnouts at locations established through consultation</p>		

Impacts	Mitigation Measures	Level of Significance After Mitigation	Monitoring
	<p>with the RTA. RTA shall be responsible for the construction and maintenance of the bus stop facilities. The area set aside for bus turnouts shall conform to RTA design standards, including the design of the contact between sidewalks and curb and gutter at bus stops and the use of Americans with Disabilities Act (ADA)-compliant paths to the major building entrances in the project.</p> <p>MM AIR-6a-12: In order to reduce energy consumption from the individual implementing development projects, applicable plans (e.g., electrical plans, improvement maps) submitted to the County shall include the installation of energy-efficient street lighting throughout the project site. These plans shall be reviewed and approved by the applicable County Department prior to conveyance of applicable streets.</p> <p>MM AIR-6a-13: Each implementing development project shall be encouraged to implement, at a minimum, an increase in each building’s energy efficiency 15 percent beyond Title 24, and reduce indoor water use by 25 percent. All requirements will be documented through a checklist to be submitted to the County of Riverside prior to issuance of building permits for the implementing development project with building plans and calculations.</p> <p>MM AIR-6a-14: Prior to issuance of building permits for non-single-family residential and</p>		

Impacts	Mitigation Measures	Level of Significance After Mitigation	Monitoring
	<p>mixed-use residential development projects in the planning area, the project applicant shall indicate on the building plans that the following features have been incorporated into the design of the building(s). Proper installation of these features shall be verified by the County of Riverside prior to the issuance of a Certificate of Occupancy.</p> <ul style="list-style-type: none"> ● Electric vehicle charging shall be provided as specified in Section A4.106.8.2 (Residential Voluntary Measures) of the California Green Building Standards Code (CALGreen). ● Bicycle parking shall be provided as specified in Section A4.106.9 (Residential Voluntary Measures) of the CALGreen Code. <p>MM AIR-6a-15: Prior to the issuance of building permits for nonresidential development projects in the planning area, project applicants shall indicate on the building plans that the following features have been incorporated into the design of the building(s). Proper installation of these features shall be verified by the County of Riverside prior to the issuance of a Certificate of Occupancy.</p> <ul style="list-style-type: none"> ● For buildings with more than 10 tenant-occupants, changing/shower facilities shall be provided as specified in Section A5.106.4.3 (Nonresidential Voluntary Measures) of the California Green Building Standards Code (CALGreen). ● Preferential parking for low-emitting, fuel-efficient, and carpool/van vehicles shall be 		

Impacts	Mitigation Measures	Level of Significance After Mitigation	Monitoring
	<p>provided as specified in Section A5.106.5.1 (Nonresidential Voluntary Measures) of the CALGreen Code.</p> <ul style="list-style-type: none"> Facilities shall be installed to support future electric vehicle charging at each nonresidential building with 30 or more parking spaces. Installation shall be consistent with Section A5.106.5.3 (Nonresidential Voluntary Measures) of the CALGreen Code. 		
<p>Impact AIR-6(b): The project would not 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 (including releasing emissions which exceed quantitative thresholds for ozone precursors) with implementation of mitigation.</p>	<p>Implementation of MM AIR-6a-1 through MM AIR-6a-15.</p>	<p>Significant and unavoidable.</p>	<p>County review.</p>
<p>Impact AIR-6(c): The project would not expose sensitive receptors, which are located within one (1) mile of the project site, to substantial pollutant concentrations with implementation of mitigation.</p>	<p>Compliance with MM AIR-6a-1 through MM AIR-6a-16.</p> <p>MM AIR-6a-16: All future residents of the planning area shall be provided with information that describes the potential risk from living near a freeway and that the incorporation of an advanced air filtration system has been provided to reduce that risk. The information shall also indicate that the residents have the option to open windows for circulation, however that by opening windows, they reduce or eliminate the effectiveness of the air filtration system within their unit for as long as the unit is open to unfiltered air.</p>	<p>Significant and unavoidable.</p>	<p>County review.</p>
<p>Impact AIR-6(d): The project would not result in</p>	<p>No mitigation measures are required.</p>	<p>Less than significant impact.</p>	<p>None.</p>

Impacts	Mitigation Measures	Level of Significance After Mitigation	Monitoring
<p>other emissions (such as those leading to odors) adversely affecting a substantial number of people.</p>			
Section 3.4—Biological Resources			
<p>Impact BIO-7(a): The project would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or State conservation plan.</p>	<p>Compliance with MM BIO-7(a) MM BIO-7(a): MSHCP and SKR HCP Compliance All future implementing projects within the planning area would include payment the Stephens' Kangaroo Rat Habitat Conservation Plan (SKR HCP) Mitigation Fee and preparation of a Multiple Species Habitat Conservation Plan (MSHCP) Consistency Analysis report that would be submitted to the County to document each individual future implementing project's consistency with the goals, objectives, and requirements of the MSHCP. Additional surveys, studies, permitting, agency coordination, and/or reporting measures may be required for the project to maintain consistency with the MSHCP. Any such additional measures would be identified in the MSHCP Consistency Analysis report prepared for each project. The project applicant for all development projects proposed within the planning area would coordinate with the County and the Western Riverside County Regional Conservation Authority (RCA) to submit all applicable forms, fees, and/or technical reports detailing any desktop analyses and/or biological field studies or surveys. Conditions that may apply to future development within the planning area include the</p>	<p>Less than significant impact.</p>	<p>County and RCA review.</p>

Impacts	Mitigation Measures	Level of Significance After Mitigation	Monitoring
	<p>following:</p> <ul style="list-style-type: none"> ● The completion of any required MSHCP wildlife and plant protocol surveys, including riparian birds and burrowing owl. ● Evaluation of project impacts to Conservation Areas, Covered Roads, Covered Public Access Activities, Public Quasi-Public Lands, and Riparian/Riverine Areas. ● The preparation of Determination of Biologically Equivalent or Superior Preservation (DBESP), a mitigation plan required for any impacts to MSHCP resources such as Riparian/Riverine habitat, etc., if triggered by the proposed project. ● Participation in the Habitat Evaluation and Acquisition Negotiation Strategy (HANS) process to determine conservation requirements if the development project occurs within a Criteria Cell. ● Implementation of Guidelines Pertaining to the Urban/Wildlands Interface for projects located in or adjacent to Conservation Areas. ● The completion of any required mitigation and Best Management Practice (BMPs) to offset impacts to any MSHCP-protected resources. 		
<p>Impact BIO-7(b): The project could have a substantial adverse effect, either directly or through habitat modifications, on any endangered, or threatened species, as listed in Title 14 of the California Code of Regulations (Sections 670.2 or</p>	<p>MM BIO-7(b): Completion of a Biological Study For all future development plans within the planning area that could contain species that are listed but not covered by the Multiple</p>	<p>Less than significant impact.</p>	<p>County review of biological study</p>

Impacts	Mitigation Measures	Level of Significance After Mitigation	Monitoring
<p>670.5) or in Title 50, Code of Federal Regulations (Sections 17.11 or 17.12) with implementation of mitigation.</p>	<p>Species Habitat Conservation Plan (MSHCP) or Stephens' Kangaroo Rat Habitat Conservation Plan (SKR HCP), or habitat conducive to hosting such species, the project applicant shall employ a qualified Biologist approved by the County to prepare a Biological Study to evaluate potential impacts to sensitive biological resources regulated by the United States Wildlife Service (USFWS), the California Department of Fish and Wildlife (CDFW), or other local, regional plans or policies that may result from the development of the specific project. The qualified Biologist shall conduct, at a minimum, a site-specific literature review, which shall consider the future development project, site location, Geographic Information System (GIS) information and known sensitive biological resources. The review shall assess the site for State or federally listed plants and/or wildlife, aquatic resources, sensitive natural communities, wildlife corridors or nurseries, or other regulated biological resources covered by the Endangered Species Act, or California Endangered Species Act (CESA) that could be affected by the proposed project. In some cases, such as a project site that is previously completely developed, a literature review would be sufficient for the Biologist to make a no impact and/or a less than significant impact determination for all six of the thresholds of significance for biological resources. In other cases, such as project sites that are all or partially undeveloped, a site survey may be needed</p>		

Impacts	Mitigation Measures	Level of Significance After Mitigation	Monitoring
	<p>to assess the biological conditions on-site. The qualified Biologist employed by each project applicant shall assess potential project impacts to non-listed, non-covered species, identify threshold of significance with a significance conclusion, and document the findings in a report. Additionally, future implementing projects may be required to incorporate additional mitigation depending on results of such future biological studies.</p>		
<p>Impact BIO-7(c): The project could have a substantial adverse effect, either directly or through habitat modifications, or any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or United States Fish and Wildlife Service with implementation of mitigation.</p>	<p>Implement MM BIO-7(b)</p>	<p>Less than significant impact.</p>	<p>County review of biological study</p>
<p>Impact BIO-7(d): The project could 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.</p>	<p>Implement MM BIO-7(b) and MM BIO-7(c)</p> <p>MM BIO-7(c): Protection of Nesting Birds For all future development plans within the planning area that contain habitats or features that could provide nesting habitat for bird species protected under the Migratory Bird Treaty Act (MBTA) and Fish and Game Code, the following measures shall apply:</p> <ol style="list-style-type: none"> 1. Removal of native vegetation shall be limited to only those necessary to construct a proposed future project as reflected in the relevant project approval documents. 2. If a proposed future project requires 	<p>Less than significant impact.</p>	<p>MM BIO-7(b): County review of biological study</p> <p>MM BIO-7(c): County review of project documents</p>

Impacts	Mitigation Measures	Level of Significance After Mitigation	Monitoring
	<p>vegetation to be removed during the nesting season, pre-construction surveys shall be conducted 7 days prior to tree removal to determine whether or not active nests are present.</p> <p>3. If an active nest is located during a pre-construction survey, a qualified Biologist shall determine an appropriately sized avoidance buffer based on the species and anticipated disturbance level. A qualified Biologist shall delineate the avoidance buffer using Environmentally Sensitive Area (ESA) fencing, pin flags, and or yellow caution tape. The buffer zone shall be maintained around the active nest site(s) until the young have fledged and are foraging independently. No construction activities or construction foot traffic is allowed to occur within the avoidance buffer(s).</p> <p>4. The qualified Biologist shall monitor the active nest during construction activities to prevent any potential impacts that may result from the construction of the proposed project until the young have fledged.</p>		
<p>Impact BIO-7(e): The project could have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Wildlife or United States Fish and Wildlife Service.</p>	<p>Implement MM BIO-7(a) and MM BIO-7(b)</p>	<p>Less than significant impact.</p>	<p>MM BIO-7(a): County and RCA review.</p> <p>MM BIO-7(b): County review of biological study</p>
<p>Impact BIO-7(f): The project would not have a substantial adverse effect on State or federally protected wetlands (including, but not limited to,</p>	<p>Implement MM BIO-7(d) and MM BIO-7(e) MM BIO-7(d): Determination of the Extent</p>	<p>Less than significant impact.</p>	<p>MM BIO-7(d): Prior to project approval, County review of</p>

Impacts	Mitigation Measures	Level of Significance After Mitigation	Monitoring
<p>marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.</p>	<p>of Impacts to Jurisdictional Waters and Wetlands Any proposed development within the planning area that could impact any potentially jurisdictional waters or wetlands shall prepare a separate jurisdictional delineation report to establish the jurisdictional limits of any potentially regulated waters/wetlands.</p> <p>MM BIO-7(e): Apply for Permits from Regulatory Agencies Any project proponent that proposes impacts to jurisdictional waters or wetlands within the planning area shall consult with the California Department of Fish and Wildlife (CDFW) regarding a Section 1602 Streambed Alteration Agreement Permit, the United States Army Corps of Engineers (USACE) regarding a Clean Water Act (CWA) Section 404 Permit, and the Regional Water Quality Control Board (RWQCB) regarding a CWA Section 401 Certification. The project applicant shall be required to obtain these permits as a condition of approval and prior to the issuance of any grading, construction or building permits from the County and prior to the commencement of any grading or construction activities. The project applicant shall implement the mitigation measures as prescribed in the permits.</p>		<p>jurisdictional delineation report</p> <p>MM BIO-7(e): Prior to project construction, County verification that all permits have been obtained</p>
<p>Impact BIO-7(g): The project would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.</p>	<p>Implement MM BIO-7(b)</p>	<p>Less than significant impact.</p>	<p>MM BIO-7(b): County review of biological study</p>

Impacts	Mitigation Measures	Level of Significance After Mitigation	Monitoring
Section 3.5—Cultural and Tribal Cultural Resources			
Impact CUL-8(a): The project could alter or destroy a historic site.	No mitigation measures are required.	Less than significant impact.	None.
Impact CUL-8(b): The project could cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5.	No mitigation measures are required.	Less than significant impact.	None.
Impact CUL-9(a): The project could alter or destroy an archaeological site.	No mitigation measures are required.	Less than significant impact.	None.
Impact CUL-9(b): The project could cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5.	No mitigation measures are required.	Less than significant impact.	None.
Impact CUL-9(c): The project could disturb any human remains, including those interred outside of formal cemeteries.	No mitigation measures are required.	Less than significant impact.	None.
Section 3.6—Energy			
Impact ENER-10a: The project would not result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation.	No mitigation measures are required.	Less than significant impact.	None.
Impact ENER-10b: The project would not conflict with or obstruct a State or Local plan for renewable energy or energy efficiency.	No mitigation measures are required.	Less than significant impact.	None.
Section 3.7—Geology and Soils			
Impact GEO-11a: The project would not be subject to 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 with implementation of mitigation.	No mitigation measures are required.	Less than significant impact.	None.

Impacts	Mitigation Measures	Level of Significance After Mitigation	Monitoring
<p>Impact GEO-12a: The project could be subject to seismic-related ground failure, including liquefaction.</p>	<p>MM GEO-12a: Prior to issuance of the first building permit for each development within the Community Plan area, the project applicant shall submit a design-level geotechnical report to the County of Riverside Building and Safety Department for review and approval. The design-level investigation shall be prepared in accordance with California Building Standards Code (CBC) and County of Riverside Code of Ordinance Standards and address the potential for seismic, soils, or other geological hazards to occur on-site and identify abatement measures to reduce the potential for such an event to acceptable levels. The recommendations of the approved design-level geotechnical report shall be incorporated into the project plans.</p>	<p>Less than significant impact.</p>	<p>MM GEO-12a: Prior to issuance of the first building permit for each development pursuant to the Community Plan, County to review and approve the project’s design level geotechnical investigation</p>
<p>Impact GEO-13a: The project could be subject to strong seismic ground shaking.</p>	<p>Implementation of GEO-12a.</p>	<p>Less than significant impact.</p>	<p>MM GEO-12a: Prior to issuance of the first building permit for each development pursuant to the Community Plan, County to review and approve the project’s design level geotechnical investigation</p>
<p>Impact GEO-14a: The project could 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, collapse, or rockfall hazards.</p>	<p>Implementation of GEO-12a.</p>	<p>Less than significant impact.</p>	<p>MM GEO-12a: Prior to issuance of the first building permit for each development pursuant to the Community Plan, County to review and approve the project’s design level geotechnical investigation</p>

Impacts	Mitigation Measures	Level of Significance After Mitigation	Monitoring
<p>Impact GEO-15a: The project could 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 ground subsidence.</p>	<p>Implementation of GEO-12a.</p>	<p>Less than significant impact.</p>	<p>MM GEO-12a: Prior to issuance of the first building permit for each development pursuant to the Community Plan, County to review and approve the project’s design level geotechnical investigation</p>
<p>Impact GEO-16a: The project could be subject to geologic hazards, such as seiche, mudflow, or volcanic hazard.</p>	<p>Implementation of GEO-12a.</p>	<p>Less than significant impact.</p>	<p>MM GEO-12a: Prior to issuance of the first building permit for each development pursuant to the Community Plan, County to review and approve the project’s design level geotechnical investigation</p>
<p>Impact GEO-17a: The project could change topography or ground surface relief features.</p>	<p>Implementation of GEO-12a.</p>	<p>Less than significant impact.</p>	<p>MM GEO-12a: Prior to issuance of the first building permit for each development pursuant to the Community Plan, County to review and approve the project’s design level geotechnical investigation</p>
<p>Impact GEO-17b: The project could create cut or fill slopes greater than 2:1 or higher than 10 feet.</p>	<p>Implementation of GEO-12a.</p>	<p>Less than significant impact.</p>	<p>MM GEO-12a: Prior to issuance of the first building permit for each development pursuant to the Community Plan, County to review and approve the project’s design level geotechnical investigation</p>
<p>Impact GEO-17c: The project could result in grading that affects or negates subsurface sewage disposal systems.</p>	<p>Implementation of GEO-12a.</p>	<p>Less than significant impact.</p>	<p>MM GEO-12a: Prior to issuance of the first building permit for each development</p>

Impacts	Mitigation Measures	Level of Significance After Mitigation	Monitoring
			pursuant to the Community Plan, County to review and approve the project’s design level geotechnical investigation
Impact GEO-18a: The project would not result in substantial soil erosion or loss of topsoil with implementation of mitigation.	No mitigation measures are required.	Less than significant impact.	None.
Impact GEO-18b: The project would not be located on expansive soil, as defined in Section 1802.3.2 of the California Building Code (2007), creating substantial direct or indirect risks to life or property with implementation of mitigation.	Implementation of GEO-12a .	Less than significant impact.	MM GEO-12a: Prior to issuance of the first building permit for each development pursuant to the Community Plan, County to review and approve the project’s design level geotechnical investigation
Impact GEO-18c: The project would not have soils incapable of adequately supporting use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater.	Implementation of GEO-12a .	Less than significant impact.	MM GEO-12a: Prior to issuance of the first building permit for each development pursuant to the Community Plan, County to review and approve the project’s design level geotechnical investigation
Impact GEO-19a: The project would not be impacted by or result in an increase in wind erosion and blowsand, either on or off-site.	Implementation of GEO-12a .	Less than significant impact.	MM GEO-12a: Prior to issuance of the first building permit for each development pursuant to the Community Plan, County to review and approve the project’s design level geotechnical investigation

Impacts	Mitigation Measures	Level of Significance After Mitigation	Monitoring
Section 3.8—Greenhouse Gas Emissions			
Impact GHG-20a: The project would not generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.	No mitigation measures are required.	Less than significant impact.	None.
Impact GHG-20b: The project would not conflict with any applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.	No mitigation measures are required.	Less than significant impact.	None.
Section 3.9—Hazards and Hazardous Materials			
Impact HAZ-21a: The project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials with implementation of mitigation.	No mitigation measures are required.	Less than significant impact.	None.
Impact HAZ-21b: The project would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.	No mitigation measures are required.	Less than significant impact.	None.
Impact HAZ-21c: The project would not impair implementation of or physically interfere with an adopted emergency response plan or an emergency evacuation plan.	No mitigation measures are required.	Less than significant impact.	None.
Impact HAZ-21d: The project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter (1/4) mile of an existing or proposed school.	No mitigation measures are required.	Less than significant impact.	None.

Impacts	Mitigation Measures	Level of Significance After Mitigation	Monitoring
Impact HAZ-21e: The project would not be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would not create a significant hazard to the public or the environment.	No mitigation measures are required.	Less than significant impact.	None.
Impact HAZ-22a: The project would not result in an inconsistency with an Airport Master Plan.	No mitigation measures are required.	No impact.	None.
Impact HAZ-22b: The project would require review by the Airport Land Use Commission.	No mitigation measures are required.	Less than significant impact.	None.
Impact HAZ-22c: For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, the project would not result in a safety hazard for people residing or working in the project area.	No mitigation measures are required.	Less than significant impact.	None.
Impact HAZ-22d: For a project within the vicinity of a private airstrip, or heliport, the project would not result in a safety hazard for people residing or working in the project area.	No mitigation measures are required.	Less than significant impact.	None.
Section 3.10—Hydrology and Water Quality			
Impact HYD-23a: The project would not violate water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality.	No mitigation measures are required.	Less than significant impact.	None.
Impact HYD-23b: The project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of this basin.	No mitigation measures are required.	Less than significant impact.	None.
Impact HYD-23c: The project would not substantially alter the existing drainage pattern of	No mitigation measures are required.	Less than significant impact.	None.

Impacts	Mitigation Measures	Level of Significance After Mitigation	Monitoring
the site or area, including the alteration of the course of a stream or river or through the addition of impervious surfaces.			
Impact HYD-23d: The project would not result in substantial erosion or siltation on-site or off-site.	No mitigation measures are required.	Less than significant impact.	None.
Impact HYD-23e: The project would not substantially increase the rate or amount of surface runoff in a manner which would result in flooding on-site or off-site.	No mitigation measures are required.	Less than significant impact.	None.
Impact HYD-23f: The project would not create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff.	No mitigation measures are required.	Less than significant impact.	None.
Impact HYD-23g: The project would not impede or redirect flood flow.	No mitigation measures are required.	Less than significant impact.	None.
Impact HYD-23h: In flood hazard tsunami, or seiche zones, the project would not risk the release of pollutants due to project inundation.	No mitigation measures are required.	Less than significant impact.	None.
Impact HYD-23i: The project would not conflict with a water quality control plan or sustainable groundwater management plan.	No mitigation measures are required.	Less than significant impact.	None.
Section 3.11—Land Use and Planning			
Impact LUP-24a: The proposed project would not physically divide an established community.	No mitigation measures are required.	Less than significant impact.	None.
Impact LUP-24b: The proposed project would not 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.	No mitigation measures are required.	Less than significant impact.	None.

Impacts	Mitigation Measures	Level of Significance After Mitigation	Monitoring
Section 3.12—Mineral Resources			
Impact MIN-25a: The project would not result in the loss of availability of a known mineral resource that would be of value to the region or the residents of the State.	No mitigation measures are required.	Less than significant impact.	None.
Impact MIN-25b: The project would not result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan.	No mitigation measures are required.	No impact.	None.
Impact MIN-25c: The project would not potentially expose people or property to hazards from proposed, existing, or abandoned quarries or mines.	No mitigation measures are required.	No impact.	None.
Section 3.13—Noise			
Impact NOI-26a: 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 not expose people residing or working in the project area to excessive noise levels.	No mitigation measures are required.	No impact.	None.
Impact NOI-26b: For a project located within the vicinity of a private airstrip, the project would not expose people residing or working in the project area to excessive noise levels	No mitigation measures are required.	No impact.	None.
Impact NOI-27a: The project could 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, noise ordinance, or applicable standards of other agencies.	MM NOI-27a: Construction Noise Mitigation Plan Prior to issuance of grading and/or building permits, a note shall be provided on grading and building plans indicating that during grading and construction, the property owner/developer shall be responsible for requiring contractors to implement the following measures to limit construction-	Less than significant impact.	MM NOI-27a: Prior to issuance of grading and/or building permits, County to review and approve construction noise mitigation plan MM NOI-27b: Prior to issuance of building permits,

Impacts	Mitigation Measures	Level of Significance After Mitigation	Monitoring
	<p>related noise:</p> <ul style="list-style-type: none"> ● The construction contractor shall limit construction activities to the daytime hours of 7:00 a.m. to 10:00 p.m., Monday through Saturday. ● The construction contractor shall ensure that all internal combustion engine-driven equipment is equipped with mufflers that are in good condition and appropriate for the equipment. ● The construction contractor shall locate stationary noise-generating equipment as far as possible from sensitive receptors when sensitive receptors adjoin or are near a construction project area. In addition, the project contractor shall place such stationary construction equipment so that emitted noise is directed away from sensitive receptors nearest the project site. ● The construction contractor shall prohibit unnecessary idling (no more than 5-minutes) of internal combustion engines. ● The construction contractor shall, to the maximum extent practical, locate on-site equipment staging areas to maximize the distance between construction-related noise sources and noise-sensitive receptors nearest the project site during all project construction. ● For construction activity within 50 feet of any noise-sensitive receptors, a temporary noise barrier shall be installed by the applicant/developer. This temporary noise barrier shall be installed prior to the onset of construction activities that would require the use of heavy construction equipment. The barrier shall be located 		<p>County to review and approve operational noise reduction plan</p>

Impacts	Mitigation Measures	Level of Significance After Mitigation	Monitoring
	<p>between the construction zone and all adjacent sensitive receptor land uses. The temporary sound barrier shall provide a reduction in noise that shall meet the County’s construction noise threshold of 55 dBA Lmax as measured at the façade of the sensitive receptor land uses. The noise barrier shall be a minimum height of 8 feet and be free of gaps and holes and must achieve a Sound Transmission Class (STC) of 35 or greater. The barrier can be either (a) a 0.75-inch-thick plywood wall OR (b) a hanging blanket/curtain with a surface density or at least 2 pounds per square foot. For either configuration, the construction side of the barrier shall have an exterior lining of sound absorption material with a Noise Reduction Coefficient (NRC) rating of 0.7 or higher.</p> <ul style="list-style-type: none"> ● The construction contractor shall designate a “disturbance coordinator” who would be responsible for responding to any complaints about construction noise. The disturbance coordinator shall determine the cause of the noise complaint (e.g., bad muffler, etc.) and shall require that reasonable measures be implemented to correct the problem. ● These measures may only be granted an exception if an application for construction-related exception is made to and considered by the Building and Safety Department in accordance with Section 9.52.070 of the Municipal Code. <p>MM NOI-27a: Operational Noise Reduction Plan Prior to issuance of building permits, the</p>		

Impacts	Mitigation Measures	Level of Significance After Mitigation	Monitoring
	<p>property owner/developer shall be responsible to implement the following measures to limit on-site operational stationary noise source impacts:</p> <ul style="list-style-type: none"> ● Any proposed development project that would include noise-sensitive land use development along noise impacted roadway segments identified in Table 3.13-7 shall demonstrate compliance with Noise Policies N 1.3, N 1.7, and N 2.2 of the County’s Noise Element by submitting a final acoustical report prepared to the satisfaction of the Planning Director that identifies any necessary design features that would address potential traffic noise impacts to proposed noise-sensitive land uses. ● Any proposed development projects that include parking structures, terminals, or loading docks of commercial or industrial land uses shall demonstrate compliance with Noise Policy N 4.8 of the County’s Noise Element by submitting a final acoustical report prepared to the satisfaction of the Planning Director that identifies design measures to adequately minimize the potential noise impacts of vehicles on the site to adjacent land uses. ● For any future development project that would include stationary noise sources, such as parking areas within 300 feet or mechanical systems within 50 feet of a residential receptor, the property owner/developer shall submit a final acoustical report prepared to the satisfaction of the Planning Director to address potential stationary source noise impacts to nearby residences. Noise 		

Impacts	Mitigation Measures	Level of Significance After Mitigation	Monitoring
	<p>reduction design features may include, but are not limited to, locating stationary noise sources on the site to be shielded by structures (buildings, enclosures, or sound walls) or by using equipment that has a quieter rating.</p> <p>These reports shall demonstrate that the proposed project incorporates sufficient noise attenuation features if needed to meet the County’s exterior and interior noise standards. The individual project owner/developer shall submit the noise mitigation report to the Planning Director for review and approval. Upon approval by the County, the proposed acoustical design features shall be incorporated into the future development.</p>		
<p>Impact NOI-27b: The proposed project could generate excessive groundborne vibration or Groundborne Vibration Impacts during construction. The proposed project would not generate excessive groundborne vibration or Groundborne Vibration Impacts during operation.</p>	<p>MM NOI-27b: Construction Vibration Reduction Plan</p> <p>Prior to issuance of grading and/or building permits, a note shall be provided on grading and building plans indicating that during grading and construction, the property owner/developer shall be responsible for requiring contractors to implement the following measures to limit construction-related vibration impacts:</p> <ul style="list-style-type: none"> • For any future development projects that would necessitate the use of pile driving within 200 feet of an off-site structure, shall submit a Construction Vibration Reduction Plan that identifies specific techniques, such as the depth and location of temporary trenching, that would reduce potential vibration impacts 	<p>Less than significant impact.</p>	<p>Prior to issuance of grading and/or building permits, County to review construction vibration reduction plan.</p>

Impacts	Mitigation Measures	Level of Significance After Mitigation	Monitoring
	<p>to less than significant for the impacted structure.</p> <ul style="list-style-type: none"> ● For any future development projects that would necessitate the use of large vibratory rollers within 30-feet of an off-site structure, or the use of other heavy construction equipment within 15-feet of an off-site structure, shall submit a Construction Vibration Reduction Plan that identifies specific techniques, such as the depth and location of temporary trenching, that would reduce potential vibration impacts to less than significant for the impacted structure. ● The individual project owner/developer shall submit the Construction Vibration Reduction Plan to the Planning Director for review and approval. Upon approval by the County, the construction vibration reduction measures shall be incorporated into the construction documents. 		
Section 3.14—Paleontological Resources			
Impact PALEO-28(a): The proposed project would/would not directly or indirectly destroy a unique paleontological resource, site, or unique geologic feature.	No mitigation measures are required.	Less than significant impact.	None.
Section 3.15—Population and Housing			
Impact POP-29a: The project would not displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere	No mitigation measures are required.	Less than significant impact.	None.
Impact POP-29b: The project would not create a demand for additional housing, particularly housing	No mitigation measures are required.	Less than significant impact.	None.

Impacts	Mitigation Measures	Level of Significance After Mitigation	Monitoring
affordable to households earning 80 percent or less of the County's median income.			
Impact POP-29c: The project would not induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure).	No mitigation measures are required.	Less than significant impact.	None.
Section 3.16—Public Services			
Impact PS-30: The project would not result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities or the 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 fire protection.	No mitigation measures are required.	Less than significant impact.	None.
Impact PS-31: The project would not result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities or the 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 Sheriff services.	No mitigation measures are required.	Less than significant impact.	None.
Impact PS-32: The proposed project would not result insubstantial adverse physical impacts associated with the provision of new or physically altered government facilities or the need for new or physically altered governmental facilities, the construction of which could cause significant	No mitigation measures are required.	Less than significant impact.	None.

Impacts	Mitigation Measures	Level of Significance After Mitigation	Monitoring
environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for schools.			
Impact PS-33: The project would not result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities or the 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 libraries.	No mitigation measures are required.	Less than significant impact.	None.
Impact PS-34: The project would not result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities or the 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 health services.	No mitigation measures required.	Less than significant impact.	None.
Section 3.17—Recreation			
Impact REC-35a: The project would not include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.	No mitigation measures required.	Less than significant impact.	None.
Impact REC-35b: The project would not increase the use of existing neighborhood or regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.	No mitigation measures are required.	Less than significant impact.	None.

Impacts	Mitigation Measures	Level of Significance After Mitigation	Monitoring
Impact REC-35c: The project would not be located within a Community Service Area or recreation and park district with a Community Parks and Recreation Plan (Quimby fees).	No mitigation measures are required.	No Impact.	None.
Impact REC-36a: The project would include the construction or expansion of a trail system.	No mitigation measures are required.	Less than significant impact.	None.
Section 3.18—Transportation and Traffic			
Impact TRANS-37a: The project would not conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities.	No mitigation measures are required.	Less than significant impact.	None.
Impact TRANS-37b: The project would conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b).	<p>MM TRANS-1: Future implementing projects shall provide more options for shorter trips by locating residential uses within walking distance to retail, office, and service-oriented uses.</p> <p>MM TRANS-2: Future implementing projects shall provide pedestrian and bicycle network improvements within the development connecting complementary uses (i.e., residential, employment and retail) internally and to existing off-site facilities.</p> <p>MM TRANS-3: Where applicable, future implementing projects shall ensure that design of key intersections and roadways encourage the use of walking, biking and transit.</p> <p>MM TRANS-4: Future implementing projects shall collaborate with the Riverside Transit Authority (RTA) to determine the feasibility of providing new or re-route existing transit services to the Project.</p>	Significant and unavoidable.	MM TRANS-1 through -5: County to review applicable trip reduction options on a project by project basis

Impacts	Mitigation Measures	Level of Significance After Mitigation	Monitoring
	<p>MM TRANS-5: In addition, the following TDM strategies may be applicable at the implementing project-level:</p> <ul style="list-style-type: none"> ● Reduce Parking Supply for Retail Uses ● Transit Rerouting and Transit Stops ● Implementation of Local Shuttle Service ● Mandatory Travel Behavior Change Program, Promotions and Marketing ● Promotions and Marketing ● Emergency Ride Home (ERH) Program ● School Carpool Program ● Bike Share ● Implement/Improve On-street Bicycle Facility ● Traffic Calming Improvements ● Pedestrian Network Improvements 		
<p>Impact TRANS-37c: The project would not substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment) with implementation of mitigation.</p>	<p>No mitigation measures are required.</p>	<p>Less than significant impact.</p>	<p>None.</p>
<p>Impact TRANS-37d: The project would not cause an effect upon, or a need for new or altered maintenance of roads.</p>	<p>No mitigation measures are required.</p>	<p>Less than significant impact.</p>	<p>None.</p>
<p>Impact TRANS-37e: The project would not cause an effect upon circulation during the project’s construction with implementation of mitigation.</p>	<p>MM TRANS-6: Prior to commencement of construction, the project applicant of future implementing projects shall prepare a traffic management plan that will specify traffic controls required to maintain adequate circulation and access along Highway 74. At least one lane shall remain open in each direction during construction and access to all existing businesses shall be maintained.</p>	<p>Less than significant impact.</p>	<p>MM TRANS-6: Prior to commencement of construction, County to review and approve construction management plan.</p>

Impacts	Mitigation Measures	Level of Significance After Mitigation	Monitoring
Impact TRANS-37f: The project would not result in inadequate emergency access or access to nearby uses.	Implement MM TRANS-6	Less than significant impact.	MM TRANS-6: At the time of planning application submittal, County to review and approve construction management plan
Impact TRANS-38(a): The proposed project would not include the construction or expansion of a bike system or bike lanes.	No mitigation measures are required.	No impact.	None.
Section 3.19—Tribal Cultural Resources			
Impact TCR-39(a): The proposed project would cause a substantial adverse change in the significance of a tribal cultural resource listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k).	No mitigation measures are required.	Less than significant impact.	None.
Impact TCR-39(b): The proposed project would cause a substantial adverse change in the significance of a tribal cultural resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1.	No mitigation measures are required.	Less than significant impact.	None.
Section 3.20—Utilities and Service Systems			
Impact USS-40a: The proposed project would not require or result in the relocation or construction of new or expanded water, wastewater treatment, or stormwater drainage systems, whereby the construction or relocation would cause significant environmental effects.	No mitigation measures are required.	Less than significant impact.	None.

Impacts	Mitigation Measures	Level of Significance After Mitigation	Monitoring
Impact USS-40b: The proposed project would have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years.	No mitigation measures are required.	Less than significant impact.	None.
Impact USS-41a: The proposed project would not require or result in the construction of new wastewater treatment facilities, including septic systems, or expansion of existing facilities, whereby the construction or relocation would cause significant environmental effects.	No mitigation measures are required.	Less than significant impact.	None.
Impact USS-41b: The project would result in a determination by the wastewater treatment provider that serves or may service the project that it has adequate capacity to serve the project’s projected demand in addition to the provider’s existing commitments.	No mitigations measures are required.	Less than significant impact.	None.
Impact USS-42a: The project would not 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.	No mitigation measures are required.	Less than significant impact.	None.
Impact USS-42b: The project would comply with federal, state, and local management and reduction statutes and regulations related to solid wastes including the CIWMP (County Integrated Waste Management Plan).	No mitigation measures are required.	Less than significant impact.	None.
Impact USS-43: The project would not impact the following facilities requiring or resulting in the construction of new facilities or the expansion of existing facilities, whereby the construction or relocation would cause significant environmental effects:	No mitigation measures are required.	Less than significant impact.	None.

Impacts	Mitigation Measures	Level of Significance After Mitigation	Monitoring
A. Electricity B. Natural Gas C. Communication Systems D. Street Lighting E. Maintenance of public facilities, including roads F. Other governmental services			
Section 3.21—Wildfire If located in or near a state responsibility areas or lands classified as very high fire hazard severity zone:			
Impact WILD-44a: The project would not substantially impair an adopted emergency response plan or emergency evacuation plan.	No mitigation measures are required.	Less than significant impact.	None.
Impact WILD-44b: Due to slope, prevailing winds, and other factors, the project would not exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire.	No mitigation measures are required.	Less than significant impact.	None.
Impact WILD-44c: The project would not require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment.	No mitigation measures are required.	Less than significant impact.	None.
Impact WILD-44d: The project would not expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes.	No mitigation measures are required.	Less than significant impact.	None.
Impact WILD-44e: The project would not expose people or structures to significant risk of loss, injury, or death involving wildland fires.	No mitigation measures are required.	Less than significant impact.	None.

CHAPTER 1: INTRODUCTION

1.1 - Overview of the CEQA Process

This Draft Program Environmental Impact Report (Draft Program EIR) is prepared in accordance with the California Environmental Quality Act (CEQA) to evaluate the potential environmental impacts associated with the implementation of the Highway 74 Community Plan (State Clearinghouse No. 2019059042). This document is prepared in conformance with CEQA (California Public Resources Code, Section 21000, *et seq.*) and the State CEQA Guidelines (California Code of Regulations, Title 14, Section 15000, *et seq.*). This Draft Program EIR is intended to inform public agency decision-makers and the public about the potential environmental effects of the Highway 74 Community Plan (proposed project).

1.1.1 - Overview

The proposed project consists of the approval of the Highway 74 Community Plan (Community Plan), which encompasses a 6.8-mile-long corridor of Highway 74 between the City of Lake Elsinore and the City of Perris in western Riverside County.

The Community Plan would provide a framework for a broad master plan to guide future policy and land uses along the Highway 74 corridor, including the potential future development of residential neighborhoods of varying densities, commercial retail, mixed use, light industrial, business park, public facilities, rural, open space, and recreation areas within the proposed planning area. The Highway 74 Community Plan also contemplates infrastructure upgrades and improved bicycle, pedestrian, and transit mobility along the Highway 74 corridor. The proposed project also includes General Plan Amendment (GPA) No. 1205. Section 2, Project Description provides a complete description of the proposed project.

1.1.2 - Purpose and Authority

This Draft Program EIR provides a program-level analysis of the environmental effects associated with the proposed project. This Draft Program EIR analyzes the potential environmental impacts resulting from the approval of the Community Plan, in accordance with State CEQA Guidelines Section 15146. This document addresses the potentially significant adverse environmental impacts that may be associated with the broad spectrum of land use and policy changes contemplated in the proposed project. It also identifies appropriate and feasible program-wide mitigation measures and broad policy alternatives that may be adopted to significantly reduce or avoid significant impacts.

CEQA requires that an EIR contain, at a minimum, certain specific elements. These elements are contained in this Draft Program EIR and include:

- Table of Contents
- Introduction
- Executive Summary
- Project Description
- Environmental Setting, Significant Environmental Impacts, and Mitigation Measures

- Cumulative Impacts
- Significant Unavoidable Adverse Impacts
- Alternatives to the Proposed Project
- Growth-Inducing Impacts
- Areas of Known Controversy

All resource areas are fully analyzed in this Draft Program EIR, therefore an Effects Found not to be Significant section is not included.

1.1.3 - Lead Agency Determination

The County of Riverside is designated as the lead agency for the proposed project. State CEQA Guidelines Section 15367 defines the lead agency as “. . . the public agency, which has the principal responsibility for carrying out or approving a project.” Other public agencies may use this Draft Program EIR in the decision-making or permit process and consider the information in this Draft Program EIR along with other information that may be presented during the CEQA process.

This Draft Program EIR was prepared by FirstCarbon Solutions, an environmental consultant. Prior to public review, it was extensively reviewed and evaluated by the County of Riverside. This document reflects the independent judgment and analysis of the County of Riverside as required by CEQA. Lists of organizations and persons consulted and the report preparation personnel is provided in Section 8 of this Draft Program EIR.

1.2 - Scope of the Program EIR

This Draft Program EIR addresses the potential environmental effects of the proposed project. The County of Riverside (County) issued a Notice of Preparation (NOP) for the proposed project on May 3, 2019, which circulated between May 9, 2019, and June 10, 2019, for the statutory 30-day public review period. The scope of this Draft Program EIR includes the potential environmental impacts identified in the NOP as well as issues raised by agencies and the public in response to the NOP. The NOP is contained in Appendix A of this Draft Program EIR.

Fourteen comment letters were received in response to the NOP. They are listed in Table 1-1 and provided in Appendix B of this Draft Program EIR.

Subsequent to June 10, 2019, the County received letters, phone calls, or verbal requests from 15 property owners affected by the proposed Community Plan, requesting that the proposed land use designation for their properties be changed. After careful consideration, the County determined that the Highway 74 Community Plan could accommodate the requested land use designations. Accordingly, the proposed project, as described in Chapter 2, Project Description, and as analyzed throughout this Draft Program EIR, reflects the land use designations proposed by these property owners. The parcel numbers, existing land uses, and requested/proposed land uses are summarized in Table 1-2.

Table 1-1: IS-NOP Comment Letters

Agency/Organization	Author	Date
Public Agencies		
Riverside County Airport Land Use Commission	Paul Rull, ALUC Principal Planner	May 9, 2019
City of Lake Elsinore	Grant Taylor, Community Development Director	June 5, 2019
Eastern Municipal Water District	Maroun El-Hage, Senior Civil Engineer	June 10, 2019
Federal Emergency Management Agency (FEMA) Region IX	Gregor Blackburn, Branch Chief	June 10, 2019
March Joint Powers Authority	Jeffrey M. Smith, Senior Planner	May 10, 2019
Pechanga Cultural Resources, Temecula Band of Luiseño Mission Indians	Tuba Ebru Ozdil, Cultural Analyst	June 10, 2020
Riverside County Habitat Conservation Agency	Princess L. Hester, Director of Administration	May 22, 2019
Southern California Association of Governments	Ping Chang, Manager	June 10, 2019
South Coast Air Quality Management District	Lijin Sun, Program Supervisor	June 4, 2020
Individuals		
Anders, Lana S.		May 17, 2019
James Jr., Raymond P.		June 7, 2020
Rodriguez, Tracy		May 9, 2020
Sheth, Dilip		June 10, 2019
Smith, Roy		June 3, 2020
Source: County of Riverside Planning Department. 2019.		

Table 1-2: Requested Land Uses

Parcel Number(s)	Existing Land Use	Requested Land Use
349-040-035	VLDR	PF
349-090-024	VLDR	CR
345-080-039	RC-VLDR	RC-VLDR
345-220-045	VLDR	MU
345-220-023	VLDR	MU
345-150-032, 345-150-008, 345-150-042, 345-150-036	VLDR	MU
345-060-061	VLDR	CR
342-092-030, 342-092-033	RD-VLDR	MU

Parcel Number(s)	Existing Land Use	Requested Land Use
349-150-082	VLDR	MU
349-150-041	VLDR	MU
345-160-063, 345-160-047	VLDR	LI
345-190-016, 345-200-013	SP-Variou	LI
345-070-021, 345-070-039	RR	CR
345-060-060	RR	CR
377-372-038	BP	CR

1.2.1 - Potentially Significant Environmental Issues

The NOP anticipated that the Draft Program EIR would analyze the following topical areas to evaluate potentially significant environmental issues that may result from the proposed project. The NOP also anticipated that the Draft Program EIR would evaluate the proposed project’s potential to cause direct and indirect growth-inducing impact as well as cumulative impacts. The topical areas are as follows:

- Aesthetics
- Agriculture and Forest Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Geology, Soils
- Greenhouse Gas Emissions
- Energy
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Mineral Resources
- Noise
- Paleontological Resources
- Population and Housing
- Public Services
- Recreation
- Transportation
- Tribal Cultural Resources
- Utilities and Service Systems
- Wildfire

1.3 - Organization of the Program EIR

This Draft Program EIR is organized into the following main sections:

- **Chapter ES: Executive Summary.** This section includes a summary of the proposed project and alternatives to be addressed in the Draft Program EIR. A brief description of the areas of controversy and issues to be resolved, and overview of the Mitigation Monitoring and Reporting Program, in addition to a table that summarizes the impacts, mitigation measures, and level of significance after mitigation, are also included in this section.
- **Chapter 1: Introduction.** This section provides an introduction and overview describing the purpose of this Draft Program EIR, its scope and components, and its review and certification process.

- **Chapter 2: Project Description.** This section includes a detailed description of the proposed project, including its location, site, and project characteristics. A discussion of the project objectives, intended uses of the Draft Program EIR, responsible agencies, and approvals that are needed for the proposed project are also provided.
- **Chapter 3: Environmental Impact Analysis.** This section analyzes the environmental impacts of the proposed project. Impacts are organized into major topic areas. Each topic area includes a description of the environmental setting, methodology, significance criteria, impacts, mitigation measures, and significance after mitigation. The specific environmental topics that are addressed within Section 3 are as follows:
 - **Section 3.1—Aesthetics, Light, and Glare:** Addresses the potential visual impacts of development intensification and the overall increase in illumination produced by the proposed project.
 - **Section 3.2—Agriculture and Forestry Resources:** Addresses agricultural and forestry resources, impacts on Farmland, agricultural uses, forests, and timberlands in relation to the project site and discusses the potential impacts to these resources that would occur with implementation of the proposed project.
 - **Section 3.3—Air Quality** Addresses the potential air quality impacts associated with project implementation, as well as consistency with the applicable Air Quality Management District’s significance criteria. In addition, the section evaluates project emissions of greenhouse gases.
 - **Section 3.4—Biological Resources:** Addresses the project’s potential impacts on habitat, vegetation, and wildlife; the potential degradation or elimination of important habitat; and impacts on listed, proposed, and candidate threatened and endangered species.
 - **Section 3.5—Cultural Resources:** Addresses potential impacts on historical resources, archaeological resources, tribal cultural resources, and burial sites.
 - **Section 3.6—Energy:** Addresses potential project impacts related to energy usage.
 - **Section 3.7—Geology, Soils, and Paleontological Resources:** Addresses the potential impacts the project may have on soils and assesses the effects of project development in relation to geologic and seismic conditions; addresses potential impacts on paleontological resources.
 - **Section 3.8—Greenhouse Gas Emissions:** Addresses the existing greenhouse gas emissions setting and potential effects from project implementation on the project site and its surrounding area.
 - **Section 3.9—Hazards and Hazardous Materials:** Addresses the potential for the presence of hazardous materials or conditions in the planning area that may have the potential to impact human health.
 - **Section 3.10—Hydrology and Water Quality:** Addresses the potential impacts of the proposed project on local hydrological conditions, including drainage areas, and changes in the flow rates.
 - **Section 3.11—Land Use and Planning:** Addresses the potential land use impacts associated with division of an established community and consistency with the applicable General Plan, area plans, and zoning ordinance.
 - **Section 3.12—Mineral Resources:** Addresses mineral resources in relation to the planning area, and discusses the potential impacts to mineral resources, mineral resource recovery

- sites, and impacts related to abandoned quarries or mines that would occur with implementation of the proposed project.
- **Section 3.13—Noise:** Addresses the potential noise impacts during construction and at project buildout from mobile and stationary sources. The section also addresses the impact of noise generation on neighboring uses.
 - **Section 3.14—Paleontological Resources:** Addresses potential impacts related to paleontological resources.
 - **Section 3.15—Population and Housing:** Addresses population and housing and potential effects from project implementation on the site and its surrounding area in terms of displacement of people or housing, a change in demand for housing and affordable housing, and unplanned population growth.
 - **Section 3.16—Public Services:** Addresses the potential impacts upon public services, including fire protection, law enforcement, schools, parks, and recreational facilities.
 - **Section 3.17—Recreation:** Addresses potential impacts associated with recreational facilities, the construction or expansion of recreational facilities, use of neighborhood or regional parks and recreational facilities, and impacts associated with a Community Service Area or a Community Parks and Recreation Plan.
 - **Section 3.18—Transportation and Traffic:** Addresses the impacts on the local and regional roadway system, public transportation, bicycle, and pedestrian access.
 - **Section 3.19—Tribal Cultural Resources:** Addresses potential impacts on tribal cultural resources.
 - **Section 3.20—Utilities and Services Systems:** Addresses the potential impacts upon service providers, including fire protection, law enforcement, water supply, wastewater, solid waste, and energy providers.
 - **Section 3.21—Wildfire:** Addresses potential impacts related to wildfire including lands within State responsibility areas and lands classified as very high fire hazard severity zones.
- **Chapter 4: Cumulative Effects.** This section discusses the cumulative impacts associated with the proposed project, including the impacts of past, present, and probable future projects.
 - **Chapter 5: Alternatives to the Proposed Project.** This section compares the impacts of the proposed project with three land-use project alternatives: the No Project Alternative, the Reduced Density Alternative, and Increased Industrial Use Alternative. An environmentally superior alternative is identified. In addition, an alternative initially considered but rejected from further consideration are discussed.
 - **Chapter 6: Other CEQA Considerations.** This section provides a summary of significant environmental impacts, including unavoidable and growth-inducing impacts. This section discusses the cumulative impacts associated with the proposed project, including the impacts of past, present, and probable future projects.
 - **Chapter 7: Persons and Organizations Consulted/List of Preparers.** This section also contains a full list of persons and organizations that were consulted during the preparation of this Draft Program EIR. This section also contains a full list of the authors who assisted in the preparation of the Draft Program EIR, by name and affiliation.

- **Appendices.** This section includes all notices and other procedural documents pertinent to the Draft Program EIR, as well as all technical material prepared to support the analysis.

1.4 - Documents Incorporated by Reference

As permitted by State CEQA Guidelines Section 15150, this Draft Program EIR has referenced several technical studies, analyses, and previously certified environmental documentation. Information from the documents, which have been incorporated by reference, has been briefly summarized in the appropriate section(s). The relationship between the incorporated part of the referenced document and the Draft Program EIR has also been described. The documents and other sources that have been used in the preparation of this Draft Program EIR include but are not limited to:

- County of Riverside General Plan EIR No. 521, as amended
- Elsinore Area Plan
- Mead Valley Area Plan

These documents are specifically identified in Section 9, References, of this Draft Program EIR. In accordance with State CEQA Guidelines Section 15150(b), the General Plan, and the referenced documents and other sources used in the preparation of the Draft Program EIR are available for review at the County of Riverside, at the address shown in Section 1.6 below.

1.5 - Documents Prepared for the Project

The following technical studies and analyses were prepared for the proposed project:

- Air Quality, Greenhouse Gas Analysis, and Energy Supporting Information
- Biological Resource Supporting Information
- Cultural Resources Supporting Information
- Hazards and Hazardous Materials Supporting Information
- Noise Analysis Supporting Information
- Vehicle Miles Traveled Memorandum

1.6 - Review of the Draft Program EIR

Upon completion of the Draft Program EIR, the County of Riverside filed a Notice of Completion (NOC) with the State Office of Planning and Research to begin the public review period (Public Resources Code, Section 21161). Concurrent with the NOC, this Draft Program EIR has been distributed to responsible and trustee agencies, other affected agencies, surrounding cities, and interested parties, as well as all parties requesting a copy of the Draft Program EIR in accordance with Public Resources Code 21092(b)(3). During the public review period, the Draft Program EIR, including the technical appendices, is available for review at the Riverside County Planning Department offices. The address is provided below:

Riverside County Planning Department
4080 Lemon Street, 12th Floor
Riverside, CA 92502-1409
Hours:
Monday–Friday: 8:00 a.m. to 5:00 p.m.

Agencies, organizations, and interested parties have the opportunity to comment on the Draft Program EIR during the 45-day public review period. Written comments on this Draft Program EIR should be addressed to:

Andrew Svitek, Project Planner
County of Riverside
4080 Lemon Street 12th Floor
Riverside, CA 92501
Phone: 951.955.8514
Email: asvitek@rivco.org

Submittal of electronic comments in Microsoft Word or Adobe PDF format is encouraged. Upon completion of the public review period, written responses to all significant environmental issues raised will be prepared and made available for review by the commenting agencies at least 10 days prior to the public hearing before the County Planning Commission and Board of Supervisors on the proposed project, at which the certification of the Final Program EIR will be considered. Comments received and the responses to comments will be included as part of the record for consideration by decision makers for the proposed project.

CHAPTER 2: PROJECT DESCRIPTION

This Draft Program Environmental Impact Report (Draft Program EIR) analyzes the potential environmental effects of implementing the proposed Highway 74 Community Plan (proposed project) in Riverside County (County), California.

2.1 - Project Location and Setting

2.1.1 - Location

The proposed project encompasses a 6.8-mile corridor of Highway 74 between the City of Lake Elsinore and the City of Perris in western Riverside County (planning area) (Exhibit 2-1). The planning area encompasses 1,026 parcels on approximately 2,220 acres of unincorporated land and includes portions of the communities of Warm Springs, Meadowbrook, and Good Hope that are located within 1,000 feet of the centerline of Highway 74 following parcel lines (Exhibit 2-2). The proposed project is located in the *Lake Elsinore, California*, United States Geological Survey (USGS) 7.5-minute Topographic Quadrangle Map, Township 5 South, Range 4 West, Section 10 (Latitude 33° 44' 33" North; Longitude 117° 16' 50" West).

Neighborhood Areas

The planning area is subdivided into three neighborhoods, summarized as follows (Exhibit 2-2a through 2-2b):

- Neighborhood 1: the northern portion from 7th Street to Ethanac Road.
- Neighborhood 2: the central portion from Ethanac Road to Mauricio Street.
- Neighborhood 3: the southern portion of the corridor that is separated by the City of Elsinore. Starting from Conard Avenue to north of Crater Drive.

2.1.2 - Existing Conditions

Highway 74

Highway 74 is a four-lane divided County Highway between the City of Lake Elsinore and City of Perris. Highway 74 provides a paved shoulder, a paved median stripe, and a two-way left turn lane in various locations. Pedestrian facilities consisting of short, non-contiguous segments of sidewalks or paths are located near intersections and provide access to bus turnouts. The California Department of Transportation (Caltrans) indicates that Highway 74 carried 28,914 average daily trips at Ethanac Road in 2019, the most recent for which year counts are available.¹

Development and Land Use Activities

Existing development and land use activities along the Highway 74 corridor consist primarily of large parcel, rural residential uses, as well as scattered commercial and industrial uses such as auto/tire

¹ California Department of Transportation (Caltrans). 2019. Traffic Volumes: Annual Average Daily Traffic (AADT) 2019. Website: Traffic Census Program | Caltrans. Website: <https://dot.ca.gov/-/media/dot-media/programs/traffic-operations/documents/census/aadt/2019-traffic-volumes.xlsx>. Accessed August 13, 2021.

repair shops, nursery, landscape and fencing supply, trailer supply, home businesses, towing services, truck repair/rental, neighborhood markets, storage facilities, warehouses, and a Caltrans maintenance facility. The planning area is relatively rural, with existing single-family residential neighborhoods scattered throughout the corridor surrounded by low hilly terrain with large boulders. The planning area also contains significant stretches of undeveloped land.

Known sensitive receptors located within 1 mile of the planning area include residential uses, childcare centers, parks, cemeteries, schools, and churches. Specifically, the following public schools are located within 1 mile of the planning area:

- Good Hope Elementary (24050 Theda Street, Perris)
- Keith McCarthy Academy (1405 Education Way, Lake Elsinore)
- Perris Elementary School (500 South A Street, Perris)
- Pinacate Middle School (1990 South A Street, Perris)
- Railway Elementary School (555 Alpine Drive, Perris)
- Earl Warren Elementary School (41221 Rosetta Canyon Drive, Lake Elsinore)
- Ortega High School (520 Chaney Street, Lake Elsinore)
- Perris Lake High School (418 West Ellis Avenue, Perris)
- Temescal Valley High School (28755 El Toro Road, Lake Elsinore)

Overall, many of the properties along Highway 74 are undeveloped or underutilized. Additionally, much of the infrastructure within the planning area (e.g., County roads, storm drainage facilities, bicycle/pedestrian facilities, etc.) is limited in terms of extent and size. Land uses within each of the neighborhoods are as follows.

Neighborhood 1

As shown in Exhibit 2-2a, Neighborhood 1 is located between Ethanac Road on the south and 7th Street on the north. Neighborhood 1 is within the Mead Valley Area Plan (MVAP). Land uses within Neighborhood 1 are primarily single-story homes on large lots with adjacent establishments such as vehicle and tire service repair shops. This neighborhood has land use designations of Commercial Retail, Business Park, and Mixed-Use Areas, and include Light Industrial and Very Low Density Residential on the outskirts of its boundary.

Neighborhood 2

As shown in Exhibit 2-2b, Neighborhood 2 is located between Mauricio Avenue on the south and Ethanac Road on the north. Neighborhood 2 is within the Elsinore Area Plan (ELAP). Land uses within Neighborhood 2 primarily has single-story homes on large lots and establishments such as markets and vehicle repair shops. This neighborhood has land use designations of Commercial Retail, Business Park, and Mixed-Use Areas, and has Very Low Density Residential on the outskirts of its boundary. There are also scenic boulders along this portion of Highway 74, as well as rural and undeveloped land and open space.

Neighborhood 3

As shown in Exhibit 2-2b, Neighborhood 3 is located on the southwestern portion of the planning area and is separated from Neighborhoods 1 and 2. Neighborhood 3 is located between Conard

Avenue and north of Crater Drive. Neighborhood 3 is within the ELAP. Land uses within Neighborhood 3 has industrial and commercial establishments and is mostly surrounded by the City of Lake Elsinore. This neighborhood has land use designations of Commercial Retail, Business Park, Light Industrial and some Very Low Density Residential on the outskirts of its boundary.

2.1.3 - General Plan Designations and Zoning

The County of Riverside General Plan (General Plan)² is the master land use plan for the planning area. The General Plan uses Area Plans to provide specific guidance for development and land use activities within smaller geographical units. The proposed project boundaries overlap with both the ELAP³ and the MVAP.^{4,5}

The existing General Plan land use designations for the planning area are summarized in Table 2-1. The General Plan includes a Rural Village Land Use Overlay (RVLUO) that permits alternate land uses within 933 acres of the planning area within the communities of Good Hope and Meadowbrook. Table 2-1 shows both the existing land use and alternate land use designations present within the planning area. Exhibit 2-4 depicts the existing General Plan land use designations and RVLUO within the planning area. Table 2-2 shows the existing zoning designations within the planning area.

Table 2-1: Existing General Plan Land Use Designations

Foundation Component	Category	Acres	
		Existing Land Use Designation OR	Rural Village Land Use Overlay Alternate Land Use
Rural Community	Very Low Density Residential (1 acre minimum)	713.50	250.54
Rural Community	Low Density Residential (0.5 acre minimum)	0	0
Community Development	Medium Density Residential (2-5 dwelling units/acre)	111.39	380.38
Community Development	Medium High Density Residential (5-8 dwelling units/acre)	29.02	172.39
Community Development	High Density Residential (14-20 dwelling units/acre)	0	0
Community Development	Very High Density Residential (14-20 dwelling units/acre)	12.82	0
Community Development	Highest Density Residential (20+ dwelling units/acre)	17.09	16.93

² Riverside County Transportation and Land Management Agency. County of Riverside General Plan. December 8, 2015. Website: <https://planning.rctlma.org/Zoning-Information/General-Plan>. Accessed August 26, 2019.

³ County of Riverside. 2019. Elsinore Area Plan. Website: https://planning.rctlma.org/Portals/14/genplan/2019/ap/ELAP_041619.pdf. Accessed March 4, 2020.

⁴ Within the planning area, Ethanac Road is the boundary between the Elsinore Area Plan and Mead Valley Area Plan.

⁵ County of Riverside. 2019. Mead Valley Area Plan. Website: https://planning.rctlma.org/Portals/14/genplan/2019/ap/MVAP_062618.pdf. Accessed March 4, 2020.

Project Description

Foundation Component	Category	Acres	
		Existing Land Use Designation OR	Rural Village Land Use Overlay Alternate Land Use
Community Development	Commercial Retail (0.2-0.35 FAR)	14.23	265.17
Community Development	Business Park (0.25-0.60 FAR)	33.74	33.79
Community Development	Light Industrial (0.25-0.60 FAR)	112.00	311.62
Community Development	Public Facilities (≤0.60 FAR)	0	0
Community Development	Mixed-Use Area (varies)	193.08	112.98
Community Development	Community Center (5-40 dwelling unit/acre; 0.1-0.3 FAR)	6.71	0
Rural	Rural Residential (5 acre minimum)	305.31	302.95
Rural	Rural Mountains (10 acre minimum)	99.34	57.64
Rural	Rural Community—Very Low Density Residential (1 acre minimum)	527.59	309.61
Open Space	Open Space—Recreation	30.80	0
Open Space	Open Space—Conservation	0	0
Open Space	Open Space—Conservation Habitat	8.72	5.46
Grand Total		2,215.34	2,219.46
Notes: FAR = floor area ratio Source: Riverside County Transportation and Land Management Agency. County of Riverside General Plan. December 8, 2015. Website: https://planning.rctlma.org/Zoning-Information/General-Plan . Accessed August 26, 2019.			

Existing zoning classifications in the planning area consist of C-1/C-P (General Commercial), C-P-S (Scenic Highway Commercial), I-P (Industrial Park), M-SC (Manufacturing-Service Commercial), MU (Mixed-Use), SP (Specific Plan), R-1 (One-Family Dwelling), R-3 (General Residential), R-7 (High Density Residential), R-A-1/R-A-10/R-A-2/R-A-20000 (Residential Agriculture), R-R (Rural Residential), W-1 (Watercourse, Watershed, and Conservation Areas), and W-2-M-1 (Controlled Development Area with Mobile Homes).

Table 2-2: Existing Zoning Classifications

Zone	Acres Existing
R-1 (One-Family Dwelling)	0
R-3 (General Residential)	0

Zone	Acres Existing
R-7 (Highest Density Residential)	16.93
R-A (Residential Agricultural)	0
R-A-1 (Residential Agricultural—1 acre minimum)	8.30
R-A-10 (Residential Agricultural—10 acre minimum)	15.43
R-A-2 (Residential Agricultural—2 acre minimum)	62.05
R-A-20000 (Residential Agricultural—20,000-square-foot minimum)	32.87
R-R (Rural Residential)	1,174.05
SP (Specific Plan)	125.09
W-1 (Watercourse, Watershed, and Conservation Areas)	12.89
W-2-M-1 (Controlled Development Area with Mobile Homes)	165.12
MU (Mixed-Use)	146.05
M-SC (Manufacturing—Service Commercial)	166.87
I-P (Industrial Park)	10.08
C-P-S (Scenic Highway Commercial)	31.84
C-1/C-P (General Commercial)	17.61
Total	1,985.18
Notes: Of the 2,219.46 acres of land within the planning area, 0.17 acre does not have a zone classification and 234.25 acres are road rights of way. Source: County of Riverside 2021.	

2.2 - Project Background

Highway 74 extends 101.5 miles from Interstate 5 (I-5) in San Juan Capistrano to Interstate 10 (I-10) in Palm Desert. It crosses rugged terrain (the Santa Ana Mountains and San Jacinto Mountains) and functions more as a local road than a regional corridor. The State encourages relinquishment of State highways that function like city streets to local governments.⁶ Consequently, Caltrans has relinquished control of Highway 74 segments to local jurisdictions in the cities of Palm Desert, Lake Elsinore and Perris, allowing these local governments to make improvements, such as adding turn lanes or curb cuts to the portion of Highway 74 within their jurisdiction, without requiring Caltrans approval.

In 2014, the County began discussions with Caltrans to relinquish control of Highway 74 in the unincorporated County between the City of Lake Elsinore and the City of Perris. In 2016, the County

⁶ Land, Richard D. 2005. Memorandum: Relinquishment of State Highways by Legislative Enactment. State of California Department of Transportation. October. Website: <https://dot.ca.gov/-/media/dot-media/programs/design/documents/f0007860-state-highway-relinquishmentwattach-a11y.pdf>. Accessed August 10, 2021.

commissioned the Highway 74 Business Corridor Land Use Study⁷ to identify opportunities to guide the orderly transition of development within the unincorporated County along the Highway 74 corridor between the City of Lake Elsinore and City of Perris.

On January 31, 2017, the County Board of Supervisors adopted Resolution Number 2017-017, Minute Order No. 322, and provided its notice of intent to consent to the relinquishment of Highway 74 by the California Transportation Commission from Mauricio Avenue to 7th Street to the County, thereby allowing greater local control over development and land use activities along the corridor.

2.3 - Project Characteristics

2.3.1 - Project Summary

The County has prepared the proposed project to guide future growth and development within the planning area. The proposed project includes a General Plan Amendment (GPA No. 1205) to guide the development of residential neighborhoods of varying densities, commercial retail, mixed-use, light industrial, business park, public facilities, rural, open space, and recreation areas. Existing land use designations would be updated as part of the proposed project, which would alter the General Plan Foundations primarily from the Rural and Rural Community Foundations to Community Development and corresponding land use designations. The proposed project would also alter other land use designations within their current Foundation Component and provide guiding policies that support the modification of the planning area's structure.

General Plan Amendment No. 1205

GPA No. 1205 involves amendments to the existing Foundation Components and land use designations in support of the proposed Highway 74 Community Plan. GPA No. 1205 would modify the existing General Plan Land Use Designations, Policy Areas, and policies to provide opportunities for residential, commercial, public facility, mixed-use areas, light industrial, and business park developments. The RVLUO for sites within the planning area would be removed. In some instances, GPA No. 1205 would update both the foundational components and land use designations of a site, or only land use designation. Table 2-3 summarizes the proposed land use designations compared to the existing land use designations currently in effect.

The proposed planning area is composed of three neighborhoods that are part of the MVAP and ELAP. Within the MVAP, approximately 184 acres of the planning area are within the Highway 74 Perris and Good Hope Policy Areas, which allow relocation of businesses due to the planned expansion of Highway 74. The Perris Policy Area, Good Hope Policy Area, along with the Good Hope and Meadowbrook RVLUO's, would be removed as part of the proposed project. Within the ELAP, approximately 192 acres of the planning area is within the Warm Springs Policy Area, which includes policies protecting the visual and biological assets of the Warm Springs area. The Warm Springs Policy Area overlapping Neighborhood 3 will be removed.

In summary, GPA No. 1205 would involve the following amendments:

⁷ Riverside County Planning Department. 2022. Highway 74 Community Plan. Highway 74 Business Corridor Land Use Study. Website: <https://planning.rctlma.org/Advanced-Planning/Highway-74-Community-Plan>. Accessed January 3, 2022.

- Modify the existing General Plan Land Use Designations, Policy Areas, and policies within the Highway 74 Community Plan planning area;
- Removal the RVLUO for all sites within the planning area;
- Either update both the foundational components and land use designations, or only land use designation of sites;
- Remove the Perris Policy Area, Good Hope Policy Area, and the Good Hope and Meadowbrook RVLUO's;
- Remove the Warm Springs Policy Area that overlaps Neighborhood 3

The proposed project would support the General Plan criteria of clustered development in order to create appropriate built environments that promote economic development. Additionally, the proposed project would promote more Community Development land uses and fewer Rural, Rural Community, and Open Space land uses, and would include policies addressing character, design, and environmental impacts.

Exhibit 2-5 shows the proposed General Plan land use designation changes for the entire planning area. Exhibit 2-6a shows the proposed General Plan land use designations for Neighborhood 1, while Exhibit 2-5b shows the proposed General Plan land use designations for Neighborhoods 2 and 3. The parcels that would be re-designated as part of the proposed project are shaded; parcels that are not proposed to be re-designated are shown in white.

Table 2-3: Comparison of Existing and Proposed General Plan Land Use Designations Within the Highway 74 Planning Area

Category	Acres	
	Existing Land Use Designation	Proposed Use (Highway 74 Community Plan)
Community Development Foundation Component		
Very Low Density Residential (1 acre minimum)	713.50	430.09
Low Density Residential (0.5 acre minimum)	0	112.43
Medium Density Residential (2-5 dwelling units/acre)	111.39	58.05
Medium High Density Residential (5-8 dwelling units/acre)	29.02	29.02
High Density Residential (14-20 dwelling units/acre)	0	3.95
Very High Density Residential (14-20 dwelling units/acre)	12.82	13.02
Highest Density Residential (20+ dwelling units/acre)	17.09	17.09
Commercial Retail (0.2-0.35 FAR)	14.23	177.47
Business Park (0.25-0.60 FAR)	33.74	187.42
Light Industrial (0.25-0.60 FAR)	112.00	167.95
Public Facilities (≤0.60 FAR)	0	21.60

Category	Acres	
	Existing Land Use Designation	Proposed Use (Highway 74 Community Plan)
Mixed-Use Area (varies)	193.08	455.92
Community Center (5-40 dwelling unit/acre; 0.1-0.3 FAR)	6.71	6.71
Community Development Foundation Component Total	1,243.58	1,680.69
Rural Foundation Component		
Rural Residential (5 acre minimum)	305.31	57.23
Rural Mountainous (10 acre minimum)	99.34	58.76
Rural Foundation Component Total	404.65	115.99
Rural Community Foundation Component		
Rural Community—Very Low Density Residential (1 acre minimum)	527.59	376.07
Rural Community Foundation Component Total	527.59	376.07
Open Space Foundation Component		
Open Space—Recreation	30.80	29.10
Open Space—Conservation	0	14.70
Open Space—Conservation Habitat	8.72	0
Open Space Foundation Component Total	39.52	43.80
Grand Total	2,215.34	2,216.55
Notes: FAR = floor area ratio Source: County of Riverside 2019.		

Subsequent proposed development may require applicant-initiated zone changes to conform to the General Plan Land Use designations proposed by the Highway 74 Community Plan. The specific features of any potential future zone change are not currently known or reasonably foreseeable; therefore, any potential environmental impacts associated with unknown future zone changes are too speculative for evaluation at this time.

2.3.2 - Potential Build Out Under the Highway 74 Community Plan

This section describes the implications of the proposed project buildout in terms of future new housing units, nonresidential uses, civic, and open space uses based on the proposed land use categories. To determine the amount of new residential uses and nonresidential uses, this Draft Program EIR estimates the density and intensity of the estimated buildouts of the existing General Plan within the Highway 74 planning area and the proposed project using General Plan Appendix E: Socioeconomic Build-out Assumptions and Methodology.

Table 2-4 illustrates the differences in buildout potential between the existing General Plan land use designations and the proposed project within the planning area. In summary, the proposed project would lead to an increase of the following uses:

- Approximately 3,970 multi-family residential dwelling units⁸.
- Approximately 2,081,150 square feet of commercial retail uses.
- Approximately 1,506,217 square feet of business park uses.
- Approximately 740,903 square feet of light industrial uses.
- Approximately 21.6 acres of public facility uses.
- Approximately 4.28 acres of open space uses.

2.3.3 - Community Plan Policies

The planning area policies and related land use plan were developed as a result of extensive community input and are designed to support the development of residential neighborhoods of varying densities, neighborhood servicing commercial uses, and local employment center areas clustered along the planning area. According to Figure LU-4.1 of the General Plan Land Use Element, several areas between I-15 and I-215 are identified as an Environmental Justice Community (EJC) within the planning area. These areas identified as EJs include the communities of Good Hope, Meadowbrook, and Warm Springs. The community of Good Hope encompasses approximately 1,073 acres and is located north of Ethanac Road and south of 7th Street in the City of Perris. The communities of Meadowbrook and Warm Springs encompasses approximately 1,143 acres and is located north of Cambren Avenue in the City of Elsinore and south of Ethanac Road. Therefore, these areas within the planning area are subject to all relevant EJC policies of the Healthy Communities Element, which addresses civic engagement, reduction to health risks, and prioritization of infrastructure improvements. The General Plan contains policies that support and address environmental justice concerns that are specific to this area. These policies from the General Plan include:

- HC 2.1** Encourage a built environment that promotes physical activity and access to healthy foods while reducing driving and pollution by:
- a.) Promoting the use of survey tools such as Health Impact Assessments, Development Application Health Checklist, or other tools the County of Riverside deems effective to evaluate the impacts of development on public health.
 - b.) Directing new growth to existing, urbanized areas while reducing new growth in undeveloped areas of Riverside County.
- HC 11.1** Improve access to fresh fruits, vegetables, and other healthy food by encouraging a mix of food establishments that offer healthy food choices.

⁸ The proposed project would lead to a decrease of approximately 383 single-family detached residential units (<5 dwelling units per acre [DU/acre]). However, given the potential increase of 3,970 multi-family dwelling units listed above, the proposed project would lead to a net increase of 3,587 residential units.

- HC 11.2** Promote the production and distribution of locally grown food by reducing barriers to farmers markets, food cooperatives, neighborhood or community gardens, ethnobotanical gardens, etc.

Highway 74 Planning Area General Policies

These are intended to be viewed as proposed policy examples. As a result, these policies may be modified, amended, or corrected. In addition, new policies may be added to further support the intent of the project.

1. Encourage consolidation of parcels to promote better land use development and project design.
2. Where feasible the development of frontage/service roads should be encouraged to increase and facilitate access from Highway 74 to residential, commercial, and industrial sites.
3. The Mixed-Use Area (MUA) Land Use Designation may be found consistent with any nonresidential zoning classification that implements the intent of the land use designation or provides for a community serving use(s).
4. Development should be coordinated with Riverside Transit Agency (RTA) to ensure bus routes are identified and bus stops are provided to adequately serve community residents.
5. Development may include live-work spaces within the MUAs where appropriate.
6. Development should promote a reduction of Vehicle Miles Traveled (VMT) and livable and resilient neighborhoods that provide housing, goods and services, open space, and multi-model transportation options within proximity to each other.
7. Encourage the use of trees, signage, landscaping, street furniture, public art, and other aesthetic elements to enhance appearance and provide neighborhood uniqueness.
8. Commercial Parking should be screened/buffered from any public right-of-way with incorporation of landscaping, walls, berms with trees in support of the streetscape.
9. Developments should be encouraged to design and locate convenient pedestrian and bicycle connections, bus, or shuttle connections, that increase connections to adjacent and nearby communities and cities, businesses, parks and open space areas, and new transit access opportunities.
10. Work on reducing illegal dumping, including hazardous waste, and increase access to affordable composting and recycling facilities; encourage the appropriate permitting of waste sites and reclamation of cleanup sites.
11. Encourage the connection of municipal water and wastewater services to community residents and facilities to reduce reliance on septic systems in order to limit groundwater contamination.

In addition to the policies discussed above, each neighborhood also has neighborhood-specific policies.

Neighborhood 1

This neighborhood presents an opportunity to serve as an entry point from the City of Perris to the planning area. It provides a sense of uniqueness and contains commercial and clean industry establishments that support residential components that facilitate a “live, work, and play” environment.

Neighborhood 1 Policies

- N 1.1** New developments within the neighborhood should support the neighborhood’s emerging identity.
- N 1.2** Encourage complete streets, which include sidewalks, greenbelts, and trails to facilitate use by pedestrians and bicyclists where such facilities are well separated from parallel or cross through traffic to ensure pedestrian and cyclist safety.
- N 1.3** The County should work with RTA to address any deficiencies or disconnection of transit routes through the neighborhood.

Neighborhood 2

This neighborhood presents an opportunity to serve as an entry point from the City of Elsinore to the planning area. It provides a sense of uniqueness and contains commercial and clean industry establishments that support residential components that facilitate a “live, work, and play” environment.

Neighborhood 2 Policies

- N 2.1** Developments should support the neighborhood’s emerging identity.
- N 2.2** Encourage complete streets, which include sidewalks, greenbelts, and trails to facilitate use by pedestrians and bicyclists where such facilities are well separated from parallel or cross through traffic to ensure pedestrian and cyclist safety.
- N 2.3** Work on preserving outstanding scenic vistas and features and encourage underground placement of electric or communication distribution lines.

Neighborhood 3

This neighborhood presents the opportunity to provide local employment to residents.

Neighborhood 3 Policy

- N 3.1** Encourage effective and comprehensive coordination efforts with the City of Lake Elsinore regarding planning, including circulation policies that affect commercial and industrial development/entitlement activity.

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Table 2-4: Highway 74 Community Plan Build Out Assumptions

Land Use Designations	Land Use Code	Existing General Plan Build Out within the Highway 74 Planning Area			Highway 74 Community Plan Buildout (GPA 1205)			Delta	
		Acres	Rate ^{1,2}	Quantity ²	Acres	Rate ^{1,2}	Quantity ²	Acres	Quantity ²
Community Development Foundation Component									
Very Low Density Residential	VLDR	713.50	0.75 DU/AC	535 DU	430.09	0.75 DU/AC	323 DU	-283.41	-212 DU
Low Density Residential	LDR	0.00	1.50 DU/AC	0 DU	112.43	1.50 DU/AC	169 DU	112.43	169 DU
Medium Density Residential	MDR	111.39	3.50 DU/AC	390 DU	58.05	3.50 DU/AC	203 DU	-53.34	-187 DU
Medium High Density Residential	MHDR	29.02	6.50 DU/AC	189 DU	29.02	6.50 DU/AC	189 DU	0.00	0 DU
High Density Residential	HDR	0.00	11.00 DU/AC	0 DU	3.95	11.00 DU/AC	43 DU	3.95	43 DU
Very High Density Residential	VHDR	12.82	17.00 DU/AC	218 DU	13.02	17.00 DU/AC	221 DU	0.20	3 DU
Highest Density Residential	HHDR	17.09	30.00 DU/AC	513 DU	17.09	30.00 DU/AC	513 DU	0.00	0 DU
Commercial Retail	CR	14.23	0.23 FAR	106.926 TSF	177.47	0.23 FAR	1,333.527 TSF	163.24	1,222.601 TSF
Business Park	BP	33.74	0.30 FAR	330.686 TSF	187.42	0.30 FAR	1,836.903 TSF	153.68	1,506.217 TSF
Light Industrial	LI	112.00	0.38 FAR	1,483.131 TSF	167.95	0.38 FAR	2,224.034 TSF	55.95	740.903 TSF
Public Facilities	PF	0.00	–	0 AC	21.60	–	21.6 AC	21.60	21.6 acre
Mixed-Use Area	MUA	194.35	0.40 FAR 30.00 DU/AC	1,269.883 TSF 2,915 DU	455.92	0.40 FAR 30.00 DU/AC	2,978.981 TSF 6,839 DU	261.57	1,709.098 TSF 3,924 DU
Community Center	CC	6.71	0.40 FAR 17.00 DU/AC	43.843 TSF 57 DU	6.71	0.40 FAR 17.00 DU/AC	43.843 TSF 57 SU	0.00	0.000 TSF 0 DU
Community Development Foundation Component Total		1,244.85 acres			1,680.72 acres			435.87 acres	
Rural Foundation Component									
Rural Residential	RR	305.31	0.15 DU/AC	46 DU	57.23	0.15 DU/AC	9 DU	-248.08	-37 Du
Rural Mountainous	RM	99.34	0.05 DU/AC	5 DU	58.76	0.05 DU/AC	3 DU	-40.58	-2 DU
Rural Foundation Component Total		404.65 acres			115.99 acres			-288.66 acres	

Land Use Designations	Land Use Code	Existing General Plan Build Out within the Highway 74 Planning Area			Highway 74 Community Plan Buildout (GPA 1205)			Delta	
		Acres	Rate ^{1,2}	Quantity ²	Acres	Rate ^{1,2}	Quantity ²	Acres	Quantity ²
Rural Community Foundation Component									
Rural Community—Very Low Density Residential	RC-VLDR	527.59	0.75 DU/AC	396 DU	376.07	0.75 DU/AC	282 DU	-151.52	-114 DU
Rural Community Foundation Component Total		527.59 acres			376.07 acres			-151.52 acres	
Open Space Foundation Component									
Open Space—Recreation	OS-R	30.80	–	30.8 acres	29.10	–	29.1	-1.70	-1.7 acres
Open Space—Conservation	OS-C	0.00	–	0 acres	14.70	–	14.70	14.70	14.7 acres
Open Space—Conservation Habitat	OS-CH	8.72	–	8.72 acres	0.00	–	0.00	-8.72	-8.71 acres
Open Space Foundation Component Total		39.52 acres			43.80 acres			4.28 acres	
Land Use Summary									
Single-family Detached Residential (< 5 DU/Acre)	–	1,757.13	–	1,372 DU	1,092.63	–	989 DU	-664.50	-383 SU
Multi-family Residential (> = 5 DU/Acre + 50% MUA/CC)	–	159.46	–	3,892 DU	294.40	–	7,862 DU	134.94	3,970 DU
Commercial Retail (CR + 50% MUA/CC)	–	114.76	–	763.789 TSF	408.79	–	2,844.939 TSF	294.03	2,081.150 TSF
Business Park	–	33.74	–	330.686 TSF	187.42	–	1,836.903 TSF	153.68	1,506.217 TSF
Light Industrial	–	112.00	–	1,483.131 TSF	167.95	–	2,224.034 TSF	55.95	740.903 TSF
Other	–	39.52	–	39.52 acres	65.40	–	65.40 acres	25.88	25.88 acres
Grand Total		2,216.61 acres			2,216.58 acres			-0.03 acre	
Notes:									
AC = acres; DU = dwelling unit; DU/AC = dwelling unit per acre; TSF = thousand square feet; FAR = floor area ratio									
¹ Rates based on the County of Riverside General Plan Appendix E: Socioeconomic Build-out Assumptions and Methodology (2017).									
² To determine the actual amount of land available for development, gross acres must be converted to net acres, as shown below:–0.75 for Commercial Retail (CR), Commercial Tourist (CT), Commercial Office (CO), Heavy Industrial (HI), and Business Park (BP)–0.80 for Light Industrial (LI)									

2.4 - Project Objectives

The underlying purpose of the proposed project is to stimulate economic development, provide housing opportunities, facilitate the development of infrastructure, and address environmental justice.

To advance the underlying purpose, the project objectives are as follows:

1. Accommodate the development of a balance of land uses that maintain and enhance Riverside County’s fiscal viability, economic diversity, and environmental integrity.
2. Update policies to be consistent with current legal requirements and legislation.
3. Encourage consolidation of parcels to promote better land use development and project design and maximize density of residential, commercial, and industrial uses.
4. Facilitate access from Highway 74 to residential, commercial, and industrial sites where feasible the development of frontage/service roads should be encouraged to increase.
5. Support economic vitality by maximizing the availability of a wide variety of employment opportunities within the planning area.
6. Provide live-work spaces within the MUAs where appropriate.
7. Promote livable and resilient neighborhoods that provide housing, goods and services, open space, and multi-modal transportation options within proximity to each other and that reduce reliance on the automobile.
8. Promote healthy neighborhoods that incorporate best practices related to land use, mobility, air quality, housing, affordability, safety, environmental justice, community services, and design. Encourage complete streets, which include sidewalks, greenbelts, and trails to facilitate use by pedestrians and bicyclists where such facilities are well separated from parallel or cross through traffic to ensure pedestrian and cyclist safety.
9. Preserve outstanding scenic vistas and features and encourage underground placement of electric or communication distribution lines.
10. Encourage trees, signage, landscaping, street furniture, public art, and other aesthetic elements in development.
11. Incorporate policies that promote the health and welfare of the community by encouraging development to include convenient pedestrian and bicycle connections, bus, or shuttle connections, that increase connections to adjacent and nearby communities and cities, businesses, parks and open space areas, and new transit access opportunities into the planning process.
12. Maintain the rural and open space character of Riverside County by implementing policies that concentrate growth near or within existing urban and suburban areas to the greatest extent possible. Preserve and maintain the environment by developing policies to reduce illegal dumping, including hazardous waste, and increase access to affordable composting and recycling facilities; encourage the appropriate permitting of waste sites and reclamation of cleanup sites.

Encourage the connection of municipal water and wastewater services to community residents and facilities to reduce reliance on septic systems in order to limit groundwater contamination.

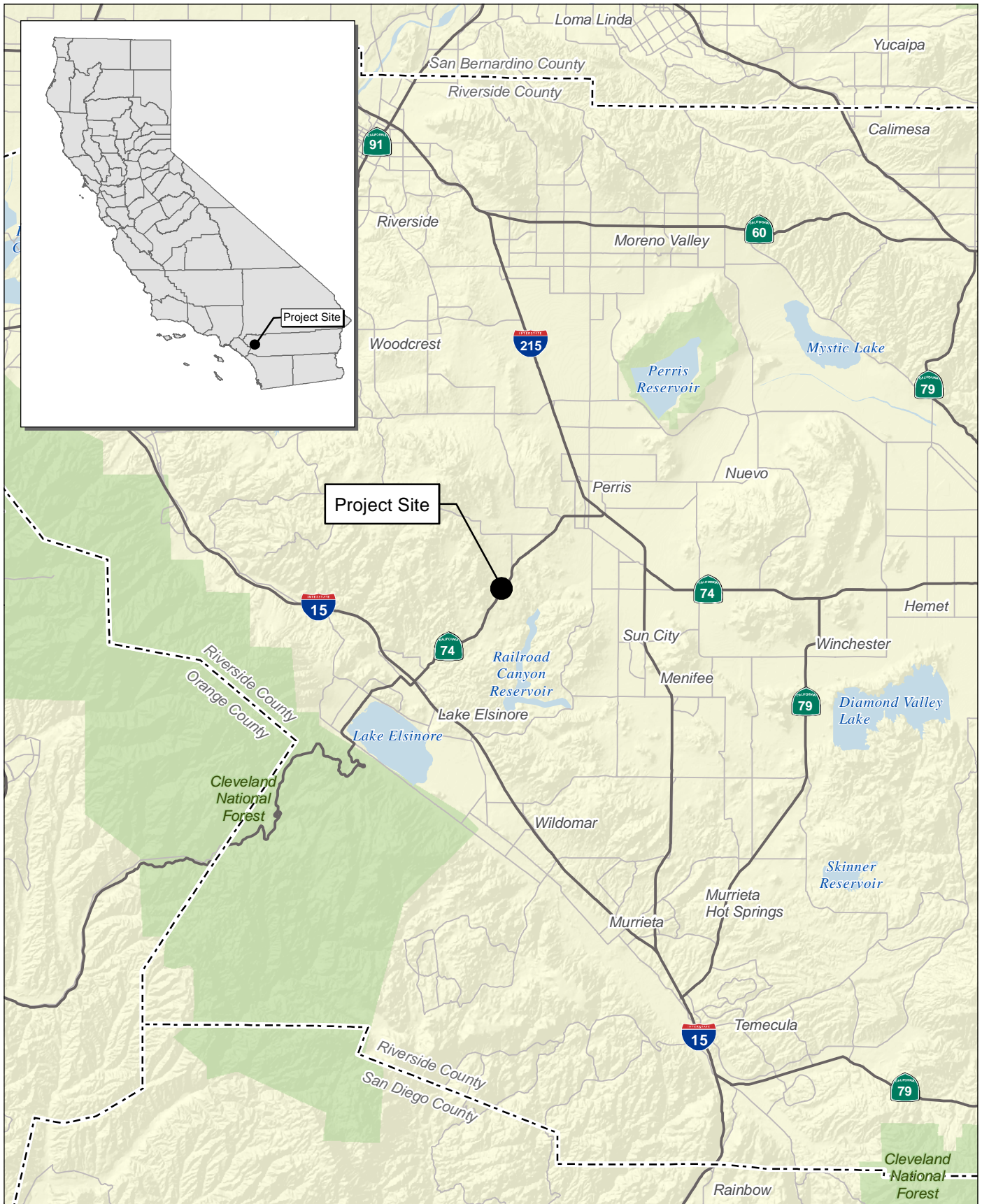
2.5 - Intended Uses of this Draft Program EIR

This Draft Program EIR is being prepared by the County to assess the potential environmental impacts that may arise in connection with actions related to implementation of the proposed project. Pursuant to California Environmental Quality Act (CEQA) Guidelines Section 15367, the County is the lead agency for the proposed project and has discretionary authority over the proposed project and project approvals. The Draft Program EIR is intended to discuss and disclose the potential project impacts to the greatest extent feasible at this time in order to avoid or minimize the need for future environmental documentation of the project by using current plans, technical studies, and relevant information available. However, as a programmatic EIR, given the size and scale of the project area, detailed site-specific analysis would be infeasible at this time. Therefore, future implementing projects may require site-specific environmental review pursuant to State CEQA Guidelines section 15168, or other CEQA tiering or streamlining procedures, and will be evaluated on a case-by-case basis to determine whether additional CEQA compliance is required. The Draft Program EIR will be used by the County of Riverside, interested parties, the general public, and responsible agencies to evaluate the potential environmental impacts of the proposed project.

2.5.1 - Discretionary and Ministerial Actions

Discretionary approvals and permits are required by the County for implementation of the proposed project. The proposed project would require the following discretionary approvals and actions, including:

- Certification of the Draft Program EIR
- Adoption of GPA No. 1205
 - Highway 74 Community Plan



Source: Census 2000 Data, The CaSIL

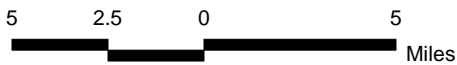
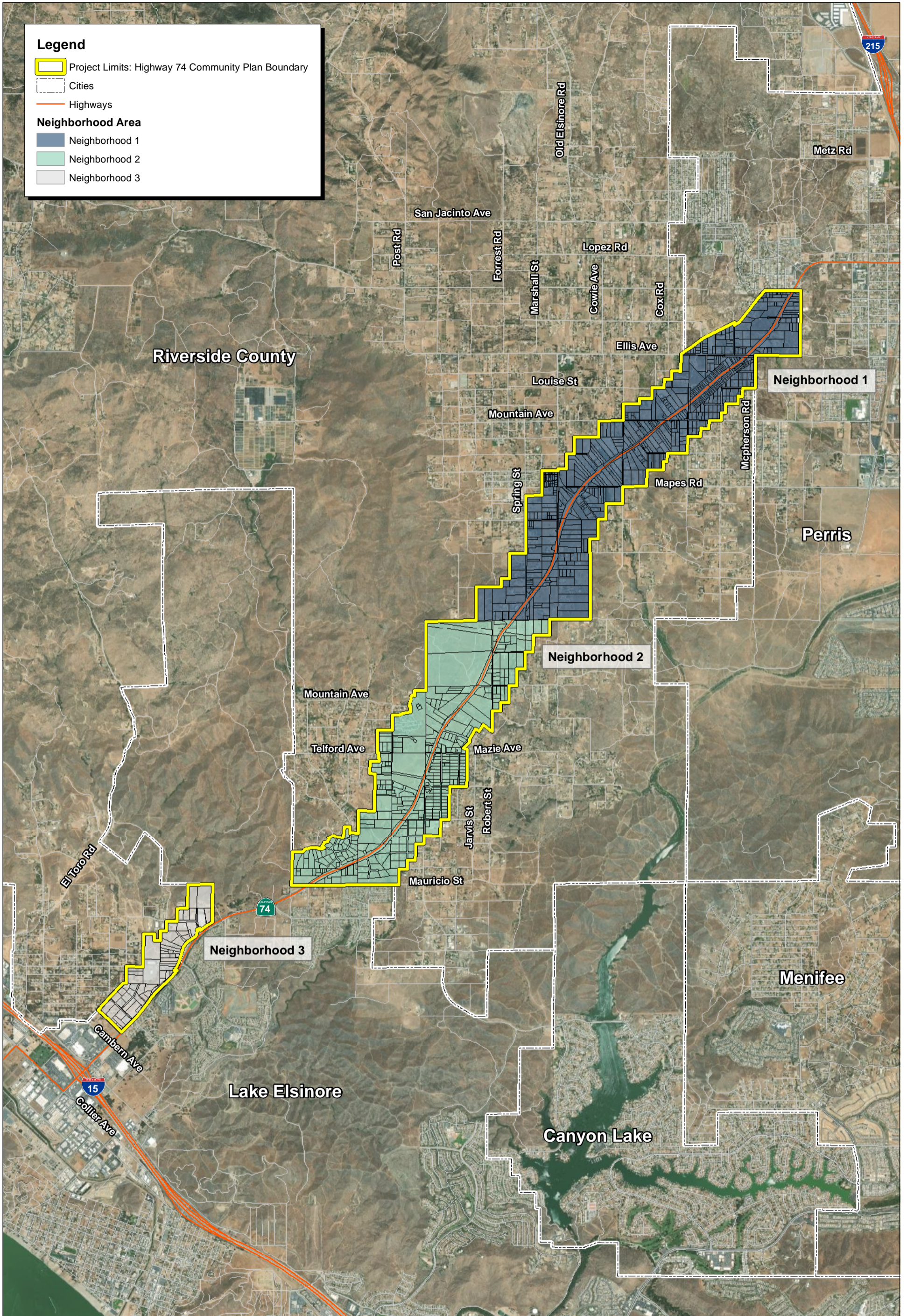


Exhibit 2-1 Regional Location Map

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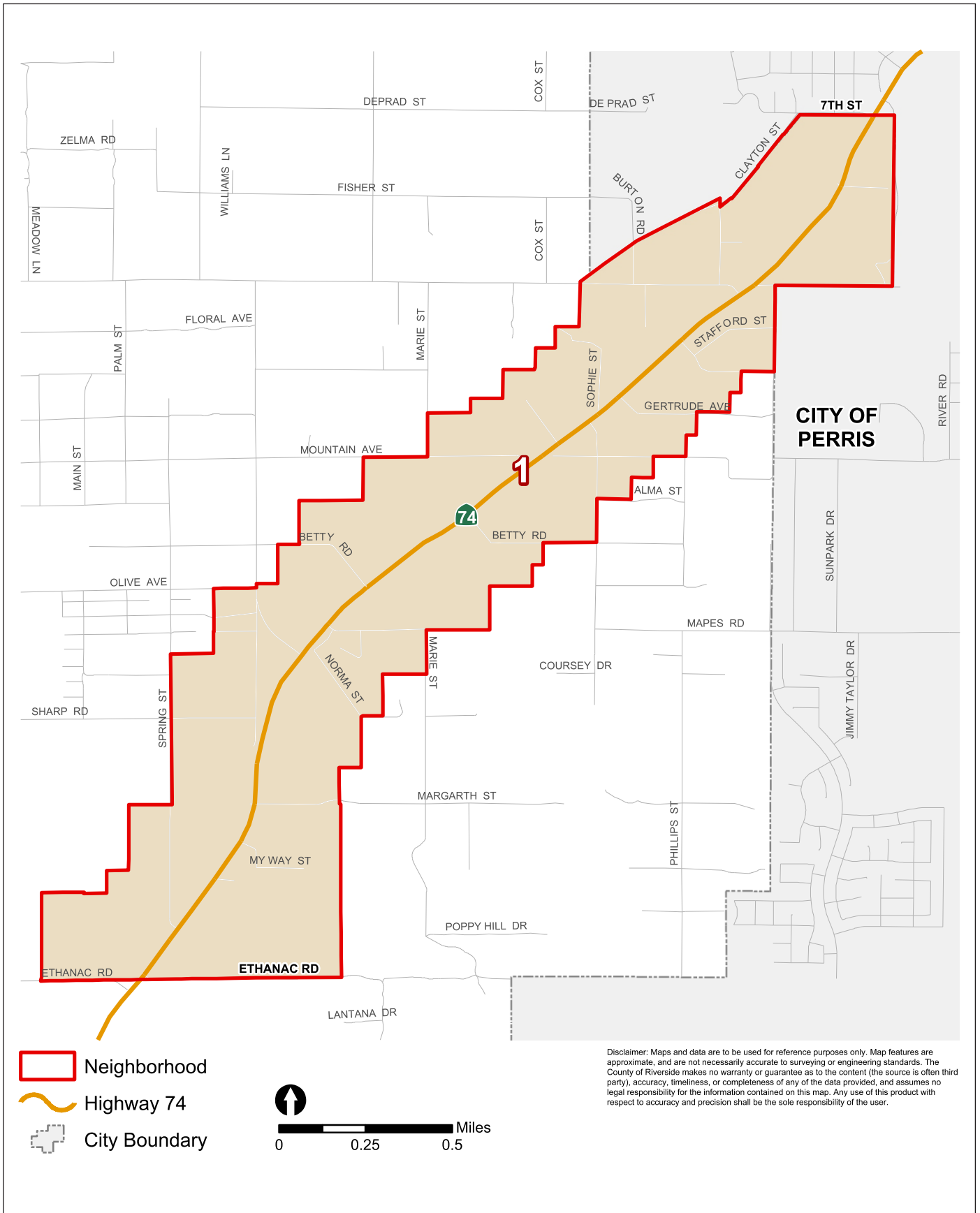


Source: ESRI Aerial Imagery. Riverside County GIS Data. CASC Engineering & Consulting, 09/2021.



Exhibit 2-2
Project Location

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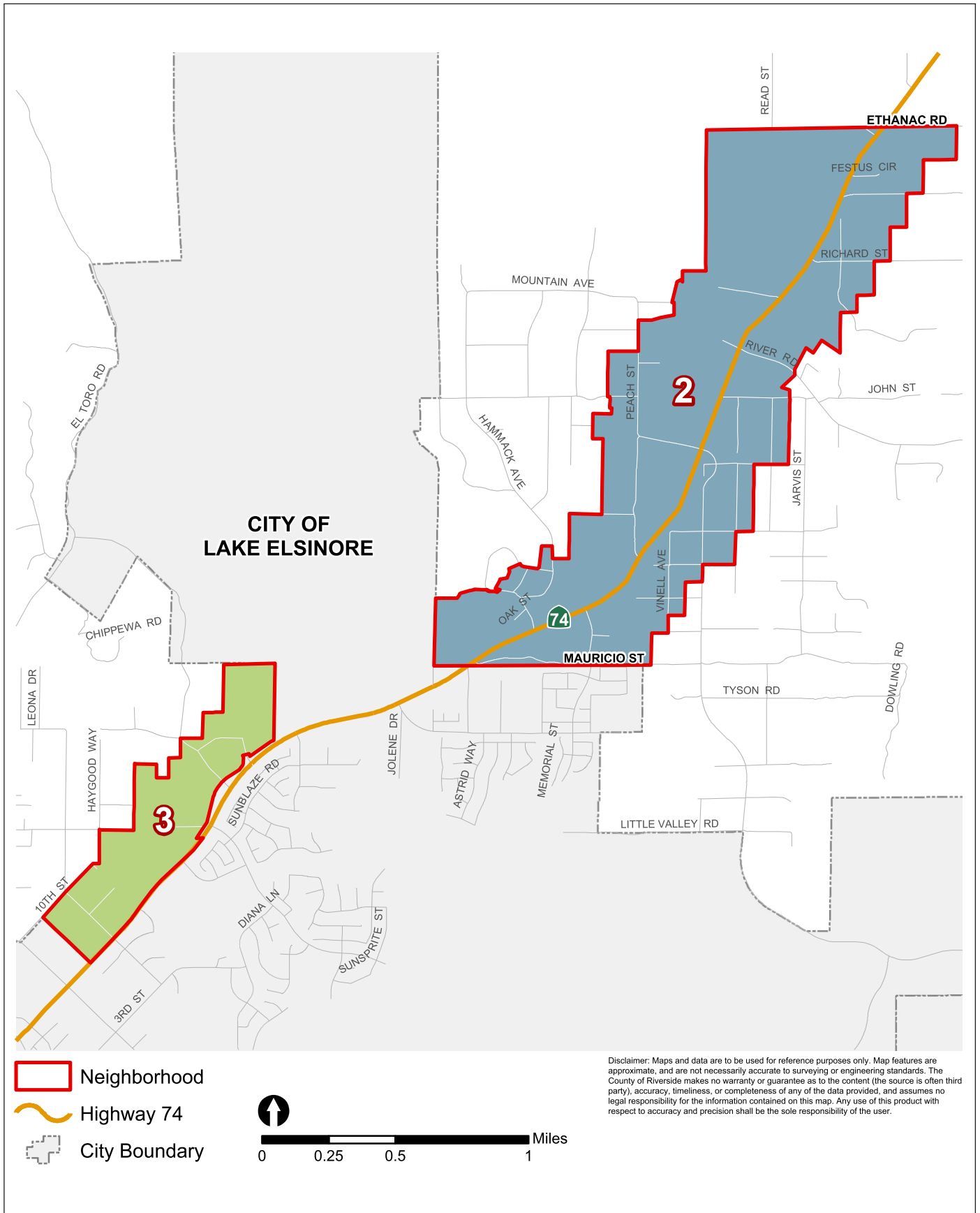


Source: County of Riverside Planning Department, 12/21/2021.



Exhibit 2-2a Project Location - Neighborhood 1

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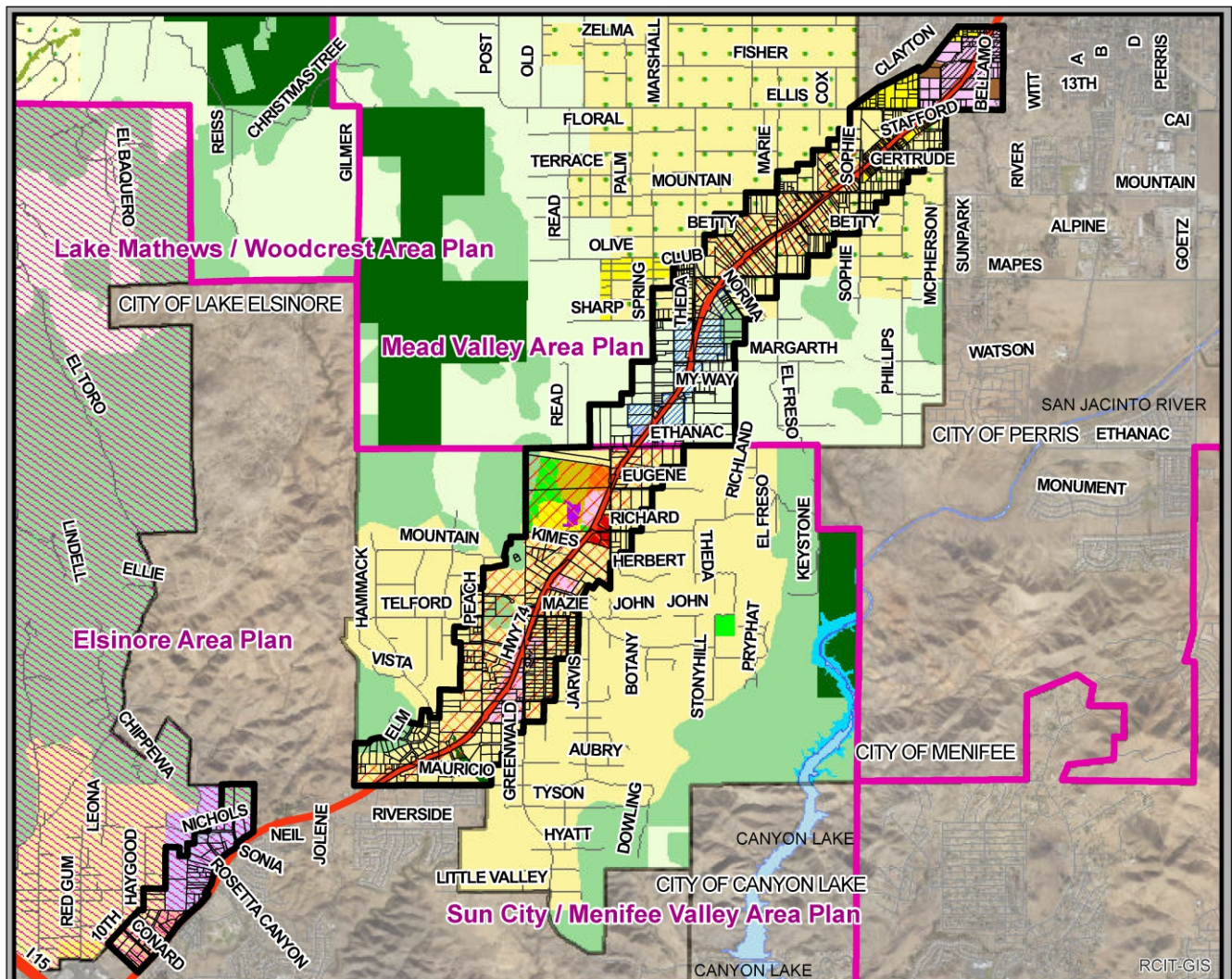


Source: County of Riverside Planning Department, 12/21/2021.



Exhibit 2-2b Project Location - Neighborhoods 2 and 3

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Date: 03/27/2019

0 0.75 1.5 Miles

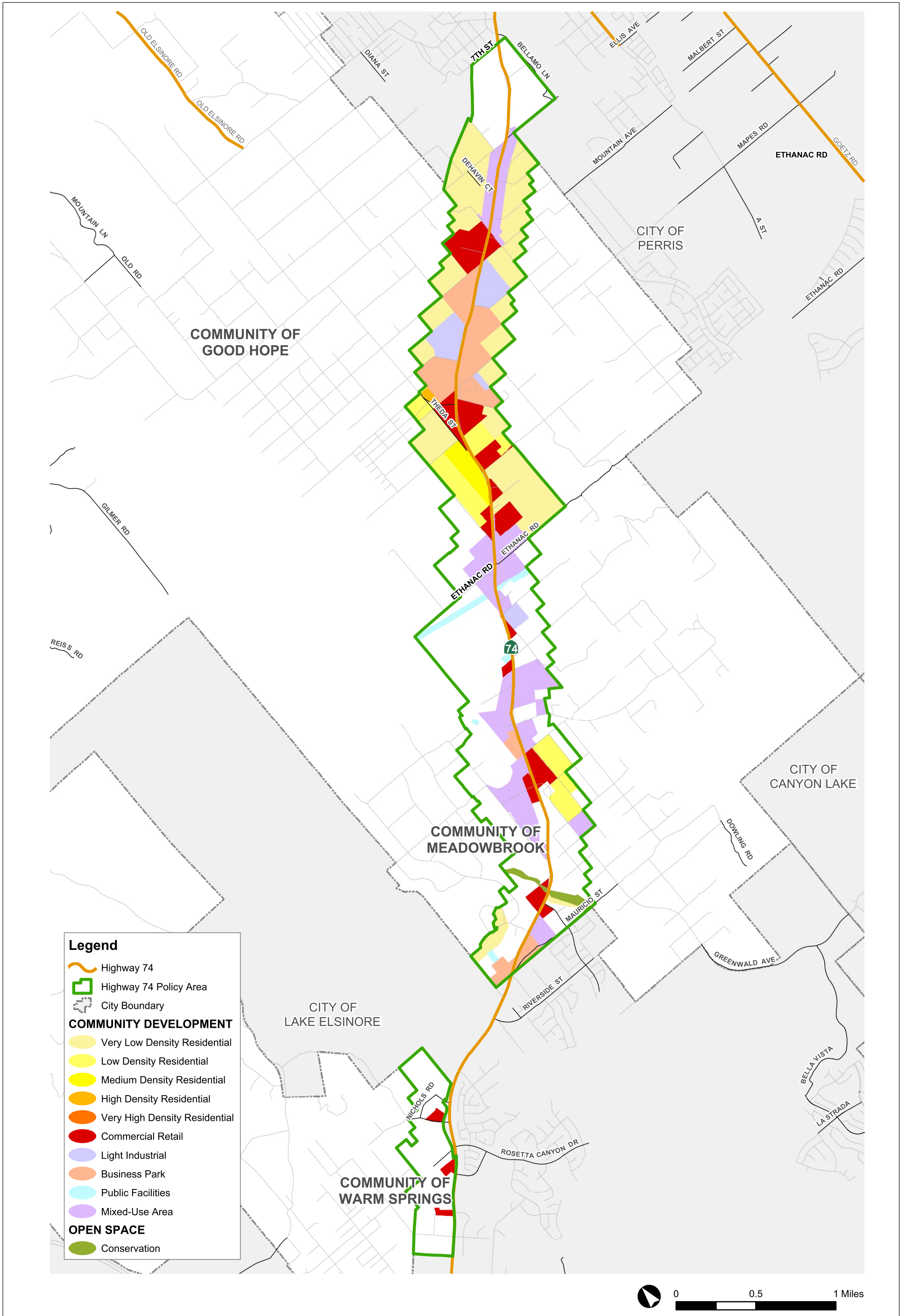
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|---|---|--|
| <ul style="list-style-type: none"> HIGHWAYS GENERAL PLAN: AREA PLAN BOUNDARIES HIGHWAY 74 COMMUNITY PLAN BOUNDARY EXISTING POLICY HIGHWAY 74 GOOD HOPE POLICY AREA HIGHWAY 74 PERRIS POLICY AREA WARM SPRINGS POLICY AREA EXISTING OVERLAY RURAL VILLAGE LAND USE OVERLAY | <p>GENERAL PLAN: LAND USE DESIGNATIONS</p> <p>RURAL COMMUNITY</p> <ul style="list-style-type: none"> Rural Community - Very Low Density Residential Rural Community - Estate Density Residential <p>RURAL</p> <ul style="list-style-type: none"> Rural Residential Rural Mountainous | <p>COMMUNITY DEVELOPMENT</p> <ul style="list-style-type: none"> Very Low Density Residential Low Density Residential Medium Density Residential Medium High Density Residential Highest Density Residential Very High Density Residential <p>COMMUNITY DEVELOPMENT</p> <ul style="list-style-type: none"> Commercial Retail Business Park Light Industrial Community Center Mixed-Use <p>OPEN SPACE</p> <ul style="list-style-type: none"> Water Open Space Rural Open Space Recreation Conservation Habitat Conservation |
|---|---|--|

Source: County of Riverside Planning Department, May 3, 2019.



Exhibit 2-3 Existing General Plan Land Use Designation Map

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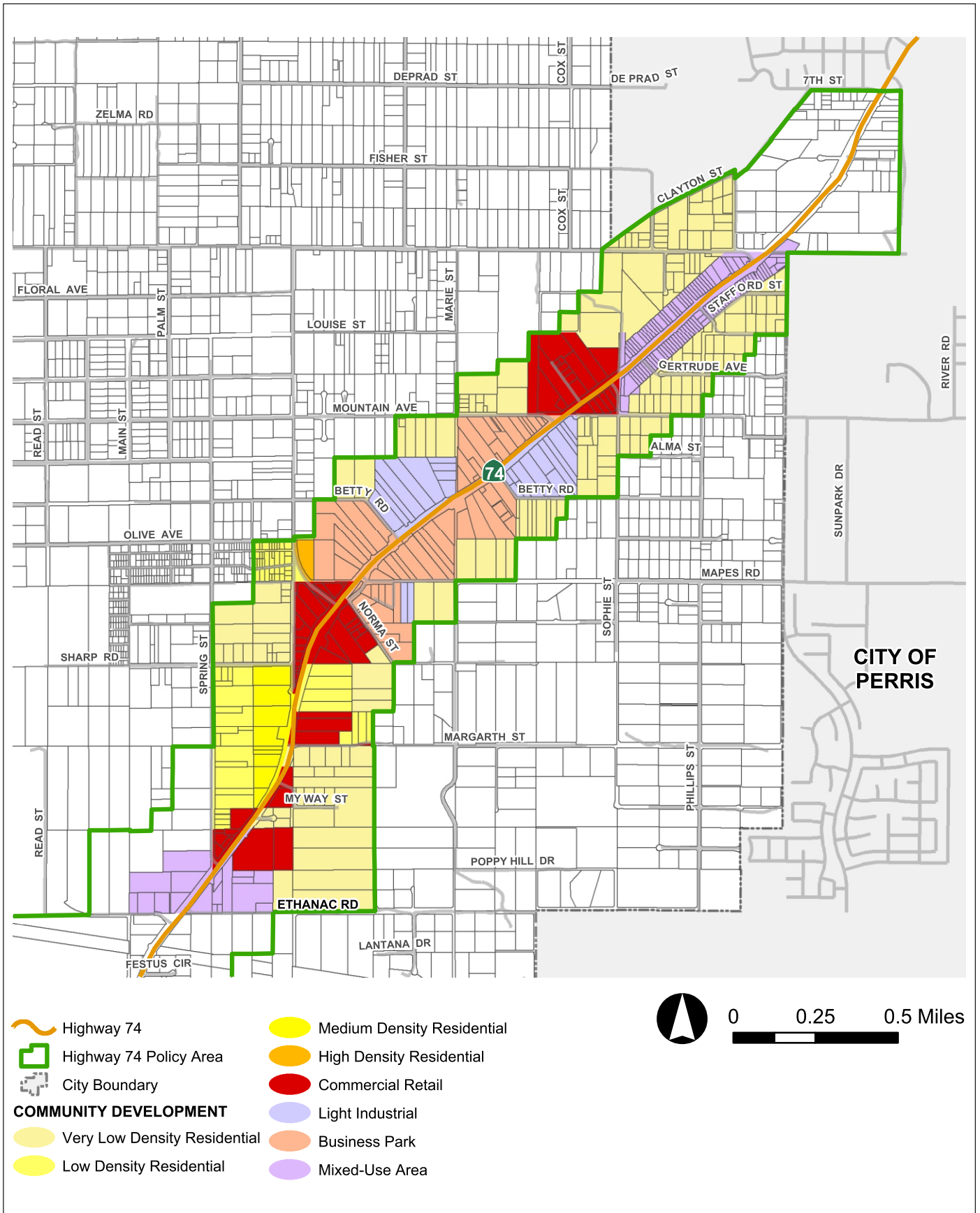


Source: County of Riverside Planning Department, 12/21/2021.



Exhibit 2-4
Proposed General Plan Land Use Designation Map

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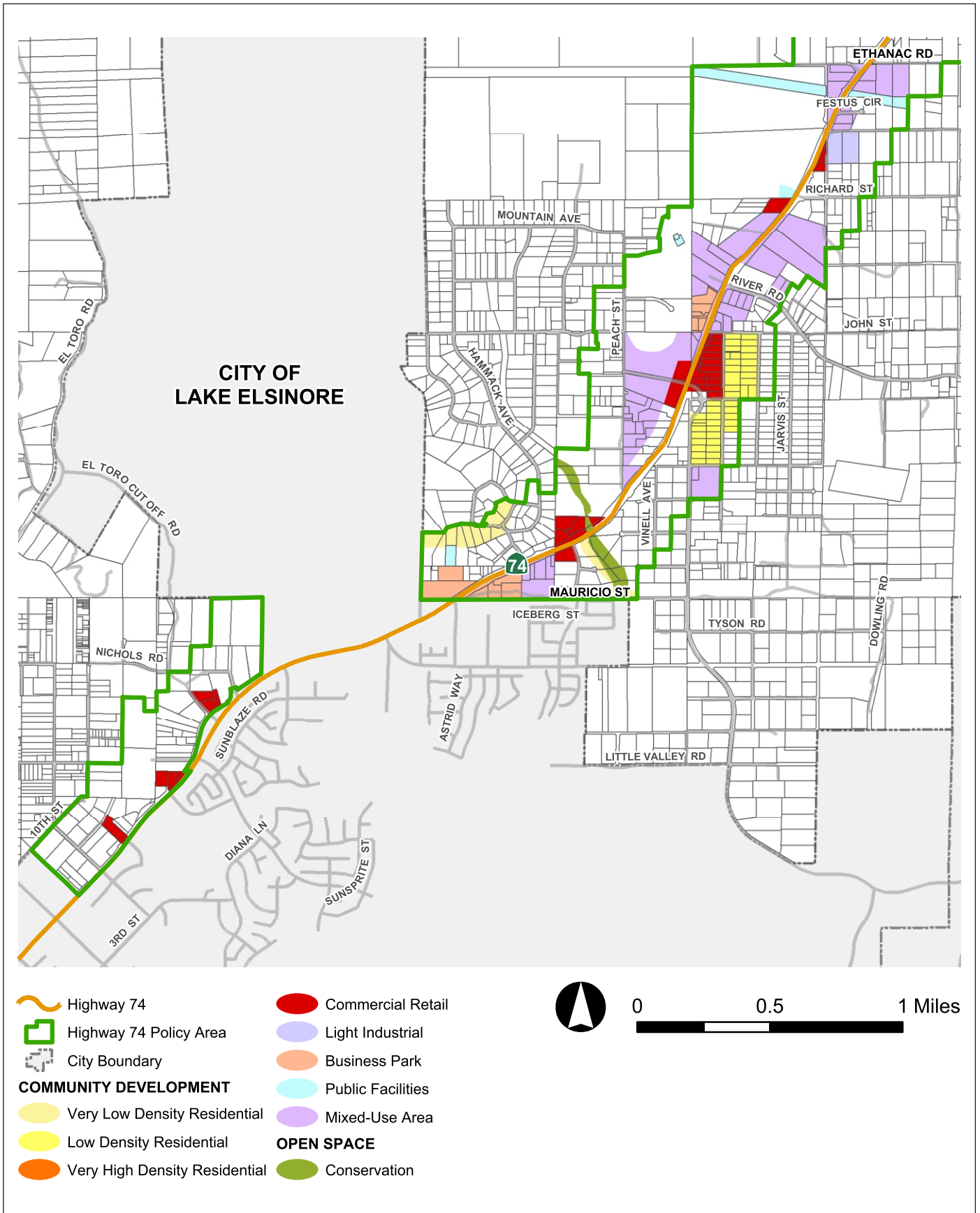


Source: County of Riverside Planning Department, 12/21/2021.



Exhibit 2-5a Proposed General Plan Land Use Designations for Neighborhood 1

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Source: County of Riverside Planning Department, 12/21/2021.



Exhibit 2-5b
 Proposed General Plan Land Use
 Designations for Neighborhoods 2 and 3

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CHAPTER 3: ENVIRONMENTAL IMPACT ANALYSIS

Organization of Issue Areas

This Draft Program Environmental Impact Report (Draft Program EIR) provides analysis of impacts for those environmental topics where it was determined in the Notice of Preparation (NOP), or through subsequent analysis that the proposed project would result in “potentially significant impacts.” Sections 3.1 through 3.21 discuss the environmental impacts that may result with approval and implementation of the proposed project.

Issues Addressed in this Program EIR

The following environmental issues are addressed in Section 3:

- Aesthetics, Light, and Glare
- Agriculture and Forest Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Energy
- Geology, Soils, and Paleontological Resources
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Mineral Resources
- Noise
- Paleontological Resources
- Population and Housing
- Public Services
- Recreation
- Transportation and Traffic
- Tribal Cultural Resources
- Utilities and Service Systems
- Wildfire

Level of Significance

Determining the severity of project impacts is fundamental to achieving the objectives of the California Environmental Quality Act (CEQA). State CEQA Guidelines section 15091 requires that decision makers mitigate, as completely as is feasible, the significant impacts identified in the Final Program EIR. If the Draft Program EIR identifies any significant unmitigated impacts, State CEQA Guidelines section 15093 requires decision makers in approving a project to adopt a statement of

overriding considerations that explains why the benefits of the project outweigh the adverse environmental consequences identified in the Draft Program EIR.

The level of significance for each impact examined in this Draft Program EIR was determined by considering the predicted magnitude of the impact against the applicable threshold. Thresholds were developed using criteria from the State CEQA Guidelines and checklist; State, federal, and local regulatory schemes; local/regional plans and ordinances; accepted practice; consultation with recognized experts; and other professional opinions.

Impact Analysis and Mitigation Measure Format

The format adopted in this Draft Program EIR to present the evaluation of impacts is described and illustrated below.

Summary Heading of Impact

Impact AES-1: An impact summary heading appears immediately preceding the impact description (Summary Heading of Impact in this example). The impact number identifies the section of the report (AES for Aesthetics, Light, and Glare in this example) and the sequential order of the impact (1 in this example) within that section. To the right of the impact number is the impact statement, which identifies the potential impact.

Impact Analysis

A narrative analysis follows the impact statement.

Level of Significance Before Mitigation

This section identifies the level of significance of the impact before any mitigation is proposed.

Mitigation Measures

In some cases, following the impact discussion, reference is made to state and federal regulations and agency policies that would fully or partially mitigate the impact. In addition, policies and programs from applicable local land use plans that partially or fully mitigate the impact may be cited.

Project-specific mitigation measures, beyond those contained in other documents, are set off with a summary heading and described using the format presented below:

MM AES-1 Project-specific mitigation is identified that would reduce the impact to the lowest degree feasible. The mitigation number links the particular mitigation to the impact it is associated with (AES-1 in this example); mitigation measures are numbered sequentially.

Level of Significance After Mitigation

This section identifies the resulting level of significance of the impact following mitigation.

Abbreviations used in the mitigation measure numbering are:

Code	Environmental Issue
AES	Aesthetics, Light, and Glare
AG	Agriculture and Forest Resources
AIR	Air Quality
BIO	Biological Resources
CUL	Cultural Resources
ENER	Energy
GEO	Geology and Soils
GHG	Greenhouse Gas Emissions
HAZ	Hazards and Hazardous Materials
HYD	Hydrology and Water Quality
LUP	Land Use and Planning
MIN	Mineral Resources
NOI	Noise
PALEO	Paleontological Resources
POP	Population and Housing
PS	Public Services
REC	Recreation
TRANS	Transportation and Traffic
TCR	Tribal Cultural Resources
USS	Utilities and Service Systems
WILD	Wildfire

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3.1 - Aesthetics, Light, and Glare

3.1.1 - Introduction

This section describes the existing aesthetics, light, and glare setting and potential effects from project implementation on visual resources and the planning area and its surroundings. Descriptions and analysis in this section are based, in part, on-site reconnaissance, as well as review of applicable policy documents such as the County of Riverside General Plan (General Plan) and its associated Program Environmental Impact Report (Program EIR), as well as the Mead Valley Area Plan (MVAP) and the Elsinore Area Plan (ELAP). No public comments were received in response to the Notice of Preparation (NOP) regarding aesthetics, light, or glare.

3.1.2 - Environmental Setting

Regional Setting

The Highway 74 Community Plan (proposed project) extends 6.8 miles between the City of Lake Elsinore and the City of Perris, between Interstate 15 (I-15) and Interstate 215 (I-215), in western Riverside County (County). The planning area includes portions of the Good Hope, Meadowbrook, and Warm Springs communities. The Santa Ana Mountains are the primary backdrop to the southwestern portion of the planning area. Notable peaks in the Santa Ana Mountains include Santiago Peak (5,689 feet) and Modjeska Peak (5,496 feet), which together form the Saddleback Mountain formation. The City of Lake Elsinore is characterized as a small city that encompasses a large geographical area across 11 districts. The City of Lake Elsinore is adjacent to Lake Elsinore, a 3,000-acre freshwater lake, while the City of Perris is a small city located near Lake Perris, an artificial lake within a State Recreation Area. The most prominent existing land use within the area is rural, low- and medium-density residential uses as well as scattered commercial and industrial uses. Much of the planning area is characterized by low hilly terrain.

The Highway 74 corridor contains a wide variety of land uses. Most of the land uses are residential, with undeveloped parcels along the corridor. Business and industrial uses also occur within the urbanized portions of the corridor in Perris and Lake Elsinore. Major roadways that provide access to the planning area include I-215 on the northeast side and I-15 on the southeast side.

Scenic Resources

According to the General Plan, scenic resources include areas that are visible to the general public and considered visually attractive. Scenic resources include scenic corridors, natural landmarks, and prominent or unusual features of the landscape. For example, the Santa Rosa and San Jacinto National Monument includes mountains or other natural features with high scenic value. Scenic backdrops include hillsides and ridges that rise above urban or rural areas or highways. Scenic vistas are points accessible to the general public that provide a view of the countryside.¹

¹ County of Riverside. 2015. Riverside County General Plan, Chapter 5: Multipurpose Open Space Element. Website: https://planning.rctlma.org/Portals/14/genplan/general_Plan_2017/elements/OCT17/Ch05_MOSE_120815.pdf?ver=2017-10-11-102103-833. Accessed October 12, 2021.

Furthermore, the General Plan states that natural slopes are one of the County’s primary aesthetic resources. Foothill and mountain areas, which are visible throughout the County, create a dramatic backdrop for local communities and help define the character of the County. Other visual resources include low-lying valleys, mountain ranges, rock formations, rivers, and lakes. These features are often enjoyed via the County’s many roadways. Due to the visual significance of many of these areas, several roadways have been officially recognized as either Eligible or Designated State or County Scenic Highways.² The planning area is characterized by hilly terrain and boulder clusters that can be considered scenic resources.

State Scenic Highways

The California Scenic Highway Mapping System indicates that the section of Highway 74 between the City of Perris and the City of Lake Elsinore is “State-Eligible,” which means that this portion of the highway is eligible for designation as a State Scenic Highway. On January 1, 2020, the California Streets and Highway Code was amended to include all of Highway 74 in the State Scenic Highway System. The segment within the planning area remains “Eligible” for designation as a State Scenic Highway.

Light and Glare

The City of Lake Perris and the City of Elsinore, adjacent to the planning area, are urbanized and experience a moderate level of ambient light. Except for downtown areas, the land uses in these cities are primarily suburban residential and subject to relatively low levels of nighttime lighting and glare, with some security and nighttime lighting in commercial areas. The planning area is characterized by existing commercial and light industrial uses, which are not sources of substantial nighttime lighting. Similarly, the planning area consists of single-family homes or rural residential on large lots, which would not be a source of substantial nighttime lighting and glare. Glare from headlights of vehicles traveling on Highway 74 is intermittent and not a substantial source of nighttime lighting and glare.

3.1.3 - Regulatory Framework

State

California Scenic Highway Program

The California Scenic Highway Program is intended to preserve and protect scenic highway corridors from change that would diminish the aesthetic value of lands adjacent to highways. 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. A scenic corridor is the land generally adjacent to and visible from the highway and is identified using a motorist’s line of vision. The corridor protection program seeks to encourage quality development that does not degrade the scenic value of the corridor. Minimum requirements for scenic corridor protection include:

- Regulation of land use and density of development.

² County of Riverside. 2015. Riverside County General Plan, Chapter 3: Land Use Element. Website: https://planning.rctlma.org/Portals/14/genplan/2021/Ch03_Land%20Use_06.29.21.pdf. Accessed October 12, 2021.

- Detailed land and site planning.
- Control of outdoor advertising (including a ban on billboards).
- Careful attention to and control of earthmoving and landscaping.
- Careful attention to design and appearance of structures and equipment.

Local

County of Riverside

General Plan

Scenic resources in the County include areas that are visible to the general public and considered visually attractive, including scenic corridors, natural landmarks, and prominent or unusual features of the landscape. Scenic resources include the Santa Rosa and San Jacinto National Monument and hillsides and ridges that rise above urban or rural areas or highways, as well as scenic vistas that provide a view of the countryside.³ The General Plan sets forth the following policies in the Healthy Communities Element related to aesthetics, light, and glare:⁴

Policy HC 2.1 Encourage a built environment that promotes physical activity and access to healthy foods while reducing driving and pollution by:

- (b) Directing new growth to existing, urbanized areas while reducing new growth in undeveloped areas of Riverside County.

Policy HC 3.1 Where appropriate, require high-density, mixed-use development near existing and proposed high-use transit centers.

Policy HC 4.1 Promote healthy land use patterns by doing each of the following to the extent feasible:

- (a) Preserving rural open space areas, and scenic resources.
- (b) Preventing inappropriate development in areas that are environmentally sensitive or subject to severe natural hazards.
- (c) Developing incentives, such as transfer of development rights, clustered development, development easements, and other mechanisms, to preserve the economic value of agricultural and open space lands.

Policy HC 8.1 Promote development patterns and policies that:

- (a) Reduce commute times.
- (b) Encourage the improvement of vacant properties and the reinvestment in neighborhoods.
- (c) Provide public space for people to congregate and interact socially.

³ County of Riverside. 2015. Riverside County General Plan, Chapter 5: Multipurpose Open Space Element. Website: https://planning.rctlma.org/Portals/14/genplan/general_Plan_2017/elements/OCT17/Ch05_MOSE_120815.pdf?ver=2017-10-11-102103-833. Accessed October 12, 2021.

⁴ County of Riverside. 2015. Riverside County General Plan, Chapter 10: Healthy Communities Element. Website: https://planning.rctlma.org/Portals/14/genplan/general_Plan_2017/elements/OCT17/Ch10_HCE_120815.pdf?ver=2017-10-11-102105-050. Accessed October 21, 2021.

- (d) Foster safe and attractive environments.
- (e) Encourage civic participation.

Policy HC 9.4 Improve safety and the perception of safety by requiring adequate lighting, street visibility, and defensible space.

Additionally, the following policies are set forth in the Multipurpose Open Space Element related to aesthetics, light, and glare:⁵

Policy OS 21.1 Identify and conserve the skylines, view corridors, and outstanding scenic vistas within Riverside County.

Policy OS 22.1 Design developments within designated scenic highway corridors to balance the objectives of maintaining scenic resources with accommodating compatible land uses.

Policy OS 22.2 Study potential scenic highway corridors for possible inclusion in the Caltrans Scenic Highways Plan.

Policy OS 22.3 Encourage joint efforts among federal, State, and County agencies, and citizen groups to ensure compatible development within scenic corridors.

Policy OS 22.4 Impose conditions on development within scenic highway corridors requiring dedication of scenic easements consistent with the Scenic Highways Plan, when it is necessary to preserve unique or special visual features.

Policy OS 22.5 Utilize contour grading and slope rounding to gradually transition graded road slopes into a natural configuration consistent with the topography of the areas within scenic highway corridors.

Furthermore, the Land Use Element sets forth the following policies related to aesthetics, light, and glare:⁶

Policy LU 9.1 Provide for permanent preservation of open space lands that contain important natural resources, cultural resources, hazards, water features, watercourses including arroyos and canyons, and scenic and recreational values.

Policy LU 9.2 Require that development protect environmental resources by compliance with the Multipurpose Open Space Element of the General Plan and federal and state regulations such as CEQA, NEPA, the Clean Air Act, and the Clean Water Act.

⁵ County of Riverside. 2015. Riverside County General Plan, Chapter 5: Multipurpose Open Space Element. Website: https://planning.rctlma.org/Portals/14/genplan/general_Plan_2017/elements/OCT17/Ch05_MOSE_120815.pdf?ver=2017-10-11-102103-833. Accessed October 12, 2021.

⁶ County of Riverside. 2015. Riverside County General Plan, Chapter 3: Land Use Element. Website: https://planning.rctlma.org/Portals/14/genplan/2021/Ch03_Land%20Use_06.29.21.pdf. Accessed October 12, 2021.

- Policy LU 9.3** Incorporate open space, community greenbelt separators, and recreational amenities into Community Development areas in order to enhance recreational opportunities and community aesthetics and improve the quality of life.
- Policy LU 9.4** Allow development clustering and/or density transfers in order to preserve open space, natural resources, cultural resources, and biologically sensitive resources. Wherever possible, development on parcels containing 100-year floodplains, blueline streams and other higher-order watercourses, and areas of steep slopes adjacent to them shall be clustered to keep development out of watercourse and adjacent steep slope areas, and to be compatible with other nearby land uses.
- Policy LU 9.5** In conjunction with the CEQA review process, evaluate the potential for residential projects not located within existing parks and recreation districts or County Service Areas (CSAs) that provide for neighborhood and community park development and maintenance to be annexed to such districts or CSAs, and require such annexation where appropriate and feasible.
- Policy LU 12.1** Apply the following policies to areas where development is allowed and that contain natural slopes, canyons, or other significant elevation changes, regardless of land use designation:
- (a) Require that hillside development minimize alteration of the natural landforms and natural vegetation.
 - (b) Allow development clustering to retain slopes in natural open space whenever possible.
 - (c) Require that areas with slope be developed in a manner to minimize the hazards from erosion and slope failures.
 - (d) Restrict development on visually significant ridgelines, canyon edges and hilltops through sensitive siting and appropriate landscaping to ensure development is visually unobtrusive.
 - (e) Require hillside adaptive construction techniques, such as post and beam construction, and special foundations for development when the need is identified in a soils and geology report which has been accepted by the County of Riverside.
 - (f) In areas at risk of flooding, limit grading, cut, and fill to the amount necessary to provide stable areas for structural foundations, street rights-of-way, parking facilities, and other intended uses.
- Policy LU 14.1** Preserve and protect outstanding scenic vistas and visual features for the enjoyment of the traveling public.
- Policy LU 14.2** Incorporate riding, hiking, and bicycle trails and other compatible public recreational facilities within scenic corridors.

- Policy LU 14.3** Ensure that the design and appearance of new landscaping, structures, equipment, signs, or grading within Designated and Eligible State and County scenic highway corridors are compatible with the surrounding scenic setting or environment.
- Policy LU 14.4** Maintain an appropriate setback from the edge of the right-of-way for new development adjacent to Designated and Eligible State and County Scenic Highways based on local surrounding development, topography, and other conditions.
- Policy LU 14.5** Require new or relocated electric or communication distribution lines, which would be visible from Designated and Eligible State and County Scenic Highways, to be placed underground.
- Policy LU 14.6** Prohibit off-site outdoor advertising displays that are visible from Designated and Eligible State and County Scenic Highways.
- Policy LU 14.7** Require that the size, height, and type of on-premises signs visible from Designated and Eligible State and County Scenic Highways be the minimum necessary for identification. The design, materials, color, and location of the signs shall blend with the environment, utilizing natural materials where possible.
- Policy LU 14.8** Avoid the blocking of public views by solid walls.

Riverside County Ordinance No. 655

The intent of Ordinance No. 655 is to restrict the permitted use of certain light fixtures emitting into the night sky undesirable light rays that have a detrimental effect on astronomical observation and research. The project corridor is within Zone B, which is within a 15- to 45-mile radius of the Mount Palomar Observatory per County Ordinance No. 655. Certain restrictions apply to lighting and lighting fixtures within Zone B. For example, in Zone B, Class I lighting—defined as lighting used for outdoor sales or eating areas, assembly or repair areas, outdoor advertising displays and other signs, recreational facilities, and other similar applications when color rendition is important—must be turned off after 11:00 p.m. Additionally, Class I lighting must have low-pressure sodium lamps, or must be fully shielded if above 4,050 lumens. Additional restrictions apply for Class II lighting—defined as outdoor lighting used for illumination for walkways, private roadways and streets, equipment yards, parking lot and outdoor security—and Class III lighting, which is defined as decorative lighting.⁷

Elsinore Area Plan

The ELAP includes the communities of Warm Springs and Meadowbrook, which are within the planning area, as well as the City of Lake Elsinore. Visual resources within the ELAP include the ridgelines and slopes of the Santa Ana Mountains, Gavilan Hills, and Sedco Hills, as well as views from I-15 from Corona south to the San Diego County line, and the western segment of Highway 74.

⁷ County of Riverside. 2020. Ordinance No. 655 – An Ordinance of the County of Riverside Regulating Light Pollution. Website: <https://www.rivcocob.org/ords/600/655.htm>. Accessed October 12, 2021.

The ELAP sets forth the following policies related to aesthetics, light, and glare:⁸

- Policy ELAP 5.7** Street trees, signage, landscaping, street furniture, public art, and other aesthetic elements should be used to enhance the appearance and identity of the Neighborhoods.
- Policy ELAP 5.8** Commercial Parking: should be screened/buffered from any public right-of-way with incorporation of landscaping, walls, berms with trees in support of the streetscape.
- Policy ELAP 8.1** Adhere to the lighting requirements of Riverside County for standards that are intended to limit light leakage and spillage that may interfere with the operations of the Palomar Observatory.
- Policy ELAP 11.1** Protect Interstate 15 and Highway 74 from change that would diminish the aesthetic value of adjacent properties through adherence to the Scenic Corridors sections of the General Plan Land Use and Circulation Elements.
- Policy ELAP 21.1** Identify and preserve the ridgelines that provide a significant visual resource for Elsinore through adherence to the Hillside Development and Slope section of the General Plan Land Use Element and the Scenic Resources section of the Multipurpose Open Space Element.
- Policy ELAP 21.2** Prohibit building sites on the Gavilan Hills Ridgeline. Projects proposed within this area shall be evaluated on a case by case basis to ensure that building pad sites are located so that buildings and roof tops do not project above the ridgeline as viewed from Interstate 15.

Additionally, the following ELAP policy applies specifically to Neighborhood 2 of the Highway 74 planning area:

- ELAP 5.14** Work on preserving outstanding scenic vistas and features and encouraging underground placement of electric or communication distribution lines.

Mead Valley Area Plan

According to the MVAP, scenic resources include Highway 74 where it connects with I-215 in the southern portion of the MVAP, and the Motte-Rimrock Reserve and Steele Peak. The MVAP sets forth the following policies related to aesthetics, light, and glare:⁹

- MVAP 3.7** Trees, signage, landscaping, street furniture, public art, and other aesthetic elements should be used to enhance appearance and provide neighborhood uniqueness.

⁸ County of Riverside. 2021. Elsinore Area Plan. Website: https://planning.rctlma.org/Portals/14/genplan/2021/ELAP_6.29.21.pdf. Accessed October 12, 2021.

⁹ County of Riverside. 2019. Mead Valley Area Plan. Website: https://planning.rctlma.org/Portals/14/genplan/2019/ap/MVAP_062618.pdf. Accessed October 12, 2021.

- MVAP 3.8** Commercial Parking: should be screened/buffered from any public right-of-way with incorporation of landscaping, walls, berms with trees in support of the streetscape.
- Policy MVAP 4.3** Assign high priority to the development of a Specific plan or Master Plan of Development (or Redevelopment) for this area with the objective of increasing the attractiveness of this area as a site for the location of new business establishments, relocation of existing business establishments, and provision of employment opportunities.
- Policy MVAP 6.2** A minimum 50-foot setback shall be required for any new industrial project on properties zoned I-P, if that property abuts a property that is zoned for residential, agricultural, or commercial uses. A minimum of 20 feet of the setback shall be landscaped, unless a tree screen is approved, in which case the setback area may be used for automobile parking, driveways or landscaping. Block walls or other fencing may be required.
- Policy MVAP 8.1** Adhere to the lighting requirements specified in Riverside County Ordinance No. 655 for standards that are intended to limit light leakage and spillage that may interfere with the operations of the Mount Palomar Observatory.
- Policy MVAP 12.1** Protect the scenic highways in the Mead Valley planning area from change that would diminish the aesthetic value of adjacent properties in accordance with the Scenic Corridors sections of the General Plan Land Use, Multipurpose Open Space, and Circulation Elements.
- Policy MVAP 21.1** Identify ridgelines that provide a significant visual resource for the Mead Valley planning area through adherence to the policies within the Hillside Development and Slope section of the General Plan Land Use Element.

Additionally, the following MVAP policy applies specifically to Neighborhood 2 of the Highway 74 planning area:

- MVAP 3.12** New developments within the neighborhood should support the neighborhood's emerging identity.

Highway 74 Community Plan

The proposed project sets forth the following policies related to aesthetics, light, and glare:

- Trees, signage, landscaping, street furniture, public art, and other aesthetic elements should be used to enhance appearance and provide neighborhood uniqueness.
- Commercial Parking: should be screened/buffered from any public right-of-way with incorporation of landscaping, walls, berms with trees in support of the streetscape.

- Policy N 2.3** Work on preserving outstanding scenic vistas and features and encourage underground placement of electric or communication distribution lines.

3.1.4 - Methodology

Potential project impacts on aesthetics, light, and glare were evaluated, in part, through site reconnaissance and review of applicable plans and policies. The planning area was visited in early 2018 and again in August 2021, and site conditions and relationships to surrounding land uses were documented. Aerial photographs, topographical maps, street maps, and project plans were also reviewed to identify surrounding land uses and evaluate potential impacts from future development that would occur pursuant to the proposed project. The General Plan and zoning ordinance, as well as the MVAP and the ELAP, were reviewed to determine applicable policies and design requirements for the proposed project.

3.1.5 - Thresholds of Significance

Section XIV of Appendix G to the California Environmental Quality Act (CEQA) Guidelines addresses typical adverse effects to biological resources and includes the following threshold questions to evaluate the project's impacts on aesthetics, light, and glare. Would the project:

- a) Have a substantial adverse effect on a scenic vista?
- b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State Scenic Highway?
- c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings. (Public views are those that are experienced from a publicly accessible vantage point.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?
- d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Significance thresholds are set forth in Riverside County's Environmental Assessment Checklist, are derived from Section XIV of Appendix G to the State CEQA Guidelines (listed above), and state that the proposed project would have a significant impact to aesthetics, light, and glare if construction and/or operation of the project would:

1. Scenic Resources

- a) Have a substantial effect upon a scenic highway corridor within which it is located.
- b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings and unique or landmark features; obstruct any prominent scenic vista or view open to the public; or result in the creation of an aesthetically offensive site open to public view.
- c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings. (Public views are those that are experienced from publicly accessible vantage points.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality.

2. Mount Palomar Observatory

- a) Interfere with the nighttime use of the Mount Palomar Observatory, as protected through Riverside County Ordinance No. 655.

3. Other Lighting Issues

- a) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.
- b) Expose residential property to unacceptable light levels.

3.1.6 - Project Impacts and Mitigation Measures

This section discusses potential impacts associated with the development of the project and provides mitigation measures where appropriate.

Scenic Resources

Impact AES-1(a): The proposed project would not have a substantial effect upon a scenic highway corridor within which it is located.

Impact Analysis

The California Scenic Highway Mapping System indicates that the section of Highway 74 between the City of Perris and the City of Lake Elsinore is “State-Eligible,” which means that this portion of the highway is eligible for designation as a State Scenic Highway (Exhibit 3.1-1). The proposed project does not include any specific development. Rather, it would guide the development and redevelopment of residential neighborhoods of varying densities, commercial retail, mixed use, light industrial, business park, public facilities, rural, open space, recreation areas, and infrastructure improvements.

Generally, the proposed project includes a General Plan Amendment (GPA) No. 1205 that would establish consistency with the existing development within the planning area and surroundings and, therefore, would not significantly alter the viewshed from the planning area. The proposed project provides a framework for development that would enhance the aesthetic value of the Highway 74 corridor, in compliance with ELAP Policy 5.14 and 11.1 and MVAP Policy 3.7, 4.3, and 12.1, all of which stress the importance of enhancing the attractiveness of the corridor and protecting scenic qualities and viewsheds. The proposed project would emphasize cohesive development designs that would connect the existing scattered commercial and industrial uses along Highway 74 while promoting safe and effective circulation. Policy ELAP 5.7 and MVAP 3.7 require that trees, signage, landscaping, street furniture, public art, and other aesthetic elements are used to enhance appearance.

Furthermore, implementation of the proposed project would ensure that future development complies with setbacks and height limits such that buildout would not result in the alteration of the viewshed or scenic vistas. Finally, the proposed project does not propose any billboards or other freeway-oriented displays that are recognized as incompatible with a designated State Scenic Highway. Impacts would be less than significant.

Level of Significance

Less than significant impact.

Mitigation Measures

No mitigation required.

Impact AES-1(b): **The proposed project would not substantially damage scenic resources, including, but not limited to, trees, rock outcroppings and unique or landmark features; obstruct any prominent scenic vista or view open to the public; or result in the creation of an aesthetically offensive site open to public view.**

Impact Analysis

The proposed project contemplates the development of residential neighborhoods of varying densities, commercial retail, mixed use, light industrial, business park, public facilities, rural, open space, and recreation areas. The planning area includes a variety of scenic resources, including scenic vistas of the Santa Ana Mountain range and unique landmarks. The communities of Warm Springs, Good Hope, and Meadowbrook are known to have numerous rock outcroppings.

Buildout of the proposed project has the potential to result in an alteration of the visual character within the plan boundaries. However, this change in and of itself is not considered significant unless the quality of scenic resources would be substantially diminished. The proposed Community Plan is a policy document that supplements the local General Plan with goals, policies, and programs that are specific and unique to the community or area that it covers. The proposed project is designed to guide development that would enhance the aesthetic value of the Highway 74 corridor.

As discussed in Impact AES-2(a), below, future buildout of the proposed project would be required to comply with Riverside County Ordinance No. 655 to restrict the permitted use of certain light fixtures emitting into the night sky undesirable light rays and would not, therefore, interfere with the nighttime use of the Mount Palomar Observatory or with Riverside County Ordinance No. 655.

Future buildout of the proposed project would also comply with applicable ELAP and MVAP policies. For example, future development would adhere to the Hillside Development and Slope section of the General Plan Land Use Element and the Scenic Resources section of the Multipurpose Open Space Element to preserve ridgelines as a visual resource (Policy ELAP 21.1).

The proposed project would implement Policy MVAP 4.3, which assigns a high priority to the development that increases the attractiveness of this area as a site for the location of new business establishments, relocation of existing business establishments, and provision of employment opportunities. The proposed land use designations complement the surrounding land uses by clustering commercial and industrial development around the Highway 74 corridor while supporting the development of residential neighborhoods of varying densities. Furthermore, Policy MVAP 12.1 requires scenic highways to be protected from change that would diminish the aesthetic value of adjacent properties. Additionally, the proposed project does not propose specific development standards or projects; any future project design that is proposed within the planning area boundaries would be subject to applicable environmental analysis, review, and approval, including

review related to design standards and guidelines,¹⁰ thereby ensuring that future development would be visually compatible with surrounding land uses. Impacts would be less than significant.

Level of Significance

Less than significant impact.

Mitigation Measures

No mitigation required.

Impact AES-1(c): In non-urbanized areas, the proposed project would not substantially degrade the existing visual character or quality of the site and its surroundings. (Public views are those that are experienced from publicly accessible vantage points.) If the proposed project is in an urbanized area, the proposed project would not conflict with applicable zoning and other regulations governing scenic quality.

Impact Analysis

The proposed project contemplates the development of residential neighborhoods of varying densities, commercial retail, mixed use, light industrial, business park, public facilities, rural, open space, and recreation areas in a non-urbanized area. Buildout of the proposed project would alter the visual character within the plan boundaries and has the potential to affect public views of the site. However, this change in and of itself is not considered a significant adverse effect unless the visual character or quality of the site are substantially diminished. Although buildout of the proposed project has the potential to result in the fundamental and irreversible change in the visual character of the planning area, the development and land use activities contemplated would achieve a high-quality design that would be visually compatible with surrounding land uses. As already noted, the proposed project is designed to encourage cohesive development that would enhance the aesthetic value of the Highway 74 corridor. Moreover, the approval of GPA No. 1205 would amend the General Plan and resolve any land use and policy inconsistencies between the proposed project and the General Plan that could result in environmental impacts. Furthermore, as applications for development are submitted, they would be subject to review and approval, including design review of individual projects subject to discretionary review, thereby ensuring that future development would be compatible with the specific plan and General Plan and visually compatible with surrounding land uses. Impacts would be less than significant.

Level of Significance

Less than significant impact.

Mitigation Measures

No mitigation required.

¹⁰ County of Riverside. 2014. Countywide Design Standards and Guidelines. August 20. Website: <https://planning.rctlma.org/Portals/14/devproc/guidelines/Countywide/Countywide%20Design%20Standards%20and%20Guidelines%20-%20Final%20max.pdf?ver=2017-04-17-154322-140>. Accessed August 19, 2021.

Mount Palomar Observatory

Impact AES-2(a): The proposed project would not interfere with the nighttime use of the Mount Palomar Observatory, as protected through Riverside County Ordinance No. 655.

Impact Analysis

The entire planning area is within Zone B per Riverside County Ordinance No. 655, which extends to all property within 45 miles of the Mount Palomar Observatory.¹¹ The planning area ranges between 34 miles and 37 miles from Mount Palomar Observatory and any new development or redevelopment of existing uses would be required to comply with the lighting restrictions that apply to Zone B. The ordinance would not apply to light fixtures that are already installed and operational. Additionally, the ordinance does not apply to low-pressure sodium lighting being used by single-family dwellings for security purposes. The proposed project does not include specific development standards or a proposal for specific construction projects; however, buildout of the proposed project could potentially create new sources of light. Future buildout of the proposed project would be required to comply with Riverside County Ordinance No. 655 and would not, therefore, interfere with the nighttime use of the Mount Palomar Observatory or with Riverside County Ordinance No. 655. Furthermore, Policy ELAP 8.1 and Policy MVAP 8.1 specify adherence to Riverside County Ordinance No. 655. Impacts would be less than significant.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation required.

Level of Significance After Mitigation

Less than significant impact.

Other Lighting Issues

Impact AES-3(a): The proposed project would not create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

The planning area and its surrounding areas currently contain several sources of light and glare, including street lighting, illuminated signage, and headlights from traffic on Highway 74, as well as from building-mounted lighting, freestanding exterior lighting, and facilities that are illuminated along the highway corridor and in the communities of Perris, Lake Elsinore, Meadowbrook, Good Hope, and Warm Springs.

Although the proposed project would not approve any specific development projects, it would identify opportunities for new development and land use activities, including residential neighborhoods of varying densities, commercial retail, mixed use, light industrial, business park, and public facilities. These new uses would provide the same types of light and glare as the existing uses

¹¹ County of Riverside Board of Supervisors. No date. Ordinance No. 655: An Ordinance of the County of Riverside Regulating Light Pollution, Section 4(l) Zone B. Website: <https://www.rivcocob.org/ords/600/655.htm>. Accessed January 11, 2022.

within the planning area, including street lighting, illuminated signage, building-mounted lighting, and freestanding exterior lighting. Many of these uses would be illuminated during the nighttime and early morning hours for safety and security purposes.

Development consistent with the proposed project would not substantially alter existing conditions and present substantial new sources of light and glare. Furthermore, the proposed project, the General Plan, and the applicable zoning restrictions have established standards for new sources of light and glare that are intended to prevent adverse impacts to daytime or nighttime views. Land use activities within the planning area would be subject to these zoning development standards for light and glare. As such, impacts would be less than significant.

Level of Significance

Less than significant impact.

Mitigation Measures

No mitigation required.

Impact AES-3(b): **The proposed project would not expose residential property to unacceptable light levels.**

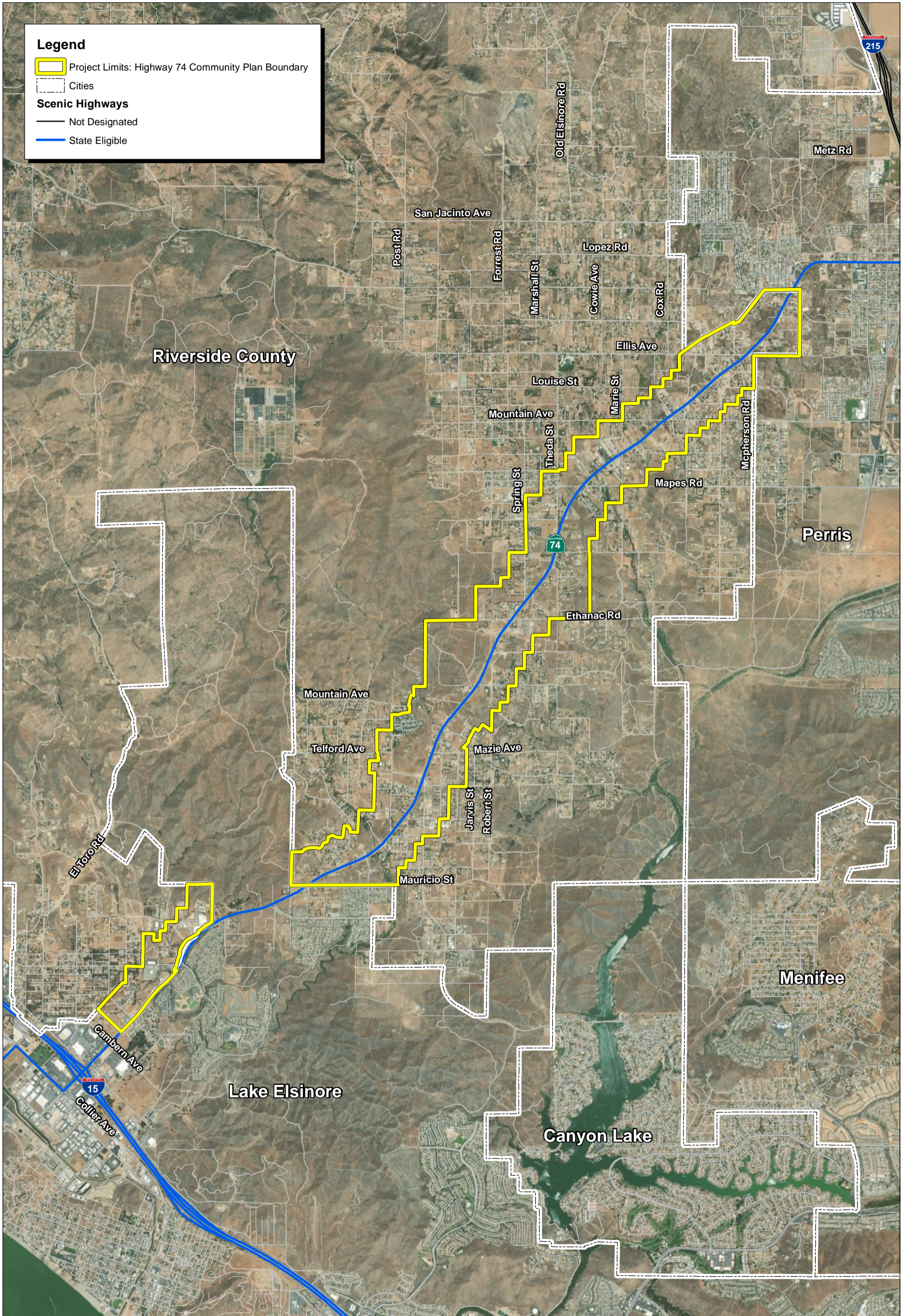
As discussed in Impact AES-3(a), the planning area is partially developed with scattered residential, commercial, and industrial uses and, as such, currently has numerous existing sources of light and glare (including during nighttime and early morning hours). The development contemplated by the proposed project would not substantially alter this existing condition. Furthermore, the General Plan and the applicable zoning restrictions have established standards for new sources of light and glare that are intended to prevent adverse impacts to daytime or nighttime views. Compliance with all applicable regulations would ensure residential property would not be exposed to unacceptable light levels. As such, impacts associated with light levels would be less than significant.

Level of Significance

Less than significant impact.

Mitigation Measures

No mitigation required.



Source: ESRI Aerial Imagery, Riverside County GIS Data.



Exhibit 3.1-1
Designated California Scenic Highways and Entry Corridors

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3.2 - Agriculture and Forestry Resources

3.2.1 - Introduction

This section of the Draft Program Environmental Impact Report (Draft Program EIR) describes agricultural and forestry resources in relation to the planning area and discusses the potential impacts to these resources that would occur with implementation of the proposed project. Descriptions and analysis in this section are based, in part, upon existing site conditions, plans/exhibits of the planning area, the County of Riverside General Plan (General Plan), and the County of Riverside General Plan EIR (General Plan EIR) and the California Department of Conservation website.

3.2.2 - Environmental Setting

According to the Land Use Element of the General Plan, in terms of historic character and economic strength, one of Riverside County's (County's) most important land uses is its widespread and diverse agricultural lands. Within the County, one of the largest industries (in terms of dollar value) is agriculture production. According to Table LU-1 in the Land Use Element of the General Plan, Unincorporated Western Riverside County—where the project is located—contains 28,552 acres of agricultural land.¹

A wide variety of residential uses, as well as scattered commercial and industrial land uses, currently exist along the Highway 74 corridor; however, no areas within the Highway 74 corridor are currently used for traditional agriculture, such as row crops. Based upon site visits conducted in 2018 and again in August 2021, none of the acreage within the planning area is currently in agricultural production or forestry. Land uses to the east, south, and west contain Medium Density Residential households and institutional uses. Land uses to the north include the State Route (SR) 91 freeway and commercial uses.

The lack of agricultural uses is supported by the project area's General Plan Land Use designations, which consist of Medium Density Residential, Rural Residential, Mixed-Use Area, Very Low Density Residential, Light Industrial, and Business Park. The majority of the project area is zoned R-R (Rural Residential), W-2-M (Controlled Development Area with Mobile Homes), MU (Mixed-Use), and M-SC (Manufacturing-Service Commercial).

Zoning designations for R-A (Residential Agriculture) currently exist in several areas along the Highway 74 corridor,² including four parcels west of Highway 74 along the north side of Sharp Road in southern Perris; one parcel east of Highway 74 in Meadowbrook along the south side of River Road; an area in Meadowbrook along Highway 74 consisting of several parcels north of Mauricio Avenue; and several parcels north of Highway 74 in Lake Elsinore.³ However, none of these parcels currently support agricultural production.

¹ County of Riverside. 2015. Riverside County General Plan, Chapter 3: Land Use Element. Website: https://planning.rctlma.org/Portals/14/genplan/2019/elements/Ch03_Land%20Use_041619.pdf. Accessed January 11, 2022.

² County of Riverside. 2020. Highway 74 Community Plan with Web AppBuilder for ArcGIS. Website: <https://casceng.maps.arcgis.com/apps/webappviewer/index.html?id=3c117eab97444ca89187a9882a72fd0b>. Accessed January 11, 2022.

³ County of Riverside. 2020. Highway 74 Community Plan with Web AppBuilder for ArcGIS. Website: <https://casceng.maps.arcgis.com/apps/webappviewer/index.html?id=3c117eab97444ca89187a9882a72fd0b>. Accessed January 11, 2022.

3.2.3 - Regulatory Framework

State

Farmland Mapping and Monitoring Program

The California Department of Conservation established the Farmland Mapping and Monitoring Program (FMMP) in 1982. The FMMP is a non-regulatory program that provides a consistent and impartial analysis of agricultural land use and land use changes throughout California. The FMMP produces maps and statistical data used for analyzing impacts on California’s agricultural resources. The maps are updated every two years with the use of aerial photographs, a computer mapping system, public review, and field reconnaissance. The program rates agricultural lands according to physical characteristics and other factors such as irrigation status. The best-quality farmland is land that contains a combination of physical and chemical features able to sustain long-term agricultural production and is classified as Prime Farmland. Additional classifications include Farmland of Statewide Importance, Unique Farmland, and Farmland of Local Importance (Table 3.2-1).

The FMMP also inventories and maps a variety of other land use categories. For purposes of determining a project’s significance under the California Environmental Quality Act (CEQA), only Prime Farmland, Unique Farmland, and Farmland of Statewide Importance are used to determine impacts. Conversion to non-agricultural uses of lands falling under any of these classifications is considered a potentially significant impact under CEQA.

Table 3.2-1 provides a description of the various farmland classifications from the United States Department of Agriculture.

Table 3.2-1: Description of Farmland Classifications

Farmland Category	Description
Prime (P)	Farmland with the best combination of physical and chemical features able to sustain long-term agricultural production. This land has the soil quality, growing season, and moisture supply needed to produce sustained high yields. Land must have been used for irrigated agricultural production at some time during the four years prior to the mapping date.
Statewide Importance (S)	Farmland similar to Prime Farmland but with minor shortcomings, such as greater slopes or less ability to store soil moisture. Land must have been used for irrigated agricultural production at some time during the four years prior to the mapping date.
Unique (U)	Farmland of lesser quality soils used for the production of the State’s leading agricultural crops. This land is usually irrigated, but may include non-irrigated orchards or vineyards as found in some climatic zones in California. Land must have been cropped at some time during the four years prior to the mapping date.
Local (L)	Land of importance to the local agricultural economy as determined by each county’s board of supervisors and a local advisory committee. In some counties, Confined Animal Agriculture facilities are part of Farmland of Local Importance, but they are shown separately.
Grazing (G)	Land on which the existing vegetation is suited to the grazing of livestock. This category was developed in cooperation with the California Cattlemen’s Association, University of California Cooperative Extension, and other groups interested in the extent of grazing activities.

Farmland Category	Description
Urban and Built Up Land (U)	Land occupied by structures with a building density of at least one unit to 1.5 acres, or approximately six structures to a 10-acre parcel. This land is used for residential, industrial, commercial, construction, institutional, public administration, railroad and other transportation yards, cemeteries, airports, golf courses, sanitary landfills, sewage treatment, water control structures, and other developed purposes.
Other (X)	Land not included in any other mapping category. Common examples include low density rural developments; brush, timber, wetland, and riparian areas not suitable for livestock grazing; confined livestock, poultry, or aquaculture facilities; strip mines, borrow pits; and water bodies smaller than 40 acres. Vacant and non-agricultural land surrounded on all sides by urban development and greater than 40 acres is mapped as “Other Land.”
Water (W)	Perennial water bodies with an extent of at least 40 acres.

California Land Conservation Act

The California Land Conservation Act, better known as the Williamson Act, was enacted by the State Legislature in 1965 to encourage the preservation of agricultural lands. Under the provisions of the act, landowners agreeing to keep their lands under agricultural production for a minimum of 10 years receive property tax adjustments. Williamson Act contracts limit the use of the properties to agricultural, open space, and other compatible uses. Williamson Act lands are assessed based on their agricultural value rather than their potential market value under non-agricultural uses.

Local

County of Riverside Ordinance No. 509

This ordinance establishes uniform rules that apply to agricultural preserves.

County of Riverside Ordinance No. 625

This ordinance (cited as the Riverside County Right-To-Farm Ordinance) intends to reduce the County’s loss of its agricultural resources by limiting the circumstances under which agricultural operations may be deemed to constitute a nuisance.

Elsinore Area Plan and Mead Valley Area Plan

Agriculture is an important land use and is considered a major foundation of the economy and culture for both the Elsinore Area Plan (ELAP) and the Mead Valley Area Plan (MVAP) areas. These Plan areas are an extension of the County of Riverside General Plan and Vision. The MVAP and ELAP guide the evolving physical development and land uses for the Mead Valley area and Elsinore area, respectively.⁴ According to the MVAP and ELAP statistical summary tables, the MVAP and ELAP areas do not contain any land that is designated solely for agricultural purposes (AG). However, limited agricultural use is allowed in Rural, Rural Community, and most Residential land use designations.

The proposed project would not interfere with agricultural resources within the ELAP or the MVAP as the planning area is not designated for agricultural use.

⁴ Riverside County. 2021. Elsinore Area Plan. Website: https://rctlma.org/Portals/14/genplan/2019/ap/ELAP_041619.pdf. Accessed August 17, 2021.

Highway 74 Community Plan

The Highway 74 Community Plan does not set forth any additional goals and policies related to agricultural uses.

3.2.4 - Methodology

The project was evaluated for potential impacts on agriculture resources resulting from implementation of the proposed project through a review of applicable plans and policies. The planning area was visited in early 2018 and again in August 2021 to document existing land uses. The California Department of Conservation was researched for potential agricultural and forestry resource issues. Aerial photographs, topographical maps, and street maps were also researched to identify surrounding land uses and evaluate potential impacts from future development that may occur pursuant to the Highway 74 Community Plan. The General Plan was reviewed to confirm applicable land use, zoning, and policies related to agricultural land uses.

3.2.5 - Thresholds of Significance

Section II of Appendix G to the State CEQA Guidelines addresses typical adverse effects to forestry and agricultural resources and includes the following threshold questions to evaluate a project's impacts on forest and agricultural resources. Would the project:

- a) Convert Prime Farmland, Unique Farmland, Farmland of Statewide Importance, or Farmland of Local 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?
- b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?
- c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?
- d) Result in the loss of forest land or conversion of forest land to non-forest use?
- e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of farmland, to non-agricultural use or conversion of forest land to non-forest use?

Significance thresholds are set forth in Riverside County's Environmental Assessment Checklist, are derived from Section II of Appendix G to the State CEQA Guidelines (listed above), and state that the proposed project would have a significant impact on forestry or agricultural resources if construction and/or operation if the project would:

4. Agriculture

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

- b) Conflict with existing agricultural zoning, agricultural use or with land subject to a Williamson Act contract or land within a Riverside County Agricultural Preserve?
- c) Cause development of non-agricultural uses within 300 feet of agriculturally zoned property (Ordinance No. 625 “Right-to-Farm”)?
- d) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to nonagricultural use?

5. Forest

- a) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?
- b) Result in the loss of forest land or conversion of forest land to non-forest use?
- c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of forest land to non-forest use?

3.2.6 - Project Impacts and Mitigation Measures

This section discusses potential impacts associated with the proposed project and provides mitigation measures where necessary.

Agriculture

Impact AG-4(a): The proposed project would not 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.

Impact Analysis

According to the Department of Conservation FMMP, the planning area is not located within an area designated as Prime Farmland, or Unique Farmland, or Farmland of Statewide Importance. The FMMP designates much of the planning area as Urban and Built Up Land. According to the California Department of Conservation, the farmland map category Urban and Built Up Land is considered land which is occupied by structures with a building density of at least one unit to 1.5 acres, or approximately six structures to a 10-acre parcel. Common examples include residential, industrial, commercial, institutional facilities, cemeteries, airports, golf courses, sanitary landfills, sewage treatment, and water control structures.⁵ Therefore, the proposed project would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural use.⁶

As shown in Exhibit 3.2-1, several areas are designated as Farmland of Local Importance; however, these lands do not meet the CEQA definition of Farmland as defined above. The southern side of

⁵ California Department of Conservation. 2019. Important Farmland Categories. Website: <https://www.conservation.ca.gov/dlrp/fmmp/Pages/Important-Farmland-Categories.aspx>. Accessed January 11, 2022.

⁶ California Department of Conservation. 2016. California Important Farmland Finder. Website: <https://maps.conservation.ca.gov/DLRP/CIFF/>. Accessed January 11, 2022.

Perris, north of Margarth Street, consists of 22.6 acres of Farmland of Local Importance that would intersect with a small portion of the Highway 74 Community Plan. Additionally, there are 14.3 acres of Farmland of Local Importance adjacent to the west side of Highway 74 at Meadowbrook Avenue, and an additional 7.7 acres of Farmland of Local Importance adjacent to the west side of Highway 74 near Trellis Lane; most of this land is not located within the planning area. A small portion of a 39-acre area designated as Farmland of Local Importance is located within the planning area near the intersection of Mauricio Street and Wasson Canyon Road in Lake Elsinore.

The proposed project would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the FMMP of the California Resources Agency, to non-agricultural use. There would be no impact.

Level of Significance

No impact.

Mitigation Measures

No mitigation required.

Impact AG-4(b): **The proposed project would not conflict with existing agricultural zoning, agricultural use or with land subject to a Williamson Act contract or land within a Riverside County Agricultural Preserve.**

Impact Analysis

The planning area currently has several land use designations and extends along Highway 74 from City of Perris to City of Lake Elsinore. As shown in Chapter 2, Project Description, Exhibit 2-4, the land uses designated for the planning area are: Business Park, Community Center, Commercial Retail, Highest Density Residential, Light Industrial, Medium Density Residential, Medium High Density Residential, Mixed-Use Area, Conservation Habitat, Recreation, Rural Mountainous, Rural Residential, Very High Density Residential, and Very Low Density Residential. The majority of the land uses within the area are residential.

Additionally, Chapter 2, Project Description, Table 2-2, shows the current zoning as a mix of: C-1/C-P (General Commercial), C-P-S (Scenic Highway Commercial), I-P (Industrial Park), M-SC (Manufacturing-Service Commercial), R-A (Residential Agriculture), R-R (Rural Residential), W-1 (Watercourse, Watershed, and Conservation Areas), and W-2-M (Controlled Development Area with Mobile Homes). The R-A zones allow for some agricultural uses and are typically single-family dwellings. As part of the entitlement process, the proposed project would require a General Plan Amendment (GPA). The proposed GPA is found in Chapter 2, Project Description, Table 2-3. The amendment necessitates a legislative policy decision by the County and does not signify a potential environmental effect. As such, the proposed GPA, if approved, constitutes a self-mitigating aspect of the proposed project that would serve to correct what would otherwise be a conflict.

Future projects within the Community Plan area would require environmental review to analyze potential project impacts related to conflict with agricultural zoning. Furthermore, the proponents of

future projects may initiate zone changes to ensure project consistency with the General Plan designation and zoning. Therefore, no impacts related to agricultural zoning would occur.

Williamson Act

Impacts to existing agricultural use or a Williamson Act contract are anticipated to be less than significant. The project's proposed GPA would not affect existing agricultural use and the planning area is not subject to a Williamson Act contract or on land within a County Agricultural Preserve or within County agricultural designations.

Riverside County Agricultural Preserve

A County Agricultural Preserve is established through a Land Conservation Contract founded upon the provisions of the California Government Code sections known as the California Land Conservation Act of 1965 or the Williamson Act (§ 51200, *et seq.*).⁷

Because the planning area is not subject to a Williamson Act contract and does not contain a County Agricultural Preserve, and because the proposed project would not conflict with the General Plan Land Use Designation or zoning for agricultural use, there would be no impact.

Level of Significance

No impact.

Mitigation Measures

No mitigation required.

Impact AG-4(c): **The proposed project would not cause development of non-agricultural uses within 300 feet of agriculturally zoned property (Ordinance No. 625 "Right-to-Farm").**

Impact Analysis

Ordinance No. 625 (cited as the Riverside County Right-To-Farm Ordinance) intends to reduce the County's loss of its agricultural resources by limiting the circumstances under which agricultural operations may be deemed to constitute a nuisance. The intent of Ordinance No. 625 is to conserve, protect, and encourage the development, improvement, and continued viability of its agricultural land and industries for the long-term production of food and other agricultural products and for the economic well-being of the County's residents. Ordinance No. 625 prohibits agricultural activity from being deemed a nuisance after three years of operation if it was not a nuisance at the time it began. Any final land division proposed for recordation that is within 300 feet of agricultural land will be notified of subsection (a) of the ordinance.⁸

⁷ County of Riverside. 2020. Assessor–County Clerk–Recorder. Agricultural Preserve Information. Website: <https://www.asrclrec.com/agricultural-preserve-information>. Accessed January 11, 2022.

⁸ Riverside County. 1994. Ordinance No. 625. Website: <https://www.rivcocob.org/ords/600/625.1.pdf>. Accessed December 30, 2021.

Additionally, the Highway 74 Community Plan does not propose specific development projects; any future projects would be subject to environmental analysis, review, and approval to ensure consistency with Ordinance No. 625. As such, there would be no impact.

Level of Significance

No impact.

Mitigation Measures

No mitigation required.

Impact AG-4(c): The proposed project would not involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use.

Impact Analysis

The proposed project would not involve the conversion of Farmland because the planning area does not contain any Farmland as discussed in Impact AG-4(a). Additionally, the use of the planning area for residential/mixed-use purposes would not cause any conversion of Farmland to a non-agricultural use in another location. The planning area would be used for residential/mixed-use purposes that would not have any direct or indirect impacts on Farmlands. The planning area is not used for agriculture and is not zoned for Farmland uses. Therefore, the proposed project would have no impact on agricultural or Farmland resources.

Level of Significance

No impact.

Mitigation Measures

No mitigation required.

Forest

Impact FOR-5(a): The proposed project would not conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?

Impact Analysis

According to Figure 4.5.2 of the General Plan EIR, Forestry Resources, the planning area and surrounding area is not zoned for forest land or timberland. Therefore, the proposed project would not conflict with existing zoning for forest land uses or timberland zoned Timberland Production and would not conflict with any existing zoning for forest land or timberland. No impacts are anticipated to occur. Therefore, the proposed project would have no impact on existing zoning of forest land. The proposed project would not involve the conversion of forest land because the planning area does not contain any forest land as the planning area is primarily Urban and Built Up Land. The planning area would be part of a Community Plan that proposes to re-designate General Plan land uses along Highway 74 from City of Perris to City of Lake Elsinore. The planning area is not used for

forest use and is not zoned for forest uses. Therefore, the proposed project would have no impact on forestry resources.

Level of Significance

No impact.

Mitigation Measures

No mitigation required.

Impact FOR-5(b): **The proposed project would not result in the loss of forest land or conversion of forest land to non-forest use.**

Impact Analysis

The proposed project would not involve the conversion of forest land because the planning area does not contain any forest land. Additionally, the use of the planning area for residential/mixed-use purposes would not cause any conversion of forest land to a non-forest use in another location. The planning area would be used for residential/mixed-use purposes that would not have any direct or indirect impacts on forest lands. The planning area is not used for forest use and is not zoned for forest uses. Therefore, the proposed project would have no impact on forestry resources.

Level of Significance

No impact.

Mitigation Measures

No mitigation required.

Impact FOR-5(c): **The proposed project would not involve other changes in the existing environment which, due to their location or nature, could result in conversion of forest land to non-forest use.**

Impact Analysis

As discussed in Impact FOR-5(a) and Impact FOR-5(b), the proposed project would not involve the conversion of forest land to non-forest use because the planning area does not contain any forest land. Additionally, the proposed project would not result in other changes that would cause conversion of forest land to a non-forest use. The planning area would be used for residential/mixed-use purposes that would not have any direct or indirect impacts on forest lands. The planning area is not used for forest use and is not zoned for forest uses. Therefore, the proposed project would have no impact on forestry resources.

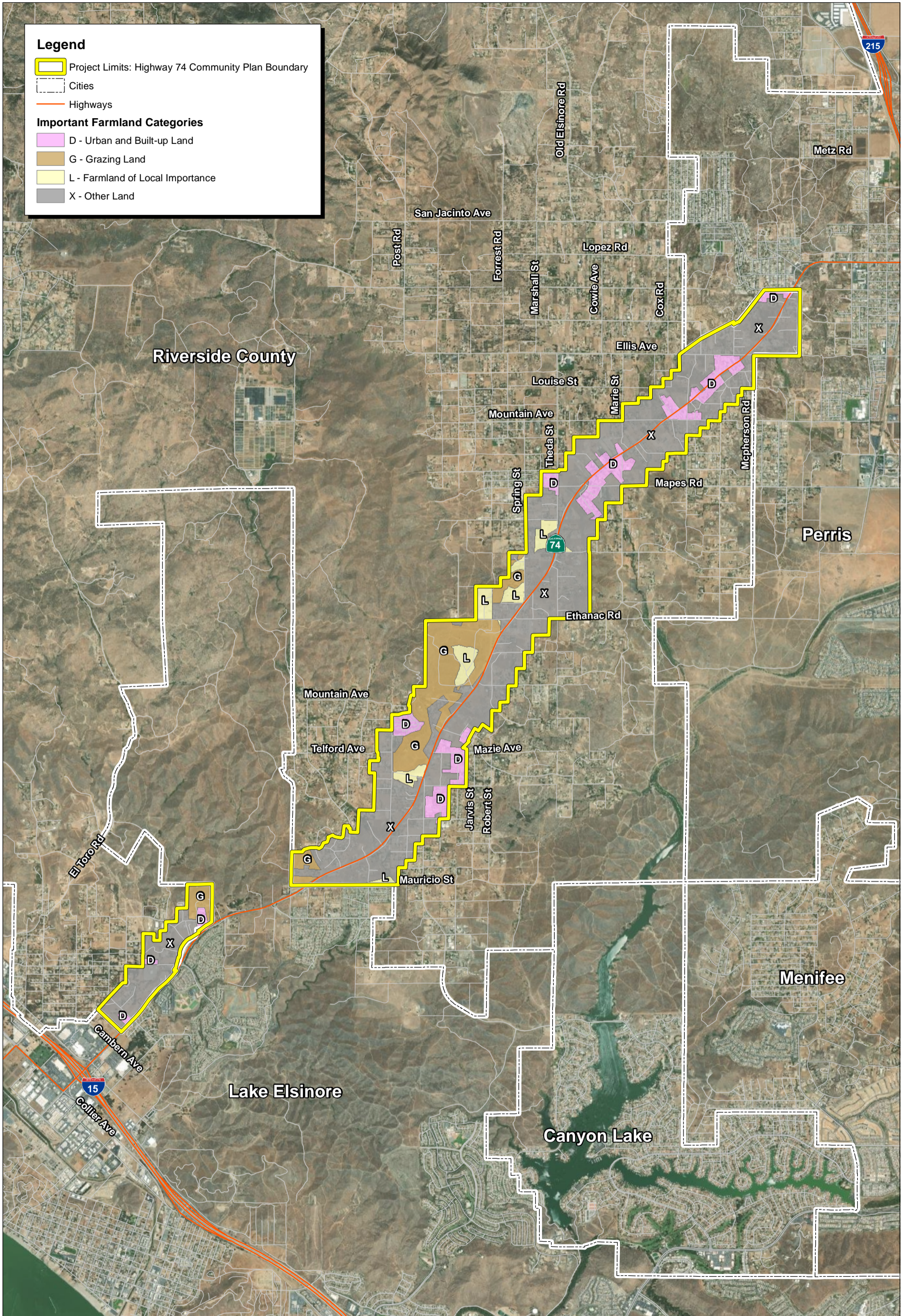
Level of Significance

No impact.

Mitigation Measures

No mitigation required.

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Source: ESRI Aerial Imagery. Riverside County GIS Data. California Department of Conservation Farmland Mapping and Monitoring Program (FMMP).



Exhibit 3.2-1
Important Farmland Map

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3.3 - Air Quality

3.3.1 - Introduction

This section describes existing air quality conditions regionally and locally as well as the relevant regulatory framework. This section also evaluates the possible impacts related to air quality that could result from the implementation of the proposed project. The information included in this section is based on project-specific air quality modeling results utilizing California Emissions Estimator Model (CalEEMod) Version 2020.4.0. Complete modeling output is provided in Appendix C.

The following comments related to Air Quality Resources were received in response to the Notice of Preparation (NOP):

- Comments were received from the South Coast Air Quality Management District (SCAQMD), which requested that all technical documentation, calculation files, and modeling files be provided to the SCAQMD for proper review of the air quality analysis during the comment period.
- The SCAQMD recommends that the SCAQMD's Air Quality Handbook and website be used to guide the methodologies utilized in the air quality analysis and that CalEEMod be utilized for the air quality modeling used to support the air quality analysis.
- The SCAQMD recommends that the SCAQMD's Guidance Document for Addressing Air Quality Issues in General Plans and the California Air Resources Board's (ARB) Air Quality and Land Use Handbook be used to guide strategies to reduce potential air pollution exposure.
- The SCAQMD requests that project emissions from construction and operation be quantified compared against the applicable regional significance thresholds and localized significance thresholds presented by the SCAQMD.
- The SCAQMD recommends the preparation of a mobile source Health Risk Assessment (HRA) if the project generates or attracts vehicle trips, especially heavy-duty diesel-fueled vehicles.
- The SCAQMD states that the California Environmental Quality Act (CEQA) Guidelines requires that all feasible mitigation be utilized to eliminate or minimize potential impacts and provides various resources to help inform potential mitigation to be used, including Chapter 11 of the SCAQMD's Air Quality Handbook, resources on the SCAQMD's website, the SCAQMD's Rule 403 on fugitive dust and Rule 1403 on asbestos emissions, and the California Air Pollution Control Officers Association's (CAPCOA) Quantifying Greenhouse Gas Mitigation Measures.
- The SCAQMD states that the SCAQMD should be identified as a Responsible Agency for the proposed project if it would require a permit from the SCAQMD.

3.3.2 - Environmental Setting

South Coast Air Basin

The planning area encompasses a 6.8-mile corridor of Highway 74 between the City of Lake Elsinore and the City of Perris in western Riverside County. The planning area encompasses approximately

2,220 acres of unincorporated land located within the South Coast Air Basin (SoCAB). The San Gabriel, San Bernardino, and San Jacinto Mountains bound the SoCAB on the north and east while the Pacific Ocean lies to the west of the SoCAB. The southern limit of the SoCAB is the San Diego County line. The SoCAB consists of Orange County, Los Angeles County (except for the Antelope Valley), the non-desert portion of western San Bernardino County, and the western and Coachella Valley portions of Riverside County.

Regional Climate

Regional climate factors such as the temperature, wind, humidity, precipitation, and amount of sunshine have a substantial influence on air quality in the SoCAB. The annual average temperatures throughout the SoCAB vary from the low to middle 60s (degrees Fahrenheit [°F]). Because of a decreased marine influence, the eastern portion of the SoCAB shows greater variability in average annual minimum and maximum temperatures. January is the coldest month throughout the SoCAB, with average minimum temperatures of 47°F in downtown Los Angeles and 36°F in San Bernardino. All portions of the SoCAB have recorded maximum temperatures above 100°F.

Although the climate of the SoCAB can be characterized as semi-arid, the air near the land surface is relatively humid on most days because of the presence of a marine layer from the Pacific Ocean. This shallow layer of sea air is an important modifier of SoCAB climate. Humidity restricts visibility in the SoCAB, and the conversion of sulfur dioxide to sulfates is heightened in air with high relative humidity. The marine layer provides an environment for that conversion process, especially during the spring and summer months. The annual average relative humidity within the SoCAB is 71 percent along the coast and 59 percent inland. Since the ocean effect is dominant, periods of heavy early morning fog are frequent and low stratus clouds are a characteristic feature of the coastal areas. These effects decrease with distance from the coast.

More than 90 percent of the SoCAB's rainfall occurs from November through April. The annual average rainfall varies from approximately 9 inches in Riverside to 14 inches in downtown Los Angeles. Monthly and yearly rainfall totals are extremely variable. Summer rainfall usually consists of widely scattered thunderstorms near the coast and slightly heavier shower activity in the eastern portion of the SoCAB with frequency being higher near the coast.

Because of its generally clear weather, about three-quarters of available sunshine is received in the SoCAB. The remaining one-quarter is absorbed by clouds. The ultraviolet portion of this abundant radiation is a key factor in photochemical reactions. On the shortest day of the year there are approximately 10 hours of possible sunshine, and on the longest day of the year there are approximately 14.5 hours of possible sunshine.

The importance of wind to air pollution is considerable. The direction and speed of the wind determines the horizontal dispersion and transport of the air pollutants. During the late autumn to early spring rainy season, the SoCAB is subjected to wind flows associated with the traveling storms moving through the region from the northwest. This period also brings five to 10 periods of strong, dry offshore winds, locally termed "Santa Anas" each year. During the dry season, which coincides with the months of maximum photochemical smog concentrations, the wind flow is bimodal, typified by a daytime onshore sea breeze and a nighttime offshore drainage wind. Summer wind

flows are created by the pressure differences between the relatively cold ocean and the unevenly heated and cooled land surfaces that modify the general northwesterly wind circulation over Southern California. Nighttime drainage begins with the radiational cooling of the mountain slopes. Heavy, cool air descends the slopes and flows through the mountain passes and canyons as it follows the lowering terrain toward the ocean. Another characteristic wind regime in the SoCAB is the “Catalina Eddy,” a low level cyclonic (counterclockwise) flow centered over Santa Catalina Island, which results in an offshore flow to the southwest. On most spring and summer days, some indication of an eddy is apparent in coastal sections.

In the SoCAB, there are two distinct temperature inversion structures that control vertical mixing of air pollution. During the summer, warm high-pressure descending (subsiding) air is undercut by a shallow layer of cool marine air. The boundary between these two layers of air is a persistent marine subsidence/inversion. This boundary prevents vertical mixing which effectively acts as an impervious lid to pollutants over the entire SoCAB. The mixing height for the inversion structure is normally situated 1,000 to 1,500 feet above mean sea level.

A second inversion-type forms in conjunction with the drainage of cool air off the surrounding mountains at night followed by the seaward drift of this pool of cool air. The top of this layer forms a sharp boundary with the warmer air aloft and creates nocturnal radiation inversions. These inversions occur primarily in the winter when nights are longer and onshore flow is weakest. They are typically only a few hundred feet above mean sea level. These inversions effectively trap pollutants, such as oxides of nitrogen (NO_x) and carbon monoxide (CO) from vehicles, as the pool of cool air drifts seaward. Winter is therefore a period of high levels of primary pollutants along the coastline.

3.3.3 - Regulatory Setting

Air pollutants are regulated to protect human health and for secondary effects such as visibility and building soiling. The Clean Air Act of 1970 tasks the United States Environmental Protection Agency (EPA) with setting air quality standards. The State of California also sets air quality standards that are in some cases more stringent than federal standards and address additional pollutants. The following section describes these federal and State standards and the health effects of the regulated pollutants.

Clean Air Act

Congress established much of the basic structure of the Clean Air Act (CAA) in 1970 and made major revisions in 1977 and 1990. Six common air pollutants (also known as criteria pollutants) are addressed in the CAA. The EPA calls these pollutants criteria air pollutants because it regulates them by developing human health-based and environmentally based criteria (science-based guidelines) for setting permissible levels. The criteria pollutants are:

- Ozone
- Nitrogen dioxide (NO₂)
- Lead
- Particulate matter (PM₁₀ and PM_{2.5})
- Carbon monoxide (CO)
- Sulfur dioxide (SO₂)

Primary federal standards are the levels of air quality necessary, with an adequate margin of safety, to protect the public health. Another set of limits intended to prevent environmental and property

damage are called secondary standards.¹ The federal standards are called National Ambient Air Quality Standards (NAAQS). The air quality standards provide benchmarks for determining whether air quality is healthy at specific locations and whether development activities will cause or contribute to a violation of the standards. The federal standards were set to protect public health, including that of sensitive individuals; thus, the EPA is tasked with updating the standards as more medical research is available regarding the health effects of the criteria pollutants.

California Clean Air Act

The California Legislature enacted the CCAA in 1988 to address air quality issues of concern not adequately addressed by the federal CAA at the time. California's air quality problems were and continue to be some of the most severe in the nation and required additional actions beyond the federal mandates. The ARB administers California Ambient Air Quality Standards (CAAQS) for the 10 air pollutants designated in the CCAA. The 10 State air pollutants are the six federal standards listed above as well visibility-reducing particulates, hydrogen sulfide, sulfates, and vinyl chloride. The EPA authorized California to adopt its own regulations for motor vehicles and other sources that are more stringent than similar federal regulations implementing the CAA. Generally, the planning requirements of the CCAA are less stringent than the federal CAA; therefore, consistency with the CAA will also demonstrate consistency with the CCAA.

Toxic Air Contaminants

A toxic air contaminant (TAC) is defined as an air pollutant that may cause or contribute to an increase in mortality or serious illness, or that may pose a hazard to human health. TACs are usually present in minute quantities in the ambient air; however, their high toxicity or health risk may pose a threat to public health even at low concentrations. There are no ambient air quality standards for TAC emissions. TACs are regulated in terms of health risks to individuals and populations exposed to the pollutants. The 1990 CAA amendments significantly expanded the EPA's authority to regulate Hazardous Air Pollutants (HAP). Section 112 of the CAA lists 187 HAPs to be regulated by source category. Authority to regulate these pollutants was delegated to individual states. ARB and local air districts regulate TACs and HAPs in California.

Air Pollutant Description and Health Effects

The NAAQS and CAAQS, relevant effects, properties, and sources of the air pollutants are summarized in Table 3.3-1.

¹ United States Environmental Protection Agency (EPA). 2021. NAAQS Table. Website: <https://www.epa.gov/criteria-air-pollutants/naaqs-table>. Accessed February 22, 2022.

Table 3.3-1: Description of Criteria Pollutants of National and California Concern

Criteria Pollutant	Physical Description and Properties	Sources	Most Relevant Effects from Pollutant Exposure
Ozone	Ozone is a photochemical pollutant as it is not emitted directly into the atmosphere but is formed by a complex series of chemical reactions between volatile organic compounds (VOC), nitrous oxides (NO _x), and sunlight. Ozone is a regional pollutant that is generated over a large area and is transported and spread by the wind.	Ozone is a secondary pollutant; thus, it is not emitted directly into the lower level of the atmosphere. The primary sources of ozone precursors (VOC and NO _x) are mobile sources (on-road and off-road vehicle exhaust).	Irritate respiratory system; reduce lung function; change breathing pattern; reduce breathing capacity; inflame and damage cells that line the lungs; make lungs more susceptible to infection; aggravate asthma; aggravate other chronic lung diseases; cause permanent lung damage; induce some immunological changes; increase mortality risk; damage to vegetation and property.
Particulate matter (PM ₁₀) Particulate matter (PM _{2.5})	Suspended particulate matter is a mixture of small particles that consist of dry solid fragments, droplets of water, or solid cores with liquid coatings. The particles vary in shape, size, and composition. PM ₁₀ refers to particulate matter that is between 2.5 and 10 microns in diameter, (one micron is one-millionth of a meter). PM _{2.5} refers to particulate matter that is 2.5 microns or less in diameter, about one-thirtieth the size of the average human hair.	Suspended particulate matter sources include fuel or wood combustion for electrical utilities, residential space heating, and industrial processes; construction and demolition; the use of metals, minerals, and petrochemicals; wood products processing; mills and elevators used in agriculture; erosion from tilled lands; waste disposal and recycling. Mobile or transportation-related sources are from vehicle exhaust and road dust. Secondary particles form from reactions in the atmosphere.	<ul style="list-style-type: none"> • Short-term exposure (hours/days): irritation of the eyes, nose, throat; coughing; phlegm; chest tightness; shortness of breath; aggravate existing lung disease, causing asthma attacks and acute bronchitis; those with heart disease can suffer heart attacks and arrhythmias. • Long-term exposure: reduced lung function; chronic bronchitis; changes in lung morphology; death.
Nitrogen dioxide (NO ₂)	During combustion of fossil fuels, oxygen reacts with nitrogen to produce nitrogen oxides—NO _x (NO, NO ₂ , NO ₃ , N ₂ O, N ₂ O ₃ , N ₂ O ₄ , and N ₂ O ₅). NO _x is a precursor to ozone, PM ₁₀ , and PM _{2.5} formation. NO _x can react with compounds to form nitric acid and related small particles and can result in PM-related health effects.	NO _x is produced in motor vehicle internal combustion engines and fossil fuel-fired electric utility and industrial boilers. Nitrogen dioxide forms quickly from NO _x emissions. NO ₂ concentrations near major roads can be 30 to 100 percent higher than those at monitoring stations.	Potential to aggravate chronic respiratory disease and respiratory symptoms in sensitive groups; risk to public health implied by pulmonary and extra-pulmonary biochemical and cellular changes and pulmonary structural changes; contributions to atmospheric discoloration; increased visits to hospital for respiratory illnesses.

Criteria Pollutant	Physical Description and Properties	Sources	Most Relevant Effects from Pollutant Exposure
Carbon monoxide (CO)	CO is a colorless, odorless, toxic gas. CO is somewhat soluble in water; therefore, rainfall and fog can suppress CO conditions. CO enters the body through the lungs, dissolves in the blood, replaces oxygen as an attachment to hemoglobin, and reduces available oxygen in the blood.	CO is produced by incomplete combustion of carbon-containing fuels (e.g., gasoline, diesel fuel, and biomass). Sources include motor vehicle exhaust, industrial processes (metals processing and chemical manufacturing), residential woodburning, and natural sources.	Ranges depending on exposure: slight headaches; nausea; aggravation of angina pectoris (chest pain) and other aspects of coronary heart disease; decreased exercise tolerance in persons with peripheral vascular disease and lung disease; impairment of central nervous system functions; possible increased risk to fetuses; death.
Sulfur dioxide (SO ₂)	Sulfur dioxide is a colorless, pungent gas. At levels greater than 0.5 parts per million (ppm), the gas has a strong odor similar to rotten eggs. Sulfur oxides (SO _x) include sulfur dioxide and sulfur trioxide. Sulfuric acid is formed from sulfur dioxide, which can lead to acid deposition and can harm natural resources and materials. Although sulfur dioxide concentrations have been reduced to levels well below State and federal standards, further reductions are desirable because sulfur dioxide is a precursor to sulfate and PM ₁₀ .	Human-caused sources include fossil fuel combustion, mineral ore processing, and chemical manufacturing. Volcanic emissions are a natural source of sulfur dioxide. The gas can also be produced in the air by dimethyl sulfide and hydrogen sulfide. Sulfur dioxide is removed from the air by dissolution in water, chemical reactions, and transfer to soils and ice caps. The sulfur dioxide levels in the State are well below the maximum standards.	Bronchoconstriction accompanied by symptoms which may include wheezing, shortness of breath, and chest tightness during exercise or physical activity in persons with asthma. Some population-based studies indicate that the mortality and morbidity effects associated with fine particles show a similar association with ambient sulfur dioxide levels. It is not clear whether the two pollutants act synergistically or one pollutant alone is the predominant factor.
Lead (Pb)	Lead is a solid heavy metal that can exist in air pollution as an aerosol particle component. Leaded gasoline was used in motor vehicles until around 1970. Lead concentrations have not exceeded State or federal standards at any monitoring station since 1982.	Lead ore crushing, lead ore smelting, and battery manufacturing are currently the largest sources of lead in the atmosphere in the United States. Other sources include dust from soils contaminated with lead-based paint, solid waste disposal, and crustal physical weathering.	Lead accumulates in bones, soft tissue, and blood and can affect the kidneys, liver, and nervous system. It can cause impairment of blood formation and nerve conduction, behavior disorders, mental retardation, neurological impairment, learning deficiencies, and low IQs.

Criteria Pollutant	Physical Description and Properties	Sources	Most Relevant Effects from Pollutant Exposure
<p>Sources:</p> <p>California Air Resources Board (ARB). 2021. Vinyl Chloride and Health. Website: https://ww2.arb.ca.gov/resources/vinyl-chloride-and-health. Accessed February 22, 2022.</p> <p>California Office of Environmental Health Hazard Assessment (OEHHA). 2001. Health Effects of Diesel Exhaust. Website: https://oehha.ca.gov/media/downloads/calenviroscreen/indicators/diesel4-02.pdf. Accessed February 22, 2022.</p> <p>National Archives and Records Administration. 2009. Part II, Environmental Protection Agency. 40 Code of Federal Regulations Parts 50 and 58, Primary National Ambient Air Quality Standard for Nitrogen Dioxide; Proposed Rule. July 15. Website: https://www.gpo.gov/fdsys/pkg/FR-2009-07-15/pdf/E9-15944.pdf. Accessed February 22, 2022.</p> <p>National Toxicology Program. 2016. Report on Carcinogens, 14th Edition; U.S. Department of Health and Human Services, Public Health Service. Benzene. November 3. Website: http://ntp.niehs.nih.gov/ntp/roc/twelfth/profiles/Benzene.pdf. Accessed February 22, 2022.</p> <p>National Toxicology Program. 2016. Report on Carcinogens, 14th Edition; U.S. Department of Health and Human Services, Public Health Service. Diesel Exhaust Particles. November 3. Website: https://ntp.niehs.nih.gov/ntp/roc/content/profiles/dieselexhaustparticulates.pdf. Accessed February 22, 2022.</p> <p>South Coast Air Quality Management District (SCAQMD). 2007. Final 2007 Air Quality Management Plan. June. Website: https://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2007-air-quality-management-plan/2007-aqmp-final-document.pdf?sfvrsn=2. Accessed February 22, 2022.</p> <p>United States Environmental Protection Agency (EPA). 2016. Nitrogen Dioxide (NO₂) Pollution. Basic Information about NO₂. Website: https://www.epa.gov/no2-pollution/basic-information-about-no2#What%20is%20NO2. Accessed February 22, 2022.</p> <p>United States Environmental Protection Agency (EPA). 2020. Particulate Matter (PM) Pollution. Health and Environmental Effects of Particulate Matter. Website: https://www.epa.gov/pm-pollution/health-and-environmental-effects-particulate-matter-pm. Accessed February 22, 2022.</p> <p>United States Environmental Protection Agency (EPA). 2021. Health Effects Notebook for Hazardous Air Pollutants. Website: https://www.epa.gov/haps/health-effects-notebook-hazardous-air-pollutants. Accessed February 22, 2022.</p> <p>United States Environmental Protection Agency (EPA). 2021. Indoor Air Quality (IAQ). Volatile Organic Compounds' Impact on Indoor Air Quality. Website: https://www.epa.gov/indoor-air-quality-iaq/volatile-organic-compounds-impact-indoor-air-quality. Accessed February 22, 2022.</p> <p>United States Environmental Protection Agency (EPA). 2021. Health Effects of Ozone Pollution. Website: https://www.epa.gov/ground-level-ozone-pollution/health-effects-ozone-pollution. Accessed February 22, 2022.</p>			

Several pollutants listed in Table 3.3-1 are not addressed in this analysis, such as lead, visibility-reducing particles, and vinyl chloride. Analysis of lead is not included in this report because no new sources of lead emissions are anticipated with the proposed project. Visibility-reducing particles are not explicitly addressed in this analysis because particulate matter is addressed as PM₁₀ and PM_{2.5}. No components of the proposed project would result in emissions of vinyl chloride or hydrogen sulfide.

Toxic Air Contaminants Health Effects

A TAC is defined as an air pollutant that may cause or contribute to an increase in mortality or serious illness, or that may pose a hazard to human health. TACs are usually present in minute quantities in the ambient air; however, their high toxicity or health risk may pose a threat to public health even at low concentrations. The California Almanac of Emissions and Air Quality—2013

Edition² presents the relevant concentration and cancer risk data for the 10 TACs that pose the most substantial health risk in California based on available data. The 10 TACs are acetaldehyde, benzene, 1,3-butadiene, carbon tetrachloride, hexavalent chromium, para-dichlorobenzene, formaldehyde, methylene chloride, perchloroethylene, and diesel particulate matter (DPM).

Some studies indicate that DPM poses the greatest health risk among the TACs listed above. A 10-year research program³ demonstrated that DPM from diesel-fueled engines is a human carcinogen and that chronic (long-term) inhalation exposure to DPM poses a chronic health risk. In addition to increasing the risk of lung cancer, exposure to diesel exhaust can have other health effects. Diesel exhaust can irritate the eyes, nose, throat, and lungs, and it can cause coughs, headaches, lightheadedness, and nausea. Diesel exhaust is a major source of fine particulate pollution as well, and studies have linked elevated particle levels in the air to increased hospital admissions, emergency room visits, asthma attacks, and premature deaths among those suffering from respiratory problems.

DPM differs from other TACs in that it is not a single substance, but a complex mixture of hundreds of substances. Although DPM is emitted by diesel-fueled, internal combustion engines, the composition of the emissions varies, depending on the engine type, operating conditions, fuel composition, lubricating oil, and whether an emission control system is present. Unlike the other TACs, however, no ambient monitoring data are available for DPM because no routine measurement method currently exists. The ARB has made preliminary concentration estimates based on a DPM exposure method. This method uses the ARB emissions inventory’s PM₁₀ database, ambient PM₁₀ monitoring data, and the results from several studies to estimate concentrations of DPM.

Table 3.3-2 provides a summary of the types, sources, and effects of TACs.

Table 3.3-2: Description of Toxic Air Contaminants of National and California Concern

Toxic Air Contaminant	Physical Description and Properties	Sources	Most Relevant Effects from Pollutant Exposure
Diesel particulate matter (DPM)	DPM is a source of PM _{2.5} —diesel particles are typically 2.5 microns and smaller. Diesel exhaust is a complex mixture of thousands of particles and gases that is produced when an engine burns diesel fuel. Organic compounds account for 80 percent of the total PM mass, which consists of compounds such as hydrocarbons and their derivatives and polycyclic	Diesel exhaust is a major source of ambient PM pollution in urban environments. Typically, the main source of DPM is from combustion of diesel fuel in diesel-powered engines. Such engines are in on-road vehicles such as diesel	Some short-term (acute) effects of DPM exposure include eye, nose, throat, and lung irritation, coughs, headaches, light-headedness, and nausea. Studies have linked elevated particle levels in the air to increased hospital admissions, emergency room visits, asthma attacks, and premature deaths among those suffering from respiratory problems. Human studies on the carcinogenicity of DPM demonstrate an increased risk of lung cancer, although the

² California Air Resource Board (ARB). 2013. California Almanac of Emissions and Air Quality – 2013 Edition. Website: <https://ww2.arb.ca.gov/our-work/programs/resource-center/technical-assistance/air-quality-and-emissions-data/almanac>. Accessed February 22, 2022.

³ California Air Resource Board (ARB). 2022. Overview: Diesel Exhaust & Health. Website: <https://ww2.arb.ca.gov/resources/overview-diesel-exhaust-and-health>. February 22, 2022.

Toxic Air Contaminant	Physical Description and Properties	Sources	Most Relevant Effects from Pollutant Exposure
	aromatic hydrocarbons and their derivatives. Fifteen polycyclic aromatic hydrocarbons are confirmed carcinogens, a number of which are found in diesel exhaust.	trucks, off-road construction vehicles, diesel electrical generators, and various pieces of stationary construction equipment.	increased risk cannot be clearly attributed to diesel exhaust exposure.
VOCs	Reactive organic gases (ROGs), or VOCs, are defined as any compound of carbon—excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate—that participates in atmospheric photochemical reactions. Although there are slight differences in the definition of ROGs and VOCs, the two terms are often used interchangeably.	Indoor sources of VOCs include paints, solvents, aerosol sprays, cleansers, tobacco smoke, etc. Outdoor sources of VOCs are from combustion and fuel evaporation. A reduction in VOC emissions reduces certain chemical reactions that contribute to the formulation of ozone. VOCs are transformed into organic aerosols in the atmosphere, which contribute to higher PM ₁₀ and lower visibility.	Although health-based standards have not been established for VOCs, health effects can occur from exposures to high concentrations because of interference with oxygen uptake. In general, concentrations of VOCs are suspected to cause eye, nose, and throat irritation; headaches; loss of coordination; nausea; and damage to the liver, the kidneys, and the central nervous system. Many VOCs have been classified as TACs.
Benzene	Benzene is a VOC. It is a clear or colorless light-yellow, volatile, highly flammable liquid with a gasoline-like odor. The EPA has classified benzene as a “Group A” carcinogen.	Benzene is emitted into the air from fuel evaporation, motor vehicle exhaust, tobacco smoke, and from burning oil and coal. Benzene is used as a solvent for paints, inks, oils, waxes, plastic, and rubber. Benzene occurs naturally in gasoline at one to 2 percent by volume. The primary route of human exposure is through inhalation.	Short-term (acute) exposure of high doses from inhalation of benzene may cause dizziness, drowsiness, headaches, eye irritation, skin irritation, and respiratory tract irritation, and at higher levels, loss of consciousness can occur. Long-term (chronic) occupational exposure of high doses has caused blood disorders, leukemia, and lymphatic cancer.

Toxic Air Contaminant	Physical Description and Properties	Sources	Most Relevant Effects from Pollutant Exposure
Asbestos	Asbestos is the name given to a number of naturally occurring fibrous silicate minerals that have been mined for their useful properties, such as thermal insulation, chemical and thermal stability, and high tensile strength. The three most common types of asbestos are chrysotile, amosite, and crocidolite.	Chrysotile, also known as white asbestos, is the most common type of asbestos found in buildings. Chrysotile makes up approximately 90 to 95 percent of all asbestos contained in buildings in the United States.	Exposure to asbestos is a health threat; exposure to asbestos fibers may result in health issues such as lung cancer, mesothelioma (a rare cancer of the thin membranes lining the lungs, chest, and abdominal cavity), and asbestosis (a non-cancerous lung disease that causes scarring of the lungs). Exposure to asbestos can occur during demolition or remodeling of buildings that were constructed prior to the 1977 ban on asbestos for use in buildings. Exposure to naturally occurring asbestos can occur during soil-disturbing activities in areas with deposits present.
Hydrogen Sulfide	Hydrogen sulfide (H ₂ S) is a flammable, colorless, poisonous gas that smells like rotten eggs.	Manure, storage tanks, ponds, anaerobic lagoons, and land application sites are the primary sources of hydrogen sulfide. Anthropogenic sources include the combustion of sulfur containing fuels (oil and coal).	High levels of hydrogen sulfide can cause immediate respiratory arrest. It can irritate the eyes and respiratory tract and cause headache, nausea, vomiting, and cough. Long exposure can cause pulmonary edema.
Sulfates	Sulfates occur in combination with metal and/or hydrogen ions. Many sulfates are soluble in water.	Sulfates are particulates formed through the photochemical oxidation of sulfur dioxide. In California, the main source of sulfur compounds is combustion of gasoline and diesel fuel.	Sulfates can cause a decrease in ventilatory function, aggravation of asthmatic symptoms; and aggravation of cardio-pulmonary disease, as well as vegetation damage, degradation of visibility, property damage.
Visibility-Reducing Particles	Suspended PM is a mixture of small particles that consist of dry solid fragments, droplets of water, or solid cores with liquid coatings. The particles vary in shape, size, and composition. PM ₁₀ refers to particulate	Stationary sources include fuel or wood combustion for electrical utilities, residential space heating, and industrial processes;	<ul style="list-style-type: none"> Short-term exposure (hours/days): irritation of the eyes, nose, throat; coughing; phlegm; chest tightness; shortness of breath; aggravates existing lung disease, causing asthma attacks and acute

Toxic Air Contaminant	Physical Description and Properties	Sources	Most Relevant Effects from Pollutant Exposure
	<p>matter that is between 2.5 and 10 microns in diameter (1 micron is one-millionth of a meter). PM_{2.5} refers to particulate matter that is 2.5 microns or less in diameter, about one-thirtieth the size of the average human hair.</p>	<p>construction and demolition; the use of metals, minerals, and petrochemicals; wood products processing; mills and elevators used in agriculture; erosion from tilled lands; waste disposal; and recycling. Mobile or transportation-related sources are from vehicle exhaust and road dust. Secondary particles form from reactions in the atmosphere.</p>	<p>bronchitis; those with heart disease can suffer heart attacks and arrhythmias.</p> <ul style="list-style-type: none"> • Long-term exposure can result in reduced lung function, chronic bronchitis, changes in lung morphology, and death.
<p>Vinyl Chloride</p>	<p>Vinyl chloride, or chloroethene, is a chlorinated hydrocarbon and a colorless gas with a mild, sweet odor. In 1990, the ARB identified vinyl chloride as a toxic air contaminant and estimated a cancer unit risk factor.</p>	<p>Most vinyl chloride is used to make polyvinyl chloride plastic and vinyl products, including pipes, wire and cable coatings, and packaging materials. It can be formed when plastics containing these substances are left to decompose in solid waste landfills. Vinyl chloride has been detected near landfills, sewage plants, and hazardous waste sites.</p>	<p>Short-term exposure to high levels of vinyl chloride in the air causes central nervous system effects, such as dizziness, drowsiness, and headaches. Epidemiological studies of occupationally exposed workers have linked vinyl chloride exposure to development of a rare cancer, liver angiosarcoma, and have suggested a relationship between exposure and lung and brain cancers.</p>
<p>Lead (Pb)</p>	<p>Lead is a solid heavy metal that can exist in air pollution as an aerosol particle component. Leaded gasoline was used in motor vehicles until around 1970. Lead concentrations have not exceeded State or federal standards at any monitoring station since 1982.</p>	<p>Lead ore crushing, lead ore smelting, and battery manufacturing are currently the largest sources of lead in the atmosphere in the United States. Other sources include dust from soils contaminated with lead-based</p>	<p>Lead accumulates in bones, soft tissue, and blood and can affect the kidneys, liver, and nervous system. It can cause impairment of blood formation and nerve conduction, behavior disorders, mental retardation, neurological impairment, learning deficiencies, and low IQs.</p>

Toxic Air Contaminant	Physical Description and Properties	Sources	Most Relevant Effects from Pollutant Exposure
		paint, solid waste disposal, and crustal physical weathering.	
<p>Sources:</p> <p>California Air Resources Board (ARB). 2021. Vinyl Chloride and Health. Website: https://ww2.arb.ca.gov/resources/vinyl-chloride-and-health. Accessed February 22, 2022.</p> <p>California Office of Environmental Health Hazard Assessment (OEHHA). 2001. Health Effects of Diesel Exhaust. Website: https://oehha.ca.gov/media/downloads/calenviroscreen/indicators/diesel4-02.pdf. Accessed February 22, 2022.</p> <p>National Archives and Records Administration. 2009. Part II, Environmental Protection Agency. 40 Code of Federal Regulations Parts 50 and 58, Primary National Ambient Air Quality Standard for Nitrogen Dioxide; Proposed Rule. July 15. Website: https://www.gpo.gov/fdsys/pkg/FR-2009-07-15/pdf/E9-15944.pdf. Accessed February 22, 2022.</p> <p>National Toxicology Program. 2016. Report on Carcinogens, 14th Edition; U.S. Department of Health and Human Services, Public Health Service. Benzene. November 3. Website: http://ntp.niehs.nih.gov/ntp/roc/twelfth/profiles/Benzene.pdf. Accessed February 22, 2022.</p> <p>National Toxicology Program. 2016. Report on Carcinogens, 14th Edition; U.S. Department of Health and Human Services, Public Health Service. Diesel Exhaust Particles. November 3. Website: https://ntp.niehs.nih.gov/ntp/roc/content/profiles/dieselexhaustparticulates.pdf. Accessed February 22, 2022.</p> <p>South Coast Air Quality Management District (SCAQMD). 2007. Final 2007 Air Quality Management Plan. June. Website: https://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2007-air-quality-management-plan/2007-aqmp-final-document.pdf?sfvrsn=2. Accessed February 22, 2022.</p> <p>United States Environmental Protection Agency (EPA). 2016. Nitrogen Dioxide (NO₂) Pollution. Basic Information about NO₂. Website: https://www.epa.gov/no2-pollution/basic-information-about-no2#What%20is%20NO2. Accessed February 22, 2022.</p>			

Asbestos

Asbestos is the name given to a number of naturally occurring fibrous silicate minerals that have been mined for their useful properties such as thermal insulation, chemical and thermal stability, and high tensile strength. The three most common types of asbestos are chrysotile, amosite, and crocidolite. Chrysotile, also known as white asbestos, is the most common type of asbestos found in buildings. Chrysotile makes up approximately 90 to 95 percent of all asbestos contained in buildings in the United States. Exposure to asbestos is a health threat; exposure to asbestos fibers may result in health issues such as lung cancer, mesothelioma (a rare cancer of the thin membranes lining the lungs, chest, and abdominal cavity), and asbestosis (a non-cancerous lung disease that causes scarring of the lungs). Exposure to asbestos can occur during demolition or remodeling of buildings that were constructed prior to the 1977 ban on asbestos for use in buildings. Exposure to naturally occurring asbestos can occur during soil-disturbing activities in areas with deposits present. According to the United States Geological Survey (USGS), one recorded occurrence of naturally occurring asbestos is located near the intersection of Betty Road and Sophie Street, within the planning area.⁴

3.3.4 - Existing Air Quality Conditions

The local air quality can be evaluated by reviewing relevant air pollution concentrations near the project area. Table 3.3-3 summarizes 2018 through 2020 published monitoring data, which is the

⁴ United States Geological Survey (USGS). N.d. Asbestos mines, prospects, and occurrences in the US. Website: <https://mrdata.usgs.gov/asbestos/>. Accessed February 22, 2022.

most recent 3-year period available. Where available, data from the Perris station located approximately 1 mile northeast of the planning area was retrieved. For air quality monitoring data that was not available at the Perris station, data from the next closest air quality station, the Lake Elsinore-W Flint Street station located approximately 1.1 miles south of the planning area, was retrieved. The data shows that during the past few years, the project area has exceeded the standards for at least ozone (State and national) and PM₁₀ (State). The data in the table reflects the concentration of the pollutants in the air, measured using air monitoring equipment. This differs from emissions, which are calculations of a pollutant being emitted over a certain period. No recent monitoring data for the Perris or Lake Elsinore stations was available for CO or SO₂. Generally, no monitoring is conducted for pollutants that are no longer likely to exceed ambient air quality standards.

Table 3.3-3: Air Quality Monitoring Summary

Air Pollutant	Averaging Time	Item	2018	2019	2020
Ozone ¹	1 Hour	Max 1 Hour (ppm)	0.117	0.118	0.125
		Days > State Standard (0.09 ppm)	31	28	34
	8 Hour	Max 8 Hour (ppm)	0.103	0.096	0.106
		Days > State Standard (0.07 ppm)	68	66	77
		Days > National Standard (0.07 ppm)	67	64	74
Carbon monoxide (CO)	8 Hour	Max 8 Hour (ppm)	ND	ND	ND
		Days > State Standard (9.0 ppm)	ND	ND	ND
		Days > National Standard (9 ppm)	ND	ND	ND
Nitrogen dioxide (NO ₂) ²	Annual	Annual Average (ppm)	0.008	0.006	0.007
	1 Hour	Max 1 Hour (ppm)	0.041	0.038	0.044
		Days > National Standard (0.1 ppm)	0	0	0
Sulfur dioxide (SO ₂)	Annual	Annual Average (ppm)	ND	ND	ND
	24 Hour	Max 24 Hour (ppm)	ND	ND	ND
		Days > State Standard (0.04 ppm)	ND	ND	ND
Inhalable coarse particles (PM ₁₀) ¹	Annual	State Annual Average (µg/m ³)	28.9	24.4	ID
	24 Hour	24 Hour (µg/m ³)	64.4	92.1	87.6
		Days > State Standard (50 µg/m ³)	12.1	24.5	ID
		Days > National Standard (150 µg/m ³)	0	0	ID
Fine particulate matter (PM _{2.5}) ²	Annual	State Annual Average (µg/m ³)	ID	ID	ID
	24 Hour	24 Hour (µg/m ³)	ID	ID	ID
		Days > National Standard (35 µg/m ³)	ID	ID	ID

Air Pollutant	Averaging Time	Item	2018	2019	2020
<p>Notes: > = exceed ppm = parts per million µg/m³ = micrograms per cubic meter ND = no data max = maximum ppb = parts per billion ID = insufficient data Bold = exceedance State Standard = California Ambient Air Quality Standard National Standard = National Ambient Air Quality Standard ¹ Perris Air Quality Monitoring Station ² Lake Elsinore-W Flint Street Air Quality Monitoring Station Source: California Air Sources Board (ARB). Air Quality Data Statistics. https://www.arb.ca.gov/adam. Accessed February 22, 2022.</p>					

The health impacts of the various air pollutants of concern can be presented in a number of ways. The clearest comparison is to the state and federal ozone standards. Air concentration below standards indicate that health risks are sufficiently low enough to have a minimal impact on public health, as there is no such thing as a zero-risk level. When concentrations exceed the standards, impacts will vary based on the amount by which the standard is exceeded. The EPA developed the Air Quality Index (AQI) as an easy-to-understand measure of health impacts compared with concentrations in the air. Table 3.3-4 provides a description of the health impacts of ozone at different concentrations.

Table 3.3-4: Air Quality Index and Health Effects from Ozone

Air Quality Index/ 8-hour Ozone Concentration	Health Effects Description
AQI (1-50)—Good	Sensitive Groups: Children and people with asthma are the groups most at risk.
Concentration 1-54 ppb	Health Effects Statements: None. Cautionary Statements: None.
AQI (51 -100)—Moderate	Sensitive Groups: Children and people with asthma are the groups most at risk.
Concentration 55-70 ppb	Health Effects Statements: Increasing likelihood of respiratory symptoms and breathing discomfort in active children and adults, and people with respiratory disease, such as asthma. Cautionary Statements: Active children and adults, and people with respiratory disease, such as asthma, should limit prolonged outdoor exertion.
AQI (101-150)—Unhealthy for Sensitive Groups	Sensitive Groups: Children and people with asthma are the groups most at risk.
Concentration 71-85 ppb	Health Effects Statements: Increasing likelihood of respiratory symptoms and breathing discomfort in active children and adults, and people with respiratory disease, such as asthma.

Air Quality Index/ 8-hour Ozone Concentration	Health Effects Description
	Cautionary Statements: Active children and adults, and people with respiratory disease, such as asthma, should limit prolonged outdoor exertion.
AQI (151-200)—Unhealthy	Sensitive Groups: Children and people with asthma are the groups most at risk.
Concentration 86-105 ppb	<p>Health Effects Statements: Greater likelihood of respiratory symptoms and breathing difficulty in active children and adults and people with respiratory disease, such as asthma; possible respiratory effects in general population.</p> <p>Cautionary Statements: Active children and adults, and people with respiratory disease, such as asthma, should avoid prolonged outdoor exertion; everyone else, especially children, should limit prolonged outdoor exertion.</p>
AQI (201-300)—Very Unhealthy	Sensitive Groups: Children and people with asthma are the groups most at risk.
Concentration 106-200 ppb	<p>Health Effects Statements: Increasingly severe symptoms and impaired breathing likely in active children and adults and people with respiratory disease, such as asthma; increasing likelihood of respiratory effects in general population.</p> <p>Cautionary Statements: Active children and adults, and people with respiratory disease, such as asthma, should avoid all outdoor exertion; everyone else, especially children, should limit outdoor exertion.</p>
Source: AirNow. AQI Calculator. https://www.airnow.gov/aqi/aqi-calculator/ . Accessed February 3, 2022.	

Based on the AQI scale for the 8-hour ozone standard, the Perris monitoring station identified at least one day in the category of “Very Unhealthy,” with a maximum reading of 106 parts per billion (ppb) in 2020.

Attainment Status

The EPA and the ARB designate air basins where ambient air quality standards are exceeded as “nonattainment” areas. If standards are met, the area is designated as an “attainment” area. If there is inadequate or inconclusive data to make a definitive attainment designation, they are considered “unclassified.” National nonattainment areas are further designated as marginal, moderate, serious, severe, or extreme as a function of deviation from standards.

Each standard has a different definition, or “form” of what constitutes attainment, based on specific air quality statistics. For example, the federal 8-hour CO standard is not to be exceeded more than once per year; therefore, an area is in attainment of the CO standard if no more than one 8-hour ambient air monitoring values exceeds the threshold per year. In contrast, the federal annual PM_{2.5} standard is met if the 3-year average of the annual average PM_{2.5} concentration is less than or equal to the standard.

The current attainment designations for the SoCAB are shown in Table 3.3-5. With respect to the CAAQS, the Riverside County portion of the SoCAB is nonattainment for ozone, PM₁₀, and PM_{2.5}, and attainment or unclassified for all other pollutants. With respect to the NAAQS, the Riverside County portion of the SoCAB is nonattainment for ozone, PM_{2.5}, and attainment or unclassified for all other pollutants.

Table 3.3-5: South Coast Air Basin Attainment Status

Pollutant	State Status ¹	National Status ²
Ozone (1-hour) ^a	Nonattainment	Nonattainment (Extreme)
Ozone (8-hour)	Nonattainment	Nonattainment (Extreme)
Carbon monoxide	Attainment	Attainment (Maintenance)
Nitrogen dioxide (annual)	Attainment	Attainment (Maintenance)
Nitrogen dioxide (1-hour)	Attainment	Unclassifiable/Attainment
Sulfur dioxide	Attainment	Unclassified/Attainment
PM ₁₀	Nonattainment	Attainment (Maintenance)
PM _{2.5}	Nonattainment	Nonattainment (Serious)
Lead (Riverside County)	—	Attainment
Hydrogen Sulfide (H ₂ S)	Attainment	—
Sulfates	Attainment	—
Vinyl Chloride	Attainment	—

Notes:
^a On June 15, 2005, the 1-Hour Ozone NAAQS was revoked for all areas except the 8-Hour Ozone nonattainment Early Action Compact areas. However, the SoCAB has not attained this standard based on 2008-2010 data and is still subject to anti-backsliding requirements
 Source: South Coast Air Quality Management District (SCAQMD). 2022. Clean Air Plans. <http://www.aqmd.gov/home/air-quality/clean-air-plans>. Accessed February 22, 2022.

3.3.5 - Air Quality Plans and Regulations

Air pollutants are regulated at the national, State, and air basin or county level; each agency has a different level of regulatory responsibility. The EPA regulates at the national level, and the ARB regulates at the State level. The SCAQMD regulates at the air basin level.

The EPA is responsible for national and interstate air pollution issues and policies. The EPA sets national vehicle and stationary source emission standards, oversees approval of all State Implementation Plans (SIPs), provides research and guidance for air pollution programs, and sets the NAAQS, as described earlier.

A SIP is a document prepared by each state describing existing air quality conditions and measures that will be followed to attain and maintain federal air standards. The SIP for the State of California is administered by the ARB, which has overall responsibility for Statewide air quality maintenance and air pollution prevention. California’s SIP incorporates individual federal attainment plans for regional

air districts—an air district prepares their federal attainment plan, which is sent to the ARB to be approved and incorporated into the California SIP. Federal attainment plans include the technical foundation for understanding air quality (e.g., emission inventories and air quality monitoring), control measures and strategies, and enforcement mechanisms.

Areas designated nonattainment must develop air quality plans and regulations to achieve standards by specified dates, depending on the severity of the exceedances. For much of the country, implementation of federal motor vehicle standards and compliance with federal permitting requirements for industrial sources are adequate to attain air quality standards on schedule. For many areas of California, however, additional State and local regulation is required to achieve the standards. Regulations adopted by California are described below.

California Regulations

Low-Emission Vehicle Program

The ARB first adopted Low-Emission Vehicle (LEV) program standards in 1990. These first LEV standards ran from 1994 through 2003. LEV II regulations, running from 2004 through 2010, represent continuing progress in emission reductions. As the State's passenger vehicle fleet continues to grow and more sport utility vehicles and pickup trucks are used as passenger cars rather than work vehicles, the more stringent LEV II standards were adopted to provide reductions necessary for California to meet federally mandated clean air goals outlined in the 1994 State Implementation Plan. In 2012, ARB adopted the LEV III amendments to California's LEV regulations. These amendments, also known as the Advanced Clean Car Program, include more stringent emission standards for model years 2017 through 2025 for both criteria pollutants and greenhouse gas (GHG) emissions for new passenger vehicles.⁵

On-Road Heavy-Duty Vehicle Program

The ARB has adopted standards for emissions from various types of new on-road heavy-duty vehicles. Section 1956.8, Title 13, California Code of Regulations contains California's emission standards for on-road heavy-duty engines and vehicles, and test procedures. The ARB has also adopted programs to reduce emissions from in-use heavy-duty vehicles including the Heavy-Duty Diesel Vehicle Idling Reduction Program, the Heavy-Duty Diesel In-Use Compliance Program, the Public Bus Fleet Rule and Engine Standards, and the School Bus Program and others.⁶

ARB Regulation for In-Use Off-Road Diesel Vehicles

On July 26, 2007, the ARB adopted a regulation to reduce DPM and NO_x emissions from in-use (existing) off-road heavy-duty diesel vehicles in California. Such vehicles are used in construction, mining, and industrial operations. The regulation limits idling to no more than 5 consecutive minutes, requires reporting and labeling, and requires disclosure of the regulation upon vehicle sale. Performance requirements of the rule are based on a fleet's average NO_x emissions, which can be met by replacing older vehicles with newer, cleaner vehicles or by applying exhaust retrofits. The regulation was amended in 2010 to delay the original timeline of the performance requirements,

⁵ California Legislative Information. 2002. Clean Car Standards—Pavley, Assembly Bill 1493. Website:

https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=200120020AB1493. Accessed February 22, 2022.

⁶ California Air Resource Board (ARB). On-Road Heavy-Duty Vehicle Programs. <https://ww2.arb.ca.gov/road-heavy-duty-regulations-certification-programs>. Accessed February 22, 2022.

making the first compliance deadline January 1, 2014, for large fleets (over 5,000 horsepower), 2017 for medium fleets (2,501-5,000 horsepower), and 2019 for small fleets (2,500 horsepower or less).

The latest amendments to the Truck and Bus regulation became effective on December 31, 2014. The amended regulation requires diesel trucks and buses that operate in California to be upgraded to reduce emissions. Newer heavier trucks and buses must meet PM filter requirements beginning January 1, 2012. Lighter and older heavier trucks must be replaced starting January 1, 2015. By January 1, 2023, nearly all trucks and buses will need to have 2010 model year engines or equivalent.

The regulation applies to nearly all privately and federally owned diesel-fueled trucks and buses and to privately and publicly owned school buses with a gross vehicle weight rating greater than 14,000 pounds. The regulation provides a variety of flexibility options tailored to fleets operating low use vehicles, fleets operating in selected vocations like agricultural and construction, and small fleets of three or fewer trucks.⁷

ARB Airborne Toxic Control Measure for Asbestos

In July 2001, the ARB approved an Air Toxic Control Measure for construction, grading, quarrying and surface mining operations to minimize emissions of naturally occurring asbestos. The regulation requires application of Best Management Practices (BMPs) to control fugitive dust in areas known to have naturally occurring asbestos and requires notification to the local air district prior to commencement of ground-disturbing activities. The measure establishes specific testing, notification and engineering controls prior to grading, quarrying, or surface mining in construction zones where naturally occurring asbestos is located on projects of any size. There are additional notification and engineering controls at work sites larger than 1 acre in size. These projects require the submittal of a “Dust Mitigation Plan” and approval by the air district prior to the start of a project.

Construction sometimes requires the demolition of existing buildings where construction occurs. Buildings often include materials containing asbestos, such as demolition of the existing commercial/residential building associated with the proposed project. In addition, asbestos is also found in a natural state, known as naturally occurring asbestos. Exposure and disturbance of rock and soil that naturally contain asbestos can result in the release of fibers into the air and consequent exposure to the public. Asbestos most commonly occurs in ultramafic rock that has undergone partial or complete alteration to serpentine rock (serpentinite) and often contains chrysotile asbestos. In addition, another form of asbestos, tremolite, can be found associated with ultramafic rock, particularly near faults. Sources of asbestos emissions include unpaved roads or driveways surfaced with ultramafic rock, construction activities in ultramafic rock deposits, or rock quarrying activities where ultramafic rock is present.

The ARB has an Air Toxics Control Measure for construction, grading, quarrying, and surface mining operations, requiring the implementation of mitigation measures to minimize emissions of asbestos-laden dust. The measure applies to road construction and maintenance, construction and grading operations, and quarries and surface mines when the activity occurs in an area where naturally occurring asbestos is likely to be found. Areas are subject to the regulation if they are identified on

⁷ California Air Resources Board (ARB). 2015. On-Road Heavy-Duty Diesel Vehicles (In-Use) Regulation. Website: <https://ww2.arb.ca.gov/our-work/programs/truck-and-bus-regulation/about>. Accessed February 3, 2022.

maps published by the Department of Conservation as ultramafic rock units or if the Air Pollution Control Officer or owner/operator has knowledge of the presence of ultramafic rock, serpentine, or naturally occurring asbestos on the site. The measure also applies if ultramafic rock, serpentine, or asbestos is discovered during any operation or activity. Review of the Department of Conservation maps indicates that no ultramafic rock has been found near the planning area.

Diesel Risk Reduction Plan

The ARB’s Diesel Risk Reduction Plan has led to the adoption of new California regulatory standards for all new on-road, off-road, and stationary diesel-fueled engines and vehicles to reduce DPM emissions by about 90 percent overall from year 2000 levels. The projected emission benefits associated with the full implementation of this plan, including federal measures, have been reductions in DPM emissions and associated cancer risks of 75 percent by 2010, and 85 percent by 2020.⁸

The ARB Air Quality Land Use Handbook lists the following ARB advisory recommendations that address the issue of siting “sensitive land uses” near specific sources of air pollution:⁹

- Chrome plating facilities
- Distribution centers
- Dry cleaners
- High traffic freeways and roads
- Large gas dispensing facilities
- Ports
- Rail yards
- Refineries

The ARB recommended screening distances are shown in Table 3.3-6 below.

Table 3.3-6: Recommendations on Siting New Sensitive Land Uses

Source Category	Advisory Recommendations
Freeways and High Traffic Roads	Avoid siting new sensitive land uses within 500 feet of a freeway, urban roads with 100,000 vehicles/day, or rural roads with 50,000 vehicles/day.
Distribution Centers	Avoid siting new sensitive land uses within 1,000 feet of a distribution center (that accommodates more than 100 trucks per day, more than 40 trucks with operating transport refrigeration units (TRUs) per day, or where TRU unit operations exceed 300 hours per week). Take into account the configuration of existing distribution centers and avoid locating residences and other new sensitive land uses near entry and exit points.
Rail Yards	Avoid siting new sensitive land uses within 1,000 feet of a major service and maintenance rail yard. Within one mile of a rail yard, consider possible siting limitations and mitigation approaches.

⁸ California Air Resources Board (ARB). 2000. Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-fueled Engines and Vehicles. Website: <http://www.arb.ca.gov/diesel/documents/rrpfinal.pdf>. Accessed February 23, 2022.

⁹ California Air Resources Board (ARB). 2005. Air Quality and Land Use Handbook. Website: <https://www.arb.ca.gov/ch/handbook.pdf>. Accessed February 23, 2022.

Source Category	Advisory Recommendations
Ports	Avoid siting of new sensitive land uses immediately downwind of ports in the most heavily impacted zones. Consult local air districts or the ARB on the status of pending analyses of health risks.
Refineries	Avoid siting new sensitive land uses immediately downwind of petroleum refineries. Consult with local air districts and other local agencies to determine an appropriate separation.
Chrome Platers	Avoid siting new sensitive land uses within 1,000 feet of a chrome plater.
Dry Cleaners Using Perchloroethylene	Avoid siting new sensitive land uses within 300 feet of any dry cleaning operation. For operations with two or more machines, provide 500 feet. For operations with three or more machines, consult with the local air district. Do not site new sensitive land uses in the same building with perchloroethylene dry cleaning operations.
Gasoline Dispensing Facilities	Avoid siting new sensitive land uses within 300 feet of a large gas station (defined as a facility with a throughput of 3.6 million gallons per year or greater). A 50-foot separation is recommended for typical gas dispensing facilities.
<p>Note: These recommendations are advisory. Land use agencies have to balance other considerations, including housing and transportation needs, economic development priorities, and other quality of life issues.</p>	

South Coast Air Quality Management District

Standard Conditions

During construction and operation, the proposed project must comply with applicable rules and regulations. The following are rules and regulations the proposed project may be required to comply with, either directly or indirectly.

SCAQMD Rule 402 prohibits a person from discharging from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause injury or damage to business or property.

SCAQMD Rule 403 governs emissions of fugitive dust during construction and operation activities. Compliance with this rule is achieved through the application of standard Best Management Practices, such as the application of water or chemical stabilizers to disturbed soils, covering haul vehicles, restricting vehicle speeds on unpaved roads to 15 miles per hour (mph), sweeping loose dirt from paved site access roadways, cessation of construction activity when winds exceed 25 mph, and establishing a permanent ground cover on finished sites.

Rule 403 requires that fugitive dust be controlled with the best available control measures, so that the presence of such dust does not remain visible in the atmosphere beyond the property line of the

emission source. In addition, SCAQMD Rule 403 requires implementation of dust suppression techniques to prevent fugitive dust from creating a nuisance off-site. Applicable dust suppression techniques from Rule 403 are summarized below. Implementation of these dust suppression techniques can reduce the fugitive dust generation (and thus the PM₁₀ component). Compliance with these rules would reduce impacts on nearby sensitive receptors.

Rule 403 measures may include but are not limited to the following:

- Apply nontoxic chemical soil stabilizers according to manufacturers' specifications to all inactive construction areas (previously graded areas inactive for 10 days or more).
- Water active sites at least three times daily. (Locations where grading is to occur will be thoroughly watered prior to earthmoving.)
- Cover all trucks hauling dirt, sand, soil, or other loose materials, or maintain at least 0.6 meters (2 feet) of freeboard (vertical space between the top of the load and top of the trailer) in accordance with the requirements of California Vehicle Code Section 23114.
- Reduce traffic speeds on all unpaved roads to 15 mph or less.
- Suspension of all grading activities when wind speeds (including instantaneous wind gusts) exceed 25 mph.
- Bumper strips or similar BMPs shall be provided where vehicles enter and exit the construction site onto paved roads or wash off trucks and any equipment leaving the site each trip.
- Replanting disturbed areas as soon as practical.
- During all construction activities, construction contractors shall sweep on-site and off-site streets if silt is carried to adjacent public thoroughfares, to reduce the amount of particulate matter on public streets. All sweepers shall be compliant with SCAQMD Rule 1186.1, Less Polluting Sweepers.

SCAQMD Rule 481 applies to all spray painting and spray coating operations and equipment. This rule would apply to the application of architectural coatings to the exterior and interior or of the building walls.

SCAQMD Rule 1108 governs the sale, use, and manufacturing of asphalt and limits the VOC content in asphalt used in the SoCAB. This rule would regulate the VOC content of asphalt used during construction. Therefore, all asphalt used during construction of the proposed project must comply with SCAQMD Rule 1108.

SCAQMD Rule 1113 governs the sale, use, and manufacturing of architectural coating and limits the VOC content in paints and paint solvents. This rule regulates the VOC content of paints available during construction. Therefore, all paints and solvents used during construction and operation of the proposed project must comply with SCAQMD Rule 1113.

SCAQMD Rule 1143 governs the manufacture, sale, and use of paint thinners and solvents used in thinning of coating materials, cleaning of coating application equipment and other solvent cleaning operations by limiting their VOC content. This rule regulates the VOC content of solvents used during construction. Solvents used during the construction phase must comply with this rule.

SCAQMD Rule 1186 limits the presence of fugitive dust on paved and unpaved roads and sets certification protocols and requirements for street sweepers that are under contract to provide sweeping services to any federal, state, county, agency or special district such as water, air, sanitation, transit, or school district.

SCAQMD Rule 1403 specifies the work practice requirements to limit asbestos emissions and exposure from building demolition and renovation activities. Requirements include asbestos surveying; notification; asbestos-containing material (ACM) removal procedures and time schedules; ACM handling and clean-up procedures; and storage, disposal, and landfilling requirements for asbestos-containing waste material (ACWM).

Air Quality Management Plans

The agency for air pollution control for the Riverside County portion of the SoCAB is the SCAQMD. The SCAQMD is responsible for controlling emissions primarily from stationary sources. The SCAQMD maintains air quality monitoring stations throughout the SoCAB and a portion of the Salton Sea Air Basin. The SCAQMD is also responsible for developing, updating, and implementing the Air Quality Management Plan (AQMP) for the region, in coordination with the Southern California Association of Governments (SCAG).

An AQMP is a plan prepared and implemented by an air pollution district for a county or region designated as nonattainment of the NAAQS and/or CAAQS. The term nonattainment area is used to refer to an air basin where one or more ambient air quality standards are exceeded.

2022 AQMP

The control strategy for the 2022 AQMP includes new regulations and the development of incentive programs to support early deployment of advanced technologies. These incentive programs are focused on two key areas: (1) promoting widespread deployment of available zero emissions (ZE) and low NO_x technologies and (2) developing new ZE and ultra-low NO_x technologies for use in cases where the technology is not currently available. The SCAQMD will prioritize distribution of incentive funding in Environmental Justice areas and seek opportunities to focus benefits on the most disadvantaged communities.

To meet the federal ozone standards in the SoCAB, the SCAQMD estimates that NO_x emissions need to be reduced approximately 83 percent below 2018 levels. The achievement of such significant reductions requires the widespread adoption of ZE technologies across mobile sectors and stationary sources. Where these technologies are not ready or commercially available, low NO_x

¹¹ South Coast Air Quality Management District (SCAQMD). 2022. Draft 2022 Air Quality Management Plan. Website: <http://www.aqmd.gov/home/air-quality/clean-air-plans/air-quality-mgt-plan>. Accessed December 1, 2022.

¹² South Coast Air Quality Management District (SCAQMD). 2022. Final 2022 Air Quality Management Plan.

technologies will need to play a significant role. According to the SCAQMD, this strategy will also assist with attainment of other air quality standards, such as federal PM_{2.5} standards.

The control measures targeting stationary sources in the 2022 AQMP are categorized into four major groups: (1) NO_x control measures, (2) co-benefits from climate and energy programs, (3) limited strategic VOC measures, and (4) other measures. The NO_x measures are further grouped by residential, commercial, and large industrial combustion. These measures rely on a combination of regulatory approaches and incentives and will require technology assessments to better understand where and when ZE and low NO_x technologies can be implemented. Emission reductions from State and federal mobile source emission reduction programs are key to the strategy to improve air quality throughout the region.

SCAQMD CEQA Guidance

The SCAQMD has two roles under CEQA:

1. **Lead Agency:** responsible for preparing environmental analyses for its own projects (adoption of rules, regulations, or plans) or permit projects filed with the SCAQMD where the SCAQMD has primary approval authority over the project.
2. **Commenting Agency:** the SCAQMD reviews and comments on air quality analyses prepared by other public agencies (such as the project).

The SCAQMD also provides guidance and thresholds for CEQA air quality and GHG analyses.

Local

County of Riverside General Plan

The County of Riverside adopted its General Plan in December of 2015, and the most recent General Plan Amendments were adopted in 2021. The County of Riverside General Plan Air Quality Element sets forth the following goals, objectives, and policies relevant to air quality:¹³

Multijurisdictional Cooperation

- AQ 1.1** Promote and participate with regional and local agencies, both public and private, to protect and improve air quality.
- AQ 1.2** Support Southern California Association of Government's (SCAG) Regional Growth Management Plan by developing intergovernmental agreements with appropriate governmental entities such as the Western Riverside Council of Governments (WRCOG), the Coachella Valley Association of Governments (CVAG), sanitation districts, water districts, and those subregional entities identified in the Regional Growth Management Plan.

¹³ Riverside County Planning Department. 2018. Riverside County General Plan, Air Quality Element. Website: https://planning.rctlma.org/Portals/14/genplan/general_plan_2018/elements/Ch09_AQE_071718.pdf. Accessed February 23, 2022.

- AQ 1.3** Participate in the development and update of those regional air quality management plans required under federal and state law, and meet all standards established for clean air in these plans.
- AQ 1.4** Coordinate with the SCAQMD and Mojave Desert Air Quality Management District (MDAQMD) to ensure that all elements of air quality plans regarding reduction of air pollutant emissions are being enforced.
- AQ 1.5** Establish and implement air quality, land use and circulation measures that improve not only the County's environment but the entire region.
- AQ 1.6** Establish a level playing field by working with local jurisdictions to simultaneously adopt policies similar to those in this Air Quality Element.
- AQ 1.7** Support legislation which promotes cleaner industry, clean fuel vehicles and more efficient burning engines and fuels.
- AQ 1.8** Support the introduction of federal, state or regional enabling legislation to permit the County to promote inventive air quality programs, which otherwise could not be implemented.
- AQ 1.9** Encourage, publicly recognize and reward innovative approaches that improve air quality.
- AQ 1.10** Work with regional and local agencies to evaluate the feasibility of implementing a system of charges (e.g., pollution charges, user fees, congestion pricing and toll roads) that requires individuals who undertake polluting activities to bear the economic cost of their actions where possible.
- AQ 1.11** Involve environmental groups, the business community, special interests, and the general public in the formulation and implementation of programs that effectively reduce airborne pollutants.

Sensitive Receptors

- AQ 2.1** The County land use planning efforts shall assure that sensitive receptors are separated and protected from polluting point sources to the greatest extent possible.
- AQ 2.2** Require site plan designs to protect people and land uses sensitive to air pollution through the use of barriers and/or distance from emissions sources when possible.
- AQ 2.3** Encourage the use of pollution control measures such as landscaping, vegetation and other materials, which trap particulate matter or control pollution.
- AQ 2.4** Consider creating a program to plant urban trees on an Area Plan basis that removes pollutants from the air, provides shade and decreases the negative impacts of heat on the air.

Mobile Pollution Source

- AQ 3.2** Seek new cooperative relationships between employers and employees to reduce vehicle miles traveled.
- AQ 3.3** Encourage large employers and commercial/industrial complexes to create Transportation Management Associations.
- AQ 3.4** Encourage employee rideshares and transit incentives for employers with more than 25 employees at a single location.

Stationary Pollution Sources

- AQ 4.1** Require the use of all feasible building materials/methods which reduce emissions.
- AQ 4.2** Require the use of all feasible efficient heating equipment and other appliances, such as water heaters, swimming pool heaters, cooking equipment, refrigerators, furnaces and boiler units.
- AQ 4.3** Require the use of all feasible efficient heating equipment and other appliances, such as water heaters, swimming pool heaters, cooking equipment, refrigerators, furnaces and boiler units.
- AQ 4.4** Require residential building construction to comply with energy use guidelines detailed in Part 6 (California Energy Code) and/or Part 11 (California Green Building Standards Code) of Title 24 of the California Code of Regulations.
- AQ 4.5** Require stationary pollution sources to minimize the release of toxic pollutants through: Design features; Operating procedures; Preventive maintenance; Operator training; and Emergency response planning.
- AQ 4.6** Require stationary air pollution sources to comply with applicable air district rules and control measures.
- AQ 4.7** To the greatest extent possible, require every project to mitigate any of its anticipated emissions which exceed allowable emissions as established by the SCAQMD, MDAQMD, SCAB, the Environmental Protection Agency and the California Air Resources Board.
- AQ 4.9** Require compliance with SCAQMD Rules 403 and 403.1, and support appropriate future measures to reduce fugitive dust emanating from construction sites.
- AQ 4.10** Coordinate with the SCAQMD and MDAQMD to create a communications plan to alert those conducting grading operations in the County of first, second, and third stage smog alerts, and when wind speeds exceed 25 miles per hour. During these instances all grading operations should be suspended.

Trip Reduction

- AQ 10.1** Encourage trip reduction plans to promote alternative work schedules, ridesharing, telecommuting and work-at-home programs, employee education and preferential parking.
- AQ 10.2** Use incentives, regulations and Transportation Demand Management in cooperation with surrounding jurisdictions when possible to eliminate vehicle trips, which would otherwise be made.

Transportation-Related Objectives

- AQ 20.1** Reduce VMT by requiring expanded multi-modal facilities and services that provide transportation alternatives, such as transit, bicycle and pedestrian modes. Improve connectivity of the multi-modal facilities by providing linkages between various uses in the developments.
- AQ 20.2** Reduce VMT by facilitating an increase in transit options. In particular, coordinate with adjacent municipalities, transit providers and regional transportation planning agencies to develop mutual policies and funding mechanisms to increase the use of alternative transportation.
- AQ 20.3** Reduce VMT and GHG emissions by improving circulation network efficiency.
- AQ 20.4** Reduce VMT and traffic through programs that increase carpooling and public transit use, decrease trips and commute times, and increase use of alternative-fuel vehicles.
- AQ 20.5** Reduce emissions from standard gasoline vehicles, through VMT, by requiring all new residential units to install circuits and provide capacity for electric vehicle charging stations.
- AQ 20.6** Reduce emissions from commercial vehicles, through VMT, by requiring all new commercial buildings, in excess of 162,000 square feet, to install circuits and provide capacity for electric vehicle charging stations.

Land Use-Related Objectives

- AQ 20.7** Reduce VMT through increased densities in urban centers and encouraging emphasis on mixed use to provide residential, commercial and employment opportunities in closer proximity to each other. Such measures will also support achieving the appropriate jobs-housing balance within the communities.
- AQ 20.8** Reduce VMT by increasing options for non-vehicular access through urban design principles that promote higher residential densities with easily accessible parks and recreation opportunities nearby.

Specific land use policies included in the General Plan would further serve to reduce potential air quality impacts. Additionally, the Air Quality Element of the General Plan includes education,

coordination, and outreach policies to reduce GHG emissions through voluntary efforts by the public and through programs developed in coordination with other agencies. The General Plan also includes Riverside County's Climate Action Plan (CAP), which contains further guidance on Riverside County's GHG inventory reduction goals, thresholds, policies, guidelines, and implementation programs, many of which have air quality benefits. As part of the General Plan development, CEQA analysis was provided to analyze the potential impacts of the construction and operation of future developments envisioned under the General Plan.

As included in the County of Riverside Environmental Impact Report (EIR) No. 521 for General Plan Amendment No. 960, several additional mitigation measures are required for projects in the General Plan area, beyond the land use and air quality policies included in the General Plan document. Mitigation measures required to reduce the potential air quality impacts of the General Plan include requiring future development projects to reduce dust emissions from construction sites through watering or the application of soil stabilizers, requiring the use of Tier 3 engines or better for construction equipment, and minimizing the use of portable generators during construction. Architectural coatings are required to be low in reactive organic gases, and hearths in new residential requirements are required to be energy-efficient natural gas appliances, rather than woodburning devices. Mitigation Measure 4.6.D-N1 requires the reduction of TACs in new developments through providing electrical outlets in the building design of loading docks, and on the outside of new structures for use with electrical landscaping equipment (minimum 20 percent of equipment used). Mitigation Measure 4.6.D-N2 requires minimum siting distances between potentially incompatible land uses, based on the recommendations of ARB and SCAQMD.¹⁴

Highway 74 Community Plan

The Highway 74 Community Plan proposes the following goals and policies related to air quality:

1. Encourage consolidation of parcels to promote better land use development and project design.
4. Development should be coordinated with Riverside Transit Agency (RTA) to ensure bus routes are identified and bus stops are provided to adequately serve community residents.
6. Development should promote a reduction of Vehicle Miles Traveled (VMT) and livable and resilient neighborhoods that provide housing, goods and services, open space, and multi-model transportation options within proximity to each other.
9. Developments should be encouraged to design and locate convenient pedestrian and bicycle connections, bus, or shuttle connections, that increase connections to adjacent and nearby communities and cities, businesses, parks and open space areas, and new transit access opportunities.

In addition to the policies discussed above, each neighborhood also has neighborhood-specific policies. Policies which may have air quality benefits are outlined below.

¹⁴ County of Riverside. 2015. Final Environmental Impact Report No. 521 for General Plan Update No. 960. Website: <https://planning.rctlma.org/General-Plan-Zoning/General-Plan/Riverside-County-General-Plan-2015/General-Plan-Amendment-No960-EIR-No521-CAP-February-2015>. Accessed February 23, 2022.

Neighborhood 1

This neighborhood presents opportunity to serve as an entry point from the City of Perris to the Highway 74 planning area, that provides a sense of uniqueness, and contains commercial and clean industry establishments, that support residential components that facilitate a “live, work, and play” environment.

Neighborhood 1 Policies

- N 1.2** Encourage complete streets, which include sidewalks, greenbelts, and trails to facilitate use by pedestrians and bicyclists where such facilities are well separated from parallel or cross through traffic to ensure pedestrian and cyclist safety.
- N 1.3** The County should work with RTA to address any deficiencies or disconnection of transit routes through the neighborhood.

Neighborhood 2

This neighborhood presents opportunity to serve as an entry point from the City of Elsinore to the Highway 74 planning area, that provides a sense of uniqueness, and contains commercial and clean industry establishments, that support residential components that facilitate a “live, work, and play” environment.

Neighborhood 2 Policies

- N 2.2** Encourage complete streets, which include sidewalks, greenbelts, and trails to facilitate use by pedestrians and bicyclists where such facilities are well separated from parallel or cross through traffic to ensure pedestrian and cyclist safety.

Neighborhood 3

This neighborhood presents the opportunity to provide local employment to residents. No Neighborhood 3 policies relate to air quality.

3.3.6 - Methodology

Model Selection and Guidance

The California Emissions Estimator Model (CalEEMod) version 2020.4.0 was used to estimate the proposed project’s construction and operation-related air pollutant emissions. The CalEEMod model was developed in cooperation with air districts throughout the State and is designated as a uniform platform for government agencies, land use planners, and environmental professionals to quantify potential criteria pollutant emissions associated with construction and operation from a variety of land uses.

Construction

Construction emissions can vary substantially from day to day, depending on the level of activity, the specific type of operation, and prevailing weather conditions. Construction emissions result from both on-site and off-site activities. On-site emissions consist of exhaust emissions from the activity levels of heavy-duty construction equipment, motor vehicle operation, and fugitive dust (mainly PM₁₀) from disturbed soil. Additionally, paving operations and application of architectural coatings

would release VOC emissions. Off-site emissions result from motor vehicle exhaust from delivery vehicles, worker traffic and road dust (PM₁₀ and PM_{2.5}).

Construction emissions are generally calculated as the product of an activity factor and an emission factor. The activity factor for construction equipment is a measure of how active a piece of equipment is and can be represented as the amount of material processed, elapsed time that a piece of equipment is in operation, horsepower of a piece of equipment used, or the amount of fuel consumed in a given amount of time. The emission factor relates the process activity to the amount of pollutant emitted. Examples of emission factors include grams of emissions per miles traveled and grams of emissions per horsepower-hour. The operation of a piece of equipment is tempered by its load factor which is the average power of a given piece of equipment while in operation compared with its maximum rated horsepower. A load factor of 1.0 indicates that a piece of equipment continually operates at its maximum operating capacity.

Construction Schedule and Activities

Development of the proposed project would generally commence beginning 2023. The construction phasing utilizes the CalEEMod default schedule based on the anticipated new land uses. Because the proposed project would consist of the development of approximately 17,299,049 square feet of building space, or approximately 397 acres (considering CalEEMod default square footage for residential land uses), the construction schedule for the proposed project utilized CalEEMod default activities and durations for a 400-acre project site. The start date for each construction activity was then assumed to be January 1, 2023, to identify concurrent emission generation from the potential overlapping of activities. Demolition was assumed to span the duration of Building Construction as it represents the demolition of all existing land uses through 2040. Refer to Appendix C for more information. Construction assumptions are based on CalEEMod defaults such as the construction equipment utilized for each construction activity and worker, vendor, and hauling trips. Table 3.3-7 presents the assumed construction schedule utilized in CalEEMod, and Table 3.3-8 presents the construction equipment list utilized in CalEEMod.

Table 3.3-7: Construction Schedule

Phase Name	Start Date	End Date	Days/Week	Total Days
Demolition	1/1/2023	12/22/2039	7	6,200
Site Preparation	1/1/2023	8/28/2023	7	240
Grading	1/1/2023	9/11/2024	7	620
Building Construction	1/1/2023	12/22/2039	7	6,200
Paving	1/1/2023	3/15/2024	7	440
Architectural Coating	1/1/2023	3/15/2024	7	440

Table 3.3-8: Construction Equipment

Phase Name	Off-Road Equipment Type	Equipment Amount	Usage Hours	Horsepower	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38

Phase Name	Off-Road Equipment Type	Equipment Amount	Usage Hours	Horsepower	Load Factor
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Operation

Operational emissions are generated by area, energy, and mobile sources once a project commences operation. While the different land uses and land use patterns envisioned by the proposed project will incrementally become operational each year through 2040, this analysis assesses the operational emissions generated by the full buildout of the proposed project as compared to the full buildout of the existing land uses and land use patterns as allowed by current land use designations and density allowances under the existing General Plan. As such, the proposed project and the “no project” scenarios were analyzed at full operation in 2040, the buildout horizon year for the proposed project. The major emission sources associated with project operation are summarized below.

Area Source Emissions

Area source emissions are generated principally from use of consumer products, cleaning supplies, architectural coatings (paints), landscape equipment, and hearths (fireplaces). Consumer products are various solvents used in non-industrial applications, which emit VOCs during their product use. “Consumer Product” means a chemically formulated product used by household and institutional consumers, including, but not limited, to detergents; cleaning compounds; polishes; floor finishes; cosmetics; personal care products; home, lawn, and garden products; disinfectants; sanitizers; aerosol paints; and automotive specialty products; but does not include other paint products, furniture coatings, or architectural coatings. The default emission factor developed for the CalEEMod

model was used. Paints release VOC emissions during application and drying. The buildings in the proposed project would be periodically repainted as warranted for maintenance needs. VOC emission estimation was based on CalEEMod. SCAQMD Rule 1113 was applied, which requires the VOC coating concentration of architectural coatings used for building envelopes to be no greater than 50 grams per liter of product (g/L). All other architectural coating VOC content values were left as CalEEMod defaults. Consistent with SCAQMD Rule 445, all fireplaces associated with residential uses were assumed to be natural gas hearths. The CalEEMod model estimates the landscaping equipment (e.g., leaf blowers, chainsaws, mowers) and emissions using the default assumptions in the model.

Energy Source Emissions

Energy source emissions result from on-site natural gas combustion for water and space heating purposes. Natural gas combustion associated with natural gas fueled fireplaces are categorized as area source emissions. Emissions generated from the off-site combustion of fuels for electricity generation are considered indirect emissions and are reported and regulated under different programs associated with that generation facility, such as the EPA's Acid Rain Program, Clean Air Interstate Rule, or Cross-State Air Pollution Rule. Indirect emissions resulting from off-site electricity generation are therefore not included in the direct emissions analysis contained herein.

Mobile Source Emissions

Urban Crossroads prepared a VMT Analysis for the proposed project, dated January 7, 2022 (Appendix H).¹⁵ As discussed in the VMT Analysis, reflecting projected 2040 data, buildout of the existing General Plan in 2040 would result in a daily VMT per resident of 22.71, and buildout of the proposed Specific Plan in 2040 would result in a daily VMT per resident of 20.88. The VMT study also provided daily VMT per employee; however, the number of employees that would be projected in 2040 is unknown. To provide a conservative estimate, the CalEEMod default trip lengths and trip generation rates were retained in the model for both the construction modeling, and for the modeling of estimated operational emissions at full project buildout in 2040.

3.3.7 - Thresholds of Significance

According to Appendix G, Environmental Checklist of the State CEQA Guidelines, as well as Riverside County's environmental checklist, air quality impacts resulting from the implementation of the proposed project would be considered significant if the project would:

- a) Conflict with or obstruct implementation of the applicable air quality plan;
- b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors);
- c) Expose sensitive receptors, which are located within one (1) mile of the project site, to substantial pollutant concentrations; or

¹⁵ Urban Crossroads. 2022. Riverside County Highway 74 Business Corridor Vehicle Miles Traveled (VMT) Analysis. January 7.

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

Regional Air Quality Significance Thresholds

The SCAQMD has established regional significance thresholds for VOC, NO_x, SO_x, CO, PM₁₀, and PM_{2.5}. Projects located within the SoCAB with construction and operational emissions in excess of any of the thresholds presented in Table 3.3-9 would be considered significant.

Table 3.3-9: SCAQMD Regional Thresholds

Pollutant	Criteria Pollutant Mass Daily Thresholds (lbs/day)	
	Construction	Operation
NO _x	100	55
VOC	75	55
PM ₁₀	150	150
PM _{2.5}	55	55
SO _x	150	150
CO	550	550

Notes:
 CO = carbon monoxide
 lbs = pounds
 NO_x = nitrogen oxides
 PM₁₀ = particulate matter with an aerodynamic resistance diameter of 10 micrometers or less;
 PM_{2.5} = particulate matter with an aerodynamic resistance diameter of 2.5 micrometers
 SO_x = Sulfur oxides
 VOC = Volatile Organic Compounds
 Source of regional thresholds: South Coast Air Quality Management District (SCAQMD). 2019. South Coast AQMD Air Quality Significance Thresholds. April. Website: <http://www.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf?sfvrsn=2>. Accessed February 23, 2021.

Localized Significance Thresholds

The SCAQMD recommends that all air quality analyses include a localized assessment of both construction and operational emissions on nearby sensitive receptors. The SCAQMD has developed Localized Significance Thresholds (LST) to be implemented at the discretion of local public agencies acting as a lead agency pursuant to CEQA. LSTs represent maximum mass emissions from a project site that would not result in pollutant concentrations that exceed NAAQS or CAAQS. LSTs are based on ambient concentrations of that pollutant within the Source Receptor Area (SRA)¹⁶ where a project is located, distance to the nearest sensitive receptor, and size of the project site, all of which are the primary factors that influence pollutant concentrations.

¹⁶ A source area is that area in which contaminants are discharged and a receptor area is that area in which the contaminants accumulate and are measured. Any of the areas can be a source area, a receptor area, or both a source and receptor area.

The SCAQMD provides the Final Localized Significance Threshold Methodology (dated June 2003, revised 2009) for guidance.¹⁷ The LST Methodology assists lead agencies in analyzing localized air quality impacts, particularly CO, NO_x, PM₁₀, and PM_{2.5}. The SCAQMD provides LST mass rate lookup tables for projects with active construction areas that are less than or equal to 5 acres, providing specific thresholds for 1-acre, 2-acre, and 5-acre project sites. These LST lookup values are provided to be used as a screening tool for identifying whether a more detailed analysis is needed for identifying localized impacts.

Table 3.3-10 shows the LSTs for NO₂, CO, PM₁₀, and PM_{2.5} for both construction and operational activities for with sensitive receptors 25 meters away. The planning area is partially within SRA 24, Perris Valley, and partially within SRA 25, Lake Elsinore. As such, LSTs for both SRAs are displayed in the table below. If a project exceeds an applicable LST, then the SCAQMD recommends that project-specific air quality modeling be performed.

Table 3.3-10: SCAQMD Localized Significance Thresholds

Pollutant	Criteria Pollutant Mass Daily Thresholds (lbs/day)	
	Construction	Operation
Source Receptor Area 24—Perris Valley		
NO ₂ /NO _x	270	270
PM ₁₀	13	4
PM _{2.5}	8	2
CO	1,577	1,700
Source Receptor Area 25—Lake Elsinore		
NO ₂ /NO _x	371	270
PM ₁₀	13	4
PM _{2.5}	8	2
CO	1,965	1,577
Notes: CO = carbon monoxide lbs = pounds LST = localized significance threshold NO _x = nitrogen oxides PM ₁₀ = particulate matter with an aerodynamic resistance diameter of 10 micrometers or less; PM _{2.5} = particulate matter with an aerodynamic resistance diameter of 2.5 micrometers SO _x = Sulfur oxides VOC = Volatile Organic Compounds Source: South Coast Air Quality Management District (SCAQMD). 2009. South Coast AQMD Air Quality Significance Thresholds. October 21. Website: http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/appendix-c-mass-rate-lst-look-up-tables.pdf?sfvrsn=2 . Accessed February 23, 2021.		

¹⁷ South Coast Air Quality Management District (SCAQMD). 2009. Localized Significance Thresholds. Website: <http://www.aqmd.gov/home/rules-compliance/ceqa/air-quality-analysis-handbook/localized-significance-thresholds>. Accessed February 23, 2022.

In developing the above regional and localized significance thresholds, the SCAQMD considers the emission levels for which a project's emissions would be significant, resulting in adverse air quality impacts to the region's existing air quality conditions. Known health effects related to ozone include worsening of bronchitis, asthma, and emphysema and a decrease in lung function. Health effects associated with PM include premature death of people with heart or lung disease, nonfatal heart attacks, irregular heartbeat, decreased lung function, and increased respiratory symptoms. Reducing emissions would further contribute to reducing possible health effects related to criteria air pollutants. However, for projects that exceed the emissions thresholds shown in Table 3.3-9 and Table 3.3-10, it is speculative to determine how exceeding regional thresholds would affect the number of days the region is in nonattainment—as mass emissions are not linearly correlated with concentrations of emissions—or how many additional individuals in the air basin would be affected by the health effects cited above.

In *Sierra Club v. County of Fresno (Friant Ranch, LP)* (2018) 6 Cal.5th 502, 510, 517-522, the California Supreme Court held generally that an EIR should “make a reasonable effort to substantively connect a project's air quality impacts to likely health consequences.” A possible example of such a connection would be to calculate a project's “impact on the days of nonattainment per year” (*Id.* at pp. 521). But the court recognized that there might be scientific limitations on an agency's ability to make the connection between air pollutant emissions and public health consequences in a credible fashion, given limitations in technical methodologies (*Id.* at pp. 520-521). Thus, the court acknowledged that another option for an agency preparing an EIR might be “to explain why it was not feasible to provide an analysis that connected the air quality effects to human health consequences” (*Id.* at p. 522).

At present, the SCAQMD has not provided methodology to assist local governments in reasonably and accurately assessing the specific connection between mass emissions of ozone precursors (e.g., ROG and NO_x) and other pollutants of concern on a regional basis and any specific effects on public health or regional air quality concentrations that might result from such mass emissions. The County has therefore concluded that it is not feasible to predict how mass emissions of pollutants of regional concern from the proposed project could lead to specific public health consequences, changes in pollutant concentrations, or changes in the number of days for which the SoCAB will be in nonattainment for regional pollutants.

On the other hand, it is technically feasible to predict with reasonable accuracy the potential localized health consequences of localized pollutants such as TACs and PM. Note that construction and operational health risk assessments can only be conducted at a project level; therefore, quantification of health risk is not applicable for this program-level environmental analysis. Meanwhile, as discussed in the following Section 3.3.8, Impact AIR-6c, construction of the proposed project would be implemented over a period of 17 years, and a range of measures would be required to ensure that individual development accommodated under the proposed project would limit the construction and operational health risks to nearby sensitive receptors under thresholds determined by SCAQMD.

Carbon Monoxide Hotspot Thresholds

The largest contributor of carbon monoxide (CO) emissions during long-term operations of a residential development project is typically from motor vehicles. A CO hotspot represents a condition wherein high concentrations of CO may be produced by motor vehicles accessing a congested traffic intersection under heavy traffic volume conditions.

Since the first regulation of CO emissions from vehicles (model year 1966) in California, vehicle emissions standards for CO applicable to light duty vehicles have decreased tailpipe CO emissions by 96 percent for automobiles, and cold weather CO standards have been implemented, effective for the 1996 model year. With the turnover of older vehicles, introduction of cleaner fuels and implementation of control technology on industrial facilities, CO concentrations in the SoCAB have steadily declined.

The analysis prepared for CO attainment in the SoCAB by the SCAQMD can help evaluate the potential for CO exceedances in the region. CO attainment was thoroughly analyzed as part of the SCAQMD's 2003 2003 AQMP and the 1992 Federal Attainment Plan for Carbon Monoxide (1992 CO Plan). As discussed in the 1992 CO Plan and subsequent plan updates, peak carbon monoxide concentrations in the SoCAB are due to unusual meteorological and topographical conditions, and not of congestion at a particular intersection.¹⁸ Considering the region's unique meteorological conditions and the increasingly stringent CO emissions standards, CO modeling was performed as part of 1992 CO Plan and subsequent plan updates and air quality management plans. In the 1992 CO Plan, a CO hot spot analysis was conducted for four busy intersections in Los Angeles at the peak morning and afternoon time periods. The intersections evaluated included Long Beach Boulevard and Imperial Highway (Lynwood); Wilshire Boulevard and Veteran Avenue (Westwood); Sunset Boulevard and Highland Avenue (Hollywood); and La Cienega Boulevard and Century Boulevard (Inglewood). These analyses did not predict a violation of CO standards. The busiest intersection evaluated was that at Wilshire Boulevard and Veteran Avenue, which has a daily traffic volume of approximately 100,000 vehicles per day. These modeling results and the determinations of this CO hot spot analysis is utilized in this analysis as the basis for determining whether the proposed project would result in a CO hot spot at impacted intersections and roadway segments.

Health Risk Significance Thresholds

In addition to the LSTs established for criteria pollutants, the SCAQMD has also defined health risk significance thresholds. For TACs, a project would result in a potentially significant impact if it were to result in the exposure of sensitive receptors within 1 mile of a project site to substantial pollutant concentrations. "Substantial" is taken to mean that the individual cancer risk exceeds a threshold considered to be a prudent risk management level.

The SCAQMD has defined several health risk significance thresholds that it recommends Lead Agencies use in assessing a project's health risk impacts. In general, risk depends on the following factors:

¹⁸ South Coast Air Quality Management District (SCAQMD). 2005. Carbon Monoxide Redesignation Request and Maintenance Plan. Website: https://ww3.arb.ca.gov/planning/sip/sccosip05/sccosip_redesig_mplan.pdf. Accessed February 23, 2022.

- Identification of the TACs that may be present in the air;
- Estimation of the amount of TACs released from all sources, or the source of particular concern, using air samples or emission models;
- Estimation of concentrations of TACs in air in the geographic area of concern by using dispersion models with information about emissions, source locations, weather, and other factors; and
- Estimation of the number of people exposed to different concentrations of the TAC at different geographic locations.

TACs can also cause chronic (long-term) and acute (short-term) related non-cancer illnesses such as reproductive effects, respiratory effects, eye sensitivity, immune effects, kidney effects, blood effects, central nervous system effects, birth defects, or other adverse environmental effects. Risk characterization for non-cancer health hazards from TACs is expressed as a hazard index (HI). The HI is a ratio of the predicted concentration of the proposed project's emissions to a concentration considered acceptable to public health professionals, termed the Reference Exposure Level (REL).

The SCAQMD has established the following project-specific health risk significance thresholds:

- Maximum Incremental Cancer Risk ≥ 10 in 1 million
- Hazard Index (project increment) ≥ 1.0

A significant impact would occur if a project's impacts exceeded any of these thresholds. When the proposed project, in combination with one or more other projects exceeds the project-specific significance thresholds, the project is considered by the SCAQMD to be cumulatively considerable. This is the reason project-specific and cumulative significance thresholds are the same. Conversely, projects that do not exceed the project-specific thresholds are generally not considered to be cumulatively significant.

Odors

Nuisance odors from land uses in the SoCAB are regulated under SCAQMD Rule 402, Nuisance, which states:

A person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause injury or damage to business or property. The provisions of this rule shall not apply to odors emanating from agricultural operations necessary for the growing of crops or the raising of fowl or animals.

The SCAQMD does not provide a suggested screening distance for odor-generating land uses or operations; however, the San Joaquin Valley Air Pollution Control District has screening distances for common odor sources, which are used herein as a guide to assess whether the proposed facilities

could generate odors which could affect a substantial number of people. Projects that would site one of the listed land uses farther than the applicable screening distances from an existing receptor would not likely have a significant impact. These screening distances by type of odor source are listed in Table 3.3-11.

Table 3.3-11: Screening Levels for Potential Odor Sources

Odor Source	Screening Distance
Wastewater Treatment Facilities	2 miles
Sanitary Landfill	1 mile
Transfer Station	1 mile
Composting Facility	1 mile
Petroleum Refinery	2 miles
Asphalt Batch Plant	1 mile
Chemical Manufacturing	1 mile
Fiberglass Manufacturing	1 mile
Painting/Coating Operations (e.g., auto body shop)	1 mile
Food Processing Facility	1 mile
Feed Lot/Dairy	1 mile
Rendering Plant	1 mile
Source: San Joaquin Valley Air Pollution Control District (Valley Air District). 2015. Guidance for Assessing and Mitigated Air Quality Impacts.	

3.3.8 - Project Impacts and Mitigation Measures

This section discusses potential impacts associated with the development of the proposed project and provides mitigation measures where appropriate.

Consistency with Air Quality Management Plan

Impact AIR-6a: **The project would conflict with or obstruct implementation of the applicable air quality plan.**

Impact Analysis

To evaluate whether or not a project conflicts with or obstructs the implementation of the applicable air quality plan (2022 AQMP for the SoCAB), the SCAQMD CEQA Air Quality Handbook states that there are two key indicators. These indicators are identified by the criteria discussed below.

1. **Indicator:** Whether the project will not result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations or delay timely attainment of air quality standards or the interim emission reductions specified in the AQMP.

2. **Indicator:** According to Chapter 12 of the SCAQMD CEQA Air Quality Handbook, the purpose of the General Plan consistency findings is to determine whether a project is inconsistent with the growth assumptions incorporated into the air quality plan, and thus, whether it would interfere with the region's ability to comply with the NAAQS and CAAQS.

Considering the recommended criteria in the SCAQMD's 1993 Handbook, this analysis uses the following criteria to address this potential impact:

- **Step 1:** Project's contribution to air quality violations (SCAQMD's first indicator)
- **Step 2:** Assumptions in the AQMP (SCAQMD's second indicator)
- **Step 3:** Compliance with applicable emission control measures in the AQMPs

Step 1: Project's Contribution to Air Quality Violations

Step 1 represents an assessment of the overall impacts associated with the proposed project. As shown in Impacts AIR-2 through AIR-4, the proposed project would generate regional or localized construction or operational emissions that would exceed SCAQMD's thresholds of significance. The proposed project would be potentially significant under Criteria 1.

Step 2: Assumptions in AQMP

Step 2 examines the proposed project's consistency with assumptions made in the AQMP. The AQMP is based on land use patterns and forecasts contained in local general plans and other land use planning documents. Therefore, it is reasonable to conclude that if a project is consistent with the applicable general plan land use designation, and if the general plan was adopted prior to the applicable AQMP, then the growth of VMT and/or population generated by proposed project would be consistent with the growth in VMT and population assumed within the AQMP.

The proposed project includes a General Plan Amendment (GPA No. 1205) and Zone Consistency Program to guide the development of residential neighborhoods of varying densities, commercial retail, mixed use, light industrial, business park, public facilities, rural, open space, and recreation areas. Existing land use designations would be updated as part of the proposed project, which would alter the General Plan Foundations primarily from the Rural and Rural Community Foundations to Community Development and corresponding land use designations. The proposed project would also alter other land use designations within their current Foundation Component and provide guiding policies that support the modification of the planning area's structure. As compared to the existing General Plan, the proposed project would lead to an increase of the following uses:

- Approximately 3,970 multi-family residential dwelling units¹⁹.
- Approximately 2,081,150 square feet of commercial retail uses.
- Approximately 1,506,217 square feet of business park uses.
- Approximately 740,903 square feet of light industrial uses.
- Approximately 21.6 acres of public facility uses.
- Approximately 4.28 acres of open space uses.

¹⁹ The proposed project would lead to a decrease of approximately 383 single-family detached residential units (<5 dwelling units per acre [DU/acre]). However, given the potential increase of 3,970 multi-family dwelling units listed above, the proposed project would lead to a net increase of 3,587 residential units.

CEQA Guidelines Section 15206(b) states that a proposed project is of statewide, regional, or area-wide significance if the project is a residential development or more than 500 dwelling units or a commercial office building of 250,000 square feet or more or that employs 1,000 or more employees. Based on this criteria, the proposed project is of statewide, regional, or area-wide significance. Additionally, the proposed project has the potential to significantly alter the demographic projections beyond what is accounted for in the current AQMP. Since the proposed project would include a General Plan Amendment, the proposed project would not be consistent with the growth assumptions within the current AQMP. The proposed project would be potentially significant under Criteria 2.

Step 3: Control Measures

Step 3 is an analysis of the proposed project's compliance with applicable emission control measures included in the AQMP. A detailed description of rules and regulations that apply to this project is provided in Section 3.3.5, South Coast Air Quality Management District. The General Plan Policy AQ 4.6 also requires compliance with applicable air district rules and control measures.

As discussed in the Regulatory Framework section of this document, additional policies included as part of the General Plan, and mitigation measures required as part of the EIR for the most recent General Plan Update, would also reduce the impacts of both construction and operational emissions from the proposed project.

General Plan Policy AQ 4.9 requires compliance with SCAQMD Rules 403 and 403.1, and the support of appropriate future measures to reduce fugitive dust emanating from construction sites, and Policy AQ 4.7 states that the County shall, "to the greatest extent possible, require every project to mitigate any of its anticipated emissions which exceed allowable emissions as established by the SCAQMD, MDAQMD, SCAB, the Environmental Protection Agency and the California Air Resources Board."

The proposed project would comply with all applicable SCAQMD rules and regulations. Therefore, the proposed project complies with this criterion.

Summary

In summary, the proposed project would comply with all applicable SCAQMD rules and regulations. As discussed above, the proposed land uses would allow for more emissions-intensive land uses relative to the existing land use designations. The proposed project includes objectives that emphasizes development of mixed-use areas and increased development intensity along Highway 74. The neighborhoods envisioned under the proposed project would permit daily services and amenities in addition to residences and businesses to be in proximity of each other. In addition to creating and emphasizing mixed-use areas, the proposed project also outlines improvements to active and public transit facilities, such as encouraging convenient pedestrian and bicycle connections, bus, or shuttle connections in the planning area. Development of mixed-use areas and improvement of active and public transit infrastructure would contribute to reducing vehicle trips and vehicle miles traveled.

However, the proposed project would represent a substantial increase in emissions compared to existing conditions. As discussed in Impact AIR-6b, implementation of Mitigation Measures (MM) AIR-6a-1 through MM AIR-6a-15 would be required to reduce regional and localized emissions to the extent feasible. However, the estimated construction emissions and long-term emissions generated under full buildout of the proposed project would exceed the SCAQMD's regional significance thresholds (see Table 3.3-9) and would cumulatively contribute to the nonattainment designations in the SoCAB. In addition, implementation of the proposed project would contribute to exceedances of the current population and employment estimates for the planning area. Therefore, the proposed project would be considered inconsistent with the AQMP, resulting in a significant impact in this regard.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

Measures required to reduce the impact of construction-related emissions from future development projects included in the planning area include MM AIR-6a -1 – MM AIR-6a-7.

- MM AIR-6a-1** To identify potential implementing development project-specific impacts resulting from construction activities, proposed development projects that are subject to CEQA shall have construction-related air quality impacts analyzed using the latest available California Emissions Estimator Model (CalEEMod), or other analytical method determined in conjunction with the SCAQMD. The results of the construction-related air quality impacts analysis shall be included in the development project's CEQA documentation. To address potential localized impacts, the air quality analysis may incorporate SCAQMD's Localized Significance Threshold analysis or other appropriate analyses as determined in conjunction with SCAQMD. If such analyses identify potentially significant regional or local air quality impacts, the City shall require the incorporation of appropriate mitigation to reduce such impacts.
- MM AIR-6a-2** As part of a standard building permit submittal, prior to the issuance of building or grading permits, the project applicant shall provide the County of Riverside with documentation demonstrating that project construction will use "super-compliant" low-volatile organic compound (VOC) Architectural Coatings, as defined by SCAQMD, with VOC content of 10 grams per liter (g/L) or less.
- MM AIR-6a-3** Each individual implementing development project shall apply paints using either high volume low pressure (HVLP) spray equipment with a minimum transfer efficiency of at least 65 percent or other application techniques with equivalent or higher transfer efficiency.
- MM AIR-6a-4** As part of a standard grading permit submittal, the project applicant shall submit documentation to the County of Riverside that demonstrates that all off-road construction equipment in excess of 50 horsepower is equipped with engines

meeting the United States Environmental Protection Agency (EPA) Tier IV Final off-road engine emission standards or cleaner. The construction contractor shall maintain records concerning its efforts to comply with this requirement during construction, including equipment lists. Off-road equipment descriptions and information may include but are not limited to equipment type, equipment manufacturer, equipment identification number, engine model year, engine certification (Tier rating), horsepower, and engine serial number. The project applicant and/or construction contractor shall submit the construction operations plan and records of compliance to the County of Riverside.

If engines that comply with Tier IV Final off-road emission standards are not commercially available, then the construction contractor shall use the next cleanest piece of off-road equipment (e.g., Tier IV Interim) available. For purposes of this mitigation measure, “commercially available” shall mean the availability of Tier IV Final engines taking into consideration factors such as (i) critical-path timing of construction; and (ii) geographic proximity to the project site of equipment. The contractor can maintain records for equipment that is not commercially available by providing letters from at least two rental companies for each piece of off-road equipment where the Tier IV Final engine is not available.

- MM AIR-6a-5** Building and grading permits shall include a restriction that limits idling of construction equipment on-site to no more than 5 minutes.
- MM AIR-6a-6** Electricity from power poles shall be used instead of temporary diesel or gasoline-powered generators to reduce associated emissions. Approval will be required by the County of Riverside prior to issuance of grading permits.
- MM AIR-6a-7** Prior to issuance of any grading permits, the developer shall provide a traffic control plan to the County of Riverside that describes in detail the location of equipment staging areas, stockpiling/storage areas, construction parking areas, safe detours around the project construction site, as well as provide temporary traffic control (e.g., flagperson) during construction-related truck hauling activities. The traffic control plan is intended to minimize traffic congestion and delays that increase idling and acceleration emissions. The applicant shall maintain one copy on-site in the construction trailer to the satisfaction of the County of Riverside.

Measures designed to reduce the impact of operational emissions from future projects included in the planning area, especially from light industrial uses including stationary sources and warehouses, include MM AIR-6a-8 – MM AIR-6a-15.

- MM AIR-6a-8** To identify potential implementing development project-specific impacts resulting from operational activities, proposed development projects that are subject to CEQA shall have long-term operational-related air quality impacts analyzed using the latest available California Emissions Estimator Model (CalEEMod), or other analytical method determined by the County of Riverside as lead agency in conjunction with

the SCAQMD. The results of the operational-related air quality impacts analysis shall be included in the development project's CEQA documentation. To address potential localized impacts, the air quality analysis may incorporate SCAQMD's Localized Significance Threshold analysis, CO Hot Spot analysis, or other appropriate analyses as determined by the County of Riverside in conjunction with SCAQMD. If such analyses identify potentially significant regional or local air quality impacts, the County shall require the incorporation of appropriate mitigation to reduce such impacts.

- MM AIR-6a-9** To identify potential implementing development project-specific impacts resulting from the use of diesel trucks, proposed implementing development projects that include an excess of 10 dock doors for a single building, a minimum of 100 truck trips per day, 40 truck trips with Transport Refrigeration Units (TRUs) per day, or TRU operations exceeding 300 hours per week, and that are subject to CEQA and are located adjacent to sensitive land uses; shall have a facility-specific Health Risk Assessment performed to assess the diesel particulate matter impacts from mobile source traffic generated by that implementing development project. The results of the Health Risk Assessment shall be included in the CEQA documentation for each implementing development project.
- MM AIR-6a-10** In order to promote alternative fuels, and help support "clean" truck fleets, the developer/successor-in-interest shall provide building occupants and businesses with information related to SCAQMD's Carl Moyer Program, or other state programs that restrict operations to "clean" trucks, such as 2007 or newer model year or 2010 compliant vehicles and information including, but not limited to, the health effect of diesel particulates, benefits of reduced idling time, California Air Resource Board (ARB) regulations, and importance of not parking in residential areas. If trucks older than 2007 model year will be used at a facility with three or more dock-high doors, the developer/ successor-in-interest shall require, within one year of signing a lease, future tenants to apply in good-faith for funding for diesel truck replacement/retrofit through grant programs such as the Carl Moyer, Prop 1B, Voucher Incentive Program (VIP), Hybrid and Zero-Emission Truck and Bus Voucher Incentive Project (HVIP), and Surplus Off-Road Opt-In for NO_x (SOON) funding programs, as identified on SCAQMD's website (<http://www.aqmd.gov>). Tenants will be required to use those funds, if awarded.
- MM AIR-6a-11** Prior to the approval of each implementing development project, the Riverside Transit Agency (RTA) shall be contacted to determine whether the RTA has plans for the future provision of bus routing within any street that is adjacent to the implementing development project that would require bus stops at the project access points. If the RTA has future plans for the establishment of a bus route that will serve the implementing development project, road improvements adjacent to the project site shall be designed to accommodate future bus turnouts at locations established through consultation with the RTA. RTA shall be responsible for the construction and maintenance of the bus stop facilities. The area set aside for bus

turnouts shall conform to RTA design standards, including the design of the contact between sidewalks and curb and gutter at bus stops and the use of Americans with Disabilities Act (ADA)-compliant paths to the major building entrances in the project.

MM AIR-6a-12 In order to reduce energy consumption from the individual implementing development projects, applicable plans (e.g., electrical plans, improvement maps) submitted to the County shall include the installation of energy-efficient street lighting throughout the project site. These plans shall be reviewed and approved by the applicable County Department prior to conveyance of applicable streets.

MM AIR-6a-13 Each implementing development project shall be encouraged to implement, at a minimum, an increase in each building's energy efficiency 15 percent beyond Title 24, and reduce indoor water use by 25 percent. All requirements will be documented through a checklist to be submitted to the County of Riverside prior to issuance of building permits for the implementing development project with building plans and calculations.

MM AIR-6a-14 Prior to issuance of building permits for non-single-family residential and mixed-use residential development projects in the planning area, the project applicant shall indicate on the building plans that the following features have been incorporated into the design of the building(s). Proper installation of these features shall be verified by the County of Riverside prior to the issuance of a Certificate of Occupancy.

- Electric vehicle charging shall be provided as specified in Section A4.106.8.2 (Residential Voluntary Measures) of the California Green Building Standards Code (CALGreen).
- Bicycle parking shall be provided as specified in Section A4.106.9 (Residential Voluntary Measures) of the CALGreen Code.

MM AIR-6a-15 Prior to the issuance of building permits for nonresidential development projects in the planning area, project applicants shall indicate on the building plans that the following features have been incorporated into the design of the building(s). Proper installation of these features shall be verified by the County of Riverside prior to the issuance of a Certificate of Occupancy.

- For buildings with more than 10 tenant-occupants, changing/shower facilities shall be provided as specified in Section A5.106.4.3 (Nonresidential Voluntary Measures) of the California Green Building Standards Code (CALGreen).
- Preferential parking for low-emitting, fuel-efficient, and carpool/van vehicles shall be provided as specified in Section A5.106.5.1 (Nonresidential Voluntary Measures) of the CALGreen Code.
- Facilities shall be installed to support future electric vehicle charging at each nonresidential building with 30 or more parking spaces. Installation shall be

consistent with Section A5.106.5.3 (Nonresidential Voluntary Measures) of the CALGreen Code.

Level of Significance After Mitigation

Components of and improvements proposed under the proposed project would contribute to minimize criteria air pollutant emissions from transportation and energy use. However, given the potential increase in growth and associated increase in criteria air pollutant emissions, the project would continue to be potentially inconsistent with the assumptions in the AQMP. Therefore, Impact AIR-1 would remain significant and unavoidable.

Cumulative Impacts

Impact AIR-6b: The project would 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.

Impact Analysis

This impact is related to the cumulative effect of a project's regional criteria pollutant emissions.

By its nature, air pollution is largely a cumulative impact resulting from emissions generated over a large geographic region. The nonattainment status of regional pollutants is a result of past and present development within the air basin, and this regional impact is a cumulative impact. In other words, new development projects (such as the proposed project) within the air basin would contribute to this impact only on a cumulative basis. No single project would be sufficient in size, by itself, to result in nonattainment of regional air quality standards. Instead, a project's emissions may be individually limited, but cumulatively considerable when taken in combination with past, present, and future development projects. All new development that would result in an increase in air pollutant emissions above those assumed in regional air quality plans would contribute to cumulative air quality impacts.

The cumulative analysis focuses on whether a specific project would result in cumulatively considerable emissions. According to Section 15064(h)(4) of the State CEQA Guidelines, the existence of significant cumulative impacts caused by other projects alone does not constitute substantial evidence that the project's incremental effects would be cumulatively considerable.

Rather, the determination of cumulative air quality impacts for construction and operational emissions is based on whether the project would result in regional emissions that exceed the SCAQMD regional thresholds of significance for construction and operations on a project level. Projects that generate emissions below the SCAQMD significance thresholds would be considered consistent with regional air quality planning efforts would not generate cumulatively considerable emissions.

The nonattainment regional pollutants of concern are ozone, PM₁₀ and PM_{2.5}. Ozone is a regional pollutant formed by a photochemical reaction in the atmosphere and not directly emitted into the air. Ozone precursors, such as VOC and NO_x, react in the atmosphere in the presence of sunlight to form ozone. Therefore, the SCAQMD ozone threshold is based on the emissions of the ozone precursors VOC and NO_x. This impact section includes analysis of, and significance determinations for, those pollutants.

The project’s regional construction and operational emissions, which include both on- and off-site emissions, are evaluated separately below. The concentration and operational emissions from the proposed project were estimated using the CalEEMod Version 2020.4.0.

Construction Emissions

Construction emissions result from on-site and off-site activities. On-site emissions principally consist of exhaust emissions from the heavy-duty off-road construction equipment, on-site motor vehicle operation, and fugitive dust from disturbed soil. Off-site emissions are caused by motor vehicle exhaust from deliver and haul truck vehicles, work traffic, and road dust (mainly PM_{2.5} and PM₁₀). The majority of this fugitive dust will remain localized and will limited to the atmosphere around the project site. However, the potential for off-site impacts from fugitive dust exists unless control measures are implemented to reduce the particulate emissions from this source prior to leaving the project site.

Construction activities associated with buildout of the proposed project are anticipated to occur sporadically over approximately 17 years. Buildout would consist of multiple smaller projects, each having its own construction timeline and activities. Development of multiple properties could occur at the same time. However, there is no defined development schedule for these future projects at this time. For this analysis, the estimate of maximum daily emissions is based on a conservative scenario, where several construction projects occur at one time, and all construction phases overlap. Table 3.3-12 shows the unmitigated daily construction emissions for future development projects envisioned under the proposed project. The table shows the highest daily emissions that would be generated over the anticipated development period.

Table 3.3-12: Construction Maximum Daily Regional Emissions—Unmitigated

Construction Activity		Mass Daily Emissions (pounds per day)					
		VOC	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
Construction Year 2023	Total	267.76	210.98	513.19	1.61	168.22	54.96
Construction Year 2024	Total	262.10	176.29	468.59	1.54	146.80	43.36
Construction Year 2025	Total	33.62	124.29	342.07	1.24	115.57	32.44
Construction Year 2026	Total	31.89	121.98	324.26	1.21	115.54	32.41
Construction Year 2027	Total	30.32	119.90	309.00	1.18	115.51	32.39
Construction Year 2028	Total	28.92	118.20	296.30	1.15	115.49	32.36
Construction Year 2029	Total	27.58	116.70	285.26	1.13	115.46	32.34
Construction Year 2030	Total	26.26	101.42	275.41	1.12	114.55	31.53
Construction Year 2031	Total	25.07	100.75	269.51	1.10	114.52	31.49
Construction Year 2032	Total	23.99	99.74	262.33	1.08	114.50	31.47
Construction Year 2033	Total	23.02	98.89	256.17	1.07	114.48	31.46
Construction Year 2034	Total	22.14	98.11	250.63	1.06	114.46	31.44
Construction Year 2035	Total	21.02	93.81	245.66	1.05	114.26	31.24

Construction Activity		Mass Daily Emissions (pounds per day)					
		VOC	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
Construction Year 2036	Total	21.02	93.81	245.66	1.05	114.26	31.24
Construction Year 2037	Total	21.02	93.81	245.66	1.05	114.26	31.24
Construction Year 2038	Total	21.02	93.81	245.66	1.05	114.26	31.24
Construction Year 2039	Total	21.02	93.81	245.66	1.05	114.26	31.24
Maximum Daily Emissions		267.76	210.98	513.19	1.61	151.56	47.27
SCAQMD Air Quality Significance Thresholds		75	100	550	150	150	55
Exceed Threshold?		Yes	Yes	No	No	Yes	No
Notes: CO = carbon monoxide NO _x = oxides of nitrogen PM ₁₀ = particulate matter with an aerodynamic resistance diameter of 10 micrometers or less. PM _{2.5} = particulate matter with an aerodynamic resistance diameter of 2.5 micrometers VOC = Volatile Organic Compounds The PM ₁₀ and PM _{2.5} emissions reflect the exhaust and “mitigated” fugitive dust emissions in accordance with SCAQMD Rule 403. All emissions are drawn from the greatest amount between the summer and winter modeling output files. Source of emissions: Appendix C.							

As shown in Table 3.3-12, construction activities associated with development of the project could potentially exceed the SCAQMD regional threshold for VOC, NO_x, and PM₁₀. The primary source of NO_x emissions is vehicle and construction equipment exhaust. NO_x is a precursor to the formation of both O₃ and particulate matter (PM₁₀ and PM_{2.5}). VOC is a precursor to the formation of O₃. PM₁₀ emissions primarily occur as fugitive dust due to disturbed soil, and road dust. Project-related emissions would contribute to the O₃, NO₂, PM₁₀, and PM_{2.5} nonattainment designations of the SoCAB. As previously discussed, existing Riverside County General Plan policies and mitigation measures required as a part of the most recent General Plan Update EIR would help minimize construction emissions from projects in the planning area. To further reduce the impacts of future development projects envisioned under the proposed project, MM AIR-6a-1 through MM AIR-6a-7 are required. These mitigation measures will reduce emissions of VOCs, NO_x, PM₁₀, and PM_{2.5} to the extent feasible, however, due to the size of the proposed project and the potential for overlapping construction activities, future development projects could still potentially exceed the SCAQMD regional thresholds, even with the implementation of mitigation. Therefore, project-related construction activities would result in significant regional air quality impacts.

Operational Emissions

Buildout of the proposed project would result in direct and indirect criteria air pollutant emissions from area, energy, and mobile sources. Area sources would include activities such as landscape maintenance and occasional architectural coatings. Energy sources would include electricity and natural gas combustion for space and water heating. Mobile sources would include vehicle trips associated with passenger cars. As previously discussed, the SCAQMD regional emission significance thresholds were used to determine the project’s impact significance. The proposed Highway 74 Community Plan policies emphasize development of mixed-use areas and improvements to active

and public transit facilities that would contribute to reducing vehicle trips and VMT. As an example, the proposed project would create mixed use areas, and would integrate three distinct neighborhood commercial development areas that would provide daily services and amenities for the nearby residences and businesses.

Overall, the general proposed guiding principles and objectives for land use planning and the proposed land use changes and transportation improvements would contribute to reducing vehicle trips and VMT per service population to the extent feasible. Furthermore, existing General Plan policies and required mitigation measures would further reduce emissions from the operation of future projects in the planning area. However, when compared to the existing land uses, due to the magnitude of planned growth in the planning area, implementation of the proposed project would generate a net increase of approximately 558,065 in total regional VMT, and a slight increase in Average Daily Traffic (ADT) (see Appendix H). As the proposed project would become fully operational in 2040, Table 3.3-13 shows the net daily operational emissions for full buildout of the proposed project in 2040.

Table 3.3-13: Project Net Daily Operational Emissions (2040)

Emissions Source	Pounds per Day					
	VOC	NO _x	CO	SO _x	PM ₁₀ (Total)	PM _{2.5} (Total)
Area	402.39	140.57	787.37	0.88	14.73	14.73
Energy	4.96	42.77	20.55	0.27	3.43	3.43
Mobile	752.33	976.06	6,734.30	14.91	1,474.88	401.26
Daily Total Emissions	1,159.69	1,159.39	7,542.22	16.06	1,493.04	419.42
<i>Existing Emissions</i>	<i>354.52</i>	<i>247.72</i>	<i>1,598.44</i>	<i>3.14</i>	<i>342.58</i>	<i>100.20</i>
Net Daily Emissions	805.17	911.67	5,943.78	12.93	1,150.46	319.22
Significance Thresholds	55	55	550	150	150	55
Exceed Threshold?	Yes	Yes	Yes	No	Yes	Yes
Notes: CO = carbon monoxide NO _x = oxides of nitrogen PM ₁₀ = particulate matter with an aerodynamic resistance diameter of 10 micrometers or less. PM _{2.5} = particulate matter with an aerodynamic resistance diameter of 2.5 micrometers VOC = Volatile Organic Compounds As all mobile trips are assumed to be generated within the Specific Plan area, all emission sources included above are considered to be "on-site" and are therefore analyzed against the SCAQMD's applicable operational Localized Significance Thresholds (LST) in addition to the SCAQMD's regional significance thresholds.						

As shown in this table, due to the magnitude of the proposed growth, operation of the land uses accommodated under the proposed project at buildout would generate air pollutant emissions that exceed SCAQMD's regional significance thresholds for VOC, NO_x, CO, PM₁₀, and PM_{2.5} at full buildout. Emissions of VOC and NO_x that exceed the SCAQMD regional threshold would cumulatively contribute to the O₃ nonattainment designation of the SoCAB. Emissions of NO_x that exceed SCAQMD's regional significance thresholds would cumulatively contribute to the O₃ and particulate matter nonattainment designations of the SoCAB. Emissions of direct PM₁₀ and PM_{2.5} would

contribute to the PM_{2.5} nonattainment designations. Therefore, the project would result in a potentially significant impact because it would significantly contribute to the nonattainment designations of the SoCAB.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

Implementation of MM AIR-6a-1 through MM AIR-6a-15.

Level of Significance After Mitigation

Buildout of the proposed project would occur over approximately 17 years. Construction activities associated with buildout of the proposed project could generate short-term emissions that exceed the SCAQMD's significance thresholds during this time and cumulatively contribute to the nonattainment designations of the SoCAB. Combined with the Riverside County General Plan policies and the implementation of existing mitigation measures developed as part of the Final EIR for the General Plan, the implementation of MM AIR-6a-1 through MM AIR-6a-7 would reduce criteria air pollutant emissions from construction-related activities to the extent feasible. However, specific construction time frames and equipment for individual site-specific projects are not available and there is a potential for multiple developments to be constructed at any one time, resulting in potentially significant cumulative construction-related emissions.

Buildout in accordance with the proposed project would generate long-term emissions that would exceed SCAQMD's regional significance thresholds and cumulatively contribute to the nonattainment designations of the SoCAB. To reduce emissions from the operation of future projects envisioned in the proposed project, MM AIR-6a-8 through MM AIR-6a-15 are required to reduce emissions to the extent feasible, in combination with the existing General Plan policies and associated mitigation. However, due to the magnitude of emissions generated by residential, office, commercial, and light industrial land uses proposed as part of the project, no mitigation measures are available that would reduce cumulative impacts below SCAQMD's thresholds. Therefore, despite adherence to the applicable mitigation measures, Impact AIR-6b would remain significant and unavoidable.

Impacts on Sensitive Receptors

Impact AIR-6c: **The project would expose sensitive receptors, which are located within one (1) mile of the project site, to substantial pollutant concentrations.**

Impact Analysis

To result in a less than significant impact, the following criteria must be true:

- **Criterion 1:** Localized significance threshold assessment: emissions and air quality impacts during project construction must be below the local significance thresholds.
- **Criterion 2:** CO hot spot assessment must demonstrate that the project would not result in the development of a CO hot spot that would result in an exceedance of the CO ambient air quality standards.

- **Criterion 3:** TAC analysis must demonstrate that the project would not result in significant health risk impacts to sensitive receptors during construction.
- **Criterion 4:** TAC analysis must demonstrate that TAC emissions from sources external to the project would not result in significant health risk impacts to the new on-site sensitive receptors.

Criterion 1: Localized Significance Threshold

LSTs are the amount of project-related emissions at which localized concentrations (ppm or $\mu\text{g}/\text{m}^3$) would exceed the ambient air quality standards for criteria air pollutants for which the SoCAB is designated a nonattainment area. Construction of the proposed project would occur over approximately 17 years and would consist of several smaller projects with their own construction time frames and equipment.

Per the LST methodology, information regarding specific development projects and the locations of receptors would be needed in order to quantify the levels of localized operation and construction-related impacts associated with future development projects. Because the proposed project is a broad-based policy plan, it is not possible to calculate individual, project-related, operation emissions at this time. The LST analysis can only be conducted at a project level; per SCAQMD methodology, quantification of LSTs is not applicable for this program-level environmental analysis. However, because potential development and redevelopment could occur close to existing sensitive receptors, the proposed project has the potential to expose sensitive receptors to substantial pollutant concentrations. Construction equipment exhaust combined with fugitive particulate matter emissions have the potential to expose sensitive receptors to substantial concentrations of criteria air pollutant emissions and result in a significant impact.

Because of the long-term nature of the buildout of the proposed project, potential development and redevelopment could occur close to existing or new sensitive receptors within the planning area, potentially exposing sensitive receptors to substantial pollutant concentrations. Construction equipment exhaust combined with fugitive particulate matter emissions have the potential to expose sensitive receptors to substantial concentrations of criteria air pollutant emissions and result in a significant impact. Furthermore, the proposed project would permit commercial and light industrial land uses, which could potentially generate substantial quantities of criteria air pollutants and TACs from land uses such as stationary sources and warehouses once the proposed project is operational. These emissions could potentially impact nearby sensitive receptors.

Criterion 2: Carbon Monoxide Hot Spot Analysis

The SoCAB is currently designated an attainment/maintenance area for the federal CO standard and an attainment area for the state CO standard. An adverse CO concentration, known as a “hot spot,” would occur if an exceedance of the State one-hour standard of 20 ppm or the eight-hour standard of 9 ppm were to occur. This localized CO pollution may be caused by severe vehicle congestion on major roadways, typically near intersections.

It has long been recognized that CO hotspots are caused by vehicular emissions, primarily when idling at congested intersections. In response, vehicle emissions standards have become increasingly stringent in the last twenty years. Currently, the allowable CO emissions standard in California is a maximum of 3.4 grams/mile for passenger cars (there are requirements for certain vehicles that are

more stringent). With the turnover of older vehicles, introduction of cleaner fuels, and implementation of increasingly sophisticated and efficient emissions control technologies, CO concentrations in the SoCAB have steadily declined since the 1990s.

To establish a more accurate record of baseline CO concentrations affecting the SoCAB, a CO “hot spot” analysis was conducted in 2003 for four busy intersections in Los Angeles at the peak morning and afternoon time periods. The analysis prepared for CO attainment in the SoCAB by the SCAQMD can be used to assist in evaluating the potential for CO exceedances in the SoCAB. CO attainment was thoroughly analyzed as part of the SCAQMD’s 2003 AQMP and the 1992 Federal Attainment Plan for Carbon Monoxide (1992 CO Plan). As discussed in the 1992 CO Plan, peak carbon monoxide concentrations in the SoCAB are due to unusual meteorological and topographical conditions, and not due to the impact of particular intersections. Considering the region’s unique meteorological conditions and the increasingly stringent CO emissions standards, CO modeling was performed as part of 1992 CO Plan and subsequent plan updates and air quality management plans.

In the 1992 CO Plan, a CO hot spot analysis was conducted for four busy intersections in Los Angeles at the peak morning and afternoon time periods. The intersections evaluated included: Long Beach Boulevard and Imperial Highway (Lynwood); Wilshire Boulevard and Veteran Avenue (Westwood); Sunset Boulevard and Highland Avenue (Hollywood); and La Cienega Boulevard and Century Boulevard (Inglewood). These analyses did not predict a violation of CO standards. The busiest intersection evaluated was that at Wilshire Boulevard and Veteran Avenue, which has a daily traffic volume of approximately 100,000 vehicles per day. The Los Angeles County Metropolitan Transportation Authority evaluated the Level of Service (LOS) in the vicinity of the Wilshire Boulevard/Veteran Avenue intersection and found it to be LOS E at peak AM traffic and LOS F at peak PM traffic.

As identified in the traffic data provided by the County for the proposed project, the intersection which would experience the greatest traffic volumes during the 2050 Cumulative Plus Project Scenario would be the intersection of State Route (SR) 74 to Nichols Road. The County provided traffic data on expected traffic volumes for roadway segments included in the planning area. The highest volume of traffic in 2050 is expected to be on the roadway segment of SR-74 from Nichols Road. to Riverside Street, which would see an estimated 113,550 ADT. As compared to the “No Project” 2050 scenario, there would only be a slight (less than 100 trips during peak hours) increase in traffic volumes associated with the proposed project along SR-74. Per the County traffic data, the addition of Project traffic is not anticipated to result in any new deficient roadway segments or LOS issues, as compared to analysis of LOS in 2050 with no project conditions.

As stated earlier, emissions have also been decreasing over time due to improved technologies and continued implementation of air quality regulations, including the use of progressively cleaner vehicles. Therefore, these future developments would not result in CO concentrations of such magnitude to exceed the State and federal ambient air quality standards. (This approach is consistent with the California Department of Transportation’s [Caltrans’] CO Project-Level Protocol that is utilized in Caltrans Environmental Assessment Reports.) Improvements to roadway segments as part of the proposed project would serve to reduce delays and increase level of service capacities, further reducing the potential CO emissions associated with the potential increase in VMT

associated with the proposed project activities. Consequently, at buildout of the proposed project, according to traffic data provided by the County of Riverside, none of the intersections in the vicinity of the proposed project would have daily traffic volumes exceeding those at the intersections modeled in the 2003 AQMP,²⁰ nor would there be any reason unique to SoCAB meteorology to conclude that this intersection would yield higher CO concentrations if modeled in detail. Therefore, the operation of the proposed project would not be expected to generate CO concentrations that would exceed the CO ambient air quality standards or cause a CO hotspot.

Criterion 3: Construction Toxic Air Pollutants

SCAQMD currently does not require HRAs to be conducted for short-term emissions from construction equipment. Health risks associated with emissions from construction equipment primarily are due to DPM. OEHHA adopted new guidance for the preparation of HRAs that was issued in March 2015. OEHHA has developed a cancer risk factor and non-cancer chronic reference exposure level for DPM, but these factors are based on continuous exposure over a 30-year time frame. No short-term acute exposure levels have been developed for DPM.

Known sensitive receptors located within 1 mile of the planning area include numerous residences, childcare centers, parks, and nine public schools. Construction of the proposed project would be implemented over a period of 17 years. It is anticipated that construction of individual developments accommodated under the plans would likely be spread out incrementally over this period of time, which would limit the exposure of on- and off-site receptors to elevated concentrations of DPM. However, similar to the LST analysis, construction health risk can only be conducted at a project level; therefore, quantification of construction-related health risk is not applicable for this program-level environmental analysis.

General Plan policies and mitigation measures would assist in reducing potential impacts of construction emissions to sensitive receptors. These measures remain applicable to this project and would lessen impacts to air quality by minimizing fugitive dust during construction and reducing pollution resulting from construction equipment, as detailed below:²¹

- **General Plan Policy AQ 4.9:** Requires compliance with SCAQMD Rules 403 and 403.1 (including submittal of a construction dust control plan to the SCAQMD) and supports appropriate future measures to reduce fugitive dust emanating from construction sites.
- **EIR No. 521 Mitigation Measure 4.6.B-N:** Requires that the construction contractor shall ensure that all disturbed areas and stockpiles are watered at least three times per day or soil stabilizers are applied as necessary to prevent visible dust plumes from these areas. Stockpiles not in use may be covered with a tarp to eliminate the need for watering or other stabilizers.

Additionally, in EIR No. 441, prepared for the 2003 Riverside County Integrated Project General Plan, Mitigation Measures 4.5.1A, 4.5.1B and 4.5.1C were imposed to reduce impacts to air quality, and

²⁰ California Air Resources Board (ARB). 2021. 2005 South Coast Carbon Monoxide Plan. Website: <https://ww2.arb.ca.gov/resources/documents/2005-south-coast-carbon-monoxide-plan>. Accessed October 25, 2021.

²¹ County of Riverside. 2015. Final Environmental Impact Report No. 521 for General Plan Update No. 960. Website: <https://planning.rctlma.org/General-Plan-Zoning/General-Plan/Riverside-County-General-Plan-2015/General-Plan-Amendment-No960-EIR-No521-CAP-February-2015>. Accessed February 23, 2022.

were also applied as mitigation measures as part of EIR No. 521 for the 2015 General Plan Update.²² These measures would also apply to the proposed project, and read as follows:

EIR No. 441 Mitigation Measure 4.5.1A Applicable [SCAQMD] Rule 403 Measures:

- Apply nontoxic chemical soil stabilizers according to manufacturers' specifications to all inactive construction areas (previously graded areas inactive for 10 days or more).
- Water active sites at least twice daily. (Locations where grading is to occur will be thoroughly watered prior to earthmoving.)
- All trucks hauling dirt, sand, soil, or other loose materials are to be covered, or should maintain at least two feet of freeboard in accordance with the requirements of California Vehicle Code (CVC) Section 23114 (freeboard means vertical space between the top of the load and top of the trailer).
- Pave construction access roads at least 100 feet onto the site from main road.
- Traffic speeds on all unpaved roads shall be reduced to 15 mph or less.

EIR No. 441 Mitigation Measure 4.5.1B [Implement the following] additional SCAQMD CEQA Air Quality Handbook dust measures:

- Revegetate disturbed areas as quickly as possible.
- All excavating and grading operations shall be suspended when wind speeds (as instantaneous gusts) exceed 25 mph.
- All streets shall be swept once a day if visible soil materials are carried to adjacent streets (recommend water sweepers with reclaimed water).
- Install wheel washers where vehicles enter and exit unpaved roads onto paved roads, or wash trucks and any equipment leaving the site each trip.

EIR No. 441 Mitigation Measure 4.5.1C: [Implement the following] mitigation measures for construction equipment and vehicles exhaust emissions:

- The construction contractor shall select the construction equipment used on-site based on low emission factors and high energy efficiency.
- The construction contractor shall ensure that construction grading plans include a statement that all construction equipment will be tuned and maintained in accordance with the manufacturer's specifications.
- The construction contractor shall utilize electric- or diesel-powered equipment, in lieu of gasoline-powered engines, where feasible.

²² County of Riverside. 2015.Final Environmental Impact Report No. 521 for General Plan Update No. 960. Website: <https://planning.rctlma.org/General-Plan-Zoning/General-Plan/Riverside-County-General-Plan-2015/General-Plan-Amendment-No960-EIR-No521-CAP-February-2015>. Accessed February 23, 2022.

- The construction contractor shall ensure that construction grading plans include a statement that work crews will shut off equipment when not in use. During smog season (May through October), the overall length of the construction period will be extended, thereby decreasing the size of the area prepared each day, to minimize vehicles and equipment operating at the same time.
- The construction contractor shall time the construction activities so as to not interfere with peak-hour traffic and minimize obstruction of through traffic lanes adjacent to the site; if necessary, a flagperson shall be retained to maintain safety adjacent to existing roadways.
- The construction contractor shall support and encourage ridesharing and transit incentives for the construction crew.
- Dust generated by the development activities shall be retained on-site and kept to a minimum by following the dust control measures listed below.
 - a. During clearing, grading, earthmoving, excavation, or transportation of cut or fill materials, water trucks or sprinkler systems shall be used to prevent dust from leaving the site and to create a crust after each day's activities cease.
 - b. During construction, water trucks or sprinkler systems shall be used to keep all areas of vehicle movement damp enough to prevent dust from leaving the site. At a minimum, this would include wetting down such areas in the late morning, after work is completed for the day and whenever wind exceeds 15 miles per hour.
 - c. Immediately after clearing, grading, earthmoving, or excavation is completed, the entire area of disturbed soil shall be treated until the area is paved or otherwise developed so that dust generation will not occur.
 - d. Soil stockpiled for more than two days shall be covered, kept moist, or treated with soil binders to prevent dust generation.
 - e. Trucks transporting soil, sand, cut or fill materials and/or construction debris to or from the site shall be tarped from the point of origin.

While the above mitigation measures apply to the proposed project and will help to reduce the impacts of future construction activities, because potential development and redevelopment could occur close to existing sensitive receptors, the proposed project has the potential to expose sensitive receptors to substantial pollutant concentrations. Construction equipment exhaust has the potential to expose sensitive receptors to substantial concentrations of TACs and result in a significant impact. As the exact location, timing, and level of future development activities arising from the proposed project is unforeseeable, specific impacts to sensitive receptors cannot be quantified. Therefore, to accurately analyze the potential impacts of potential future development projects, MM AIR-1 is required. Compliance with this mitigation measure will ensure that specific project-level construction impacts are analyzed and further mitigation measures are considered, as appropriate. Even after complying with regulations, existing policies and mitigation measures, as well as new mitigation measures, the impacts cannot be guaranteed to be reduced to below applicable agency thresholds, resulting in a potentially significant impact from construction toxic air pollutants to sensitive receptors.

Criterion 4: Operation Toxic Air Pollutants

Types of land uses that typically generate substantial quantities of criteria air pollutants and TACs include industrial (stationary sources) and warehousing (truck idling) land uses. Development of the commercial land uses that are allowed under the proposed project may result in stationary sources of TAC emissions, including light industrial facilities, warehouses, dry cleaners, restaurants with charbroilers, or buildings with emergency generators and boilers. These types of stationary sources are subject to SCAQMD's new source review through their permitting requirements and would be subject to further study and HRAs prior to the issuance of any necessary air quality permits under SCAQMD Rule 1401. The permitting process ensures that stationary source emissions would be below the SCAQMD significance thresholds of 10 in a million cancer risk and 1 for acute risk at the maximally exposed individual.

The General Plan Air Quality Element sets forth the policies that will further assist in reducing the impact of operational project-related emissions to sensitive receptors, including AQ 2.1, 2.2, 2.3, 2.4, 4.5, 4.6, and 4.7.²³ A large portion of emissions from project operation would originate from mobile sources. The General Plan also includes the following policies to reduce emissions from mobile sources and to promote trip reduction: AQ 3.2, 3.3, 3.4, 10.1, and 10.2.²⁴ Mitigation measures included as part of EIR No. 521²⁵ would further serve to reduce the impacts of operational emissions on sensitive receptors within the General Plan area. As discussed in the Regulatory Framework section of this section, required General Plan mitigation includes EIR No. 441 Mitigation Measures 2.51A, 4.51B, and 4.5.1C, and EIR No. 521 Mitigation Measures 4.6.B-N1, 4.6.B-N2, 4.6.B-N3, 4.6.D-N1, and 4.6.D-N2.

To reduce the impact of TACs from project operations to sensitive receptors, Mitigation Measure 4.6.D-N1 establishes that:

- New developments are required to provide electrical outlets in the building design of loading docks to allow use by refrigerated delivery trucks.
- Signage shall also be installed, instructing commercial vehicles to limit idling times to five minutes or less.
- If loading and/or unloading of perishable goods would occur for more than five minutes and continual refrigeration is required, all refrigerated delivery trucks shall use the electrical outlets to continue powering the truck refrigeration units when the delivery truck engine is turned off.
- Electrical outlets are also required to be installed on the exterior of new structures for use with electrical landscaping equipment, which is required to be a minimum 20 percent of the equipment used.

Furthermore, as included in EIR No. 521, Mitigation Measure 4.6.D-N2 states that, "The County of Riverside shall require minimum distances between potentially incompatible land uses, as described

²³ Riverside County Planning Department. 2018. Riverside County General Plan, Air Quality Element. Website: https://planning.rctlma.org/Portals/14/genplan/general_plan_2018/elements/Ch09_AQE_071718.pdf. Accessed February 23, 2022.

²⁴ Ibid.

²⁵ County of Riverside. 2015. Final Environmental Impact Report No. 521 for General Plan Update No. 960. Website: <https://planning.rctlma.org/General-Plan-Zoning/General-Plan/Riverside-County-General-Plan-2015/General-Plan-Amendment-No960-EIR-No521-CAP-February-2015>. Accessed February 23, 2022.

below, unless a project-specific evaluation of human health risks defines, quantifies and reduces the potential incremental health risks through site design or the implementation of additional reduction measures to levels below applicable standards (e.g., standards recommended or required by CARB, SCAQMD or MDAQMD).” For projects under SCAQMD jurisdiction, the siting distances included in the mitigation measure are as follows:

- a) Proposed dry cleaners and film processing services that use perchloroethylene must be sited at least 500 feet from existing sensitive land uses including residential, schools, day care facilities, congregate care facilities, hospitals or other places of long-term residency for people.
- b) Proposed auto body repair services shall be sited at least 500 feet from existing sensitive land uses.
- c) Proposed gasoline dispensing stations with an annual throughput of less than 3.6 million gallons shall be sited at least 50 feet from existing sensitive land uses. Proposed gasoline dispensing stations with an annual throughput at or above 3.6 million gallons shall be sited at least 300 feet from existing sensitive land uses.
- d) Other proposed sources of TACs including furniture manufacturing and repair services that use methylene chloride or other solvents identified as a TAC shall be sited at least 300 feet from existing sensitive land uses.
- e) Avoid siting distribution centers that accommodate more than 100 truck trips per day (or more than 40 truck trips operating transport refrigeration units per day, or where transportation refrigeration units operate more than 300 hours per week) within 1,000 feet of existing sensitive land uses.
- f) Proposed sensitive land uses shall be sited at least 500 feet from existing freeways, major urban roadways with 100,000 vehicles per day or more and major rural roadways with 50,000 vehicles per day or more.
- g) Proposed sensitive land uses shall be sited at least 500 feet from existing dry cleaners and film processing services that use perchloroethylene.
- h) Proposed sensitive land uses shall be sited at least 500 feet from existing auto body repair services.
- i) Proposed sensitive land uses shall be sited at least 50 feet from existing gasoline dispensing stations with an annual throughput of less than 3.6 million gallons and 300 feet from existing gasoline dispensing stations with an annual throughput at or above 3.6 million gallons.
- j) Proposed sensitive land uses shall be sited at least 300 feet from existing land uses that use methylene chloride or other solvents identified as a TAC.
- k) Proposed sensitive land uses shall be sited at least 1,000 feet from existing distribution centers that accommodate more than 100 trucks per day, accommodate more than 40 trucks per day with transportation refrigeration units, or where transportation refrigeration units operate more than 300 hours per week.

These existing mitigation measures would serve to reduce the potential air quality impacts from future project operations to sensitive receptors. In regard to the light industrial land uses proposed to be included in the planning area, the California Department of Justice (DOJ) has provided a document entitled, “Warehouse Projects: Best Practices and Mitigation Measures to Comply with the California Environmental Quality Act,” that provides guidance on CEQA analysis for warehouse projects and feasible mitigation measures.²⁶ This guidance has been reviewed and incorporated into this analysis, as appropriate. However, the document also includes a recommendation to fully analyze the impacts from truck trips as a part of CEQA compliance, stating that, “CEQA requires full public disclosure of a project’s anticipated truck trips, which entails calculating truck trip length based on likely truck trip destinations...” While CalEEMod default trip lengths have been utilized for this analysis as a conservative estimate because the type of industrial project that may be implemented in future buildout of the proposed project is unknown, there is the possibility that trip lengths for the industrial land uses may be longer than these default values, especially where trucks may be traveling to local ports or to destinations outside of the SoCAB. Therefore, to accurately analyze the potential impacts of potential future development projects that include trucking emissions, MM AIR-6a-8 and MM AIR-6a-9 are required. Compliance with MM AIR-6a-8 and MM AIR-6a-9 will ensure that localized and regional project-level emissions are analyzed and further mitigation measures are considered, as appropriate.

In addition to operational emissions from new stationary sources of emissions and vehicle trips to and within the planning area, the proposed project would locate new sensitive receptors (residents) that could be subject to existing sources of TACs within the project boundary. The California Supreme Court in *California Building Industry Association v. Bay Area Air Quality Management District* concluded that agencies generally subject to CEQA are not required to analyze the impact of existing environmental conditions on a project’s future users or residents. However, various type of mitigation are potentially available to reduce potential impacts to new sensitive receptors in the planning area. These methods include enhanced air filtration systems, sound walls, and vegetation. General Plan Air Quality Element policies that promote these methods include AQ 2.1 through AQ 2.4. Both the SCAQMD²⁷ and ARB²⁸ have discussed the merits and effectiveness of various measures designed to reduce near-roadway pollutant levels.

Many heating, ventilation, and air conditioning (HVAC) filters available in the United States are rated for their particle removal efficiency using a laboratory test procedure described in the American Society of Heating, Refrigerating, and Air Conditioning Engineers (ASHRAE) Standard 52.2-2012, Method of Testing General Ventilation Air-Cleaning Devices for Removal Efficiency by Particle Size. The test procedure classifies the single-pass particle removal efficiency of HVAC filters based on their minimum particle removal efficiency in three particle size bins (0.3 µm to 1 µm, 1 µm to 3 µm, and 3 µm to 10 µm) under various loading conditions. Minimum removal efficiency values in these three size bins are used to assign HVAC filters a single efficiency metric called the Minimum Efficiency

²⁶ Department of Justice (DOJ). 2021. Warehouse Projects: Best Practices and Mitigation Measures to Comply with the California Environmental Quality Act. Website: <https://oag.ca.gov/system/files/media/warehouse-best-practices.pdf>. Accessed March 1, 2022.

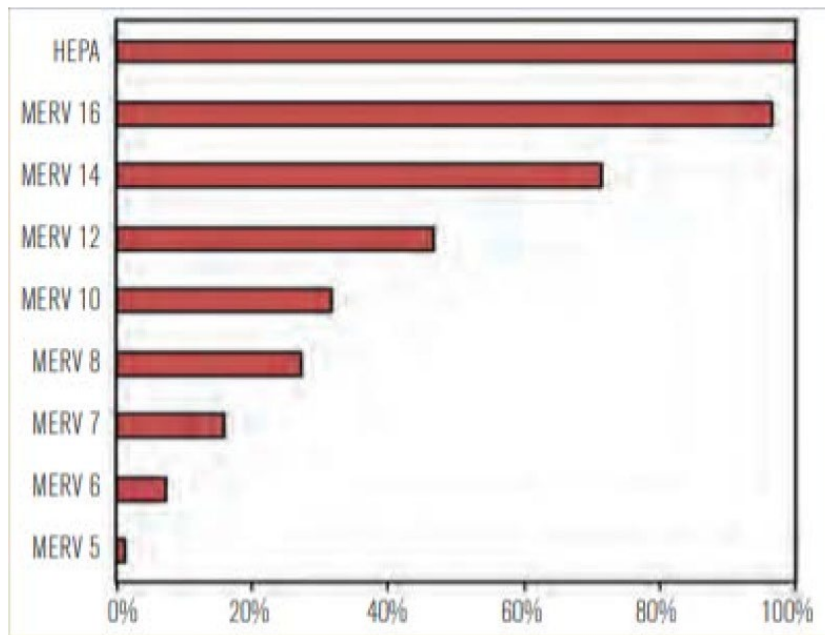
²⁷ South Coast Air Quality Measurement District (SCAQMD). 2009. Pilot Study of High Performance Air Filtration for Classrooms Applications. Website: <http://www.aqmd.gov/docs/default-source/ceqa/handbook/aqmdpilotstudyfinalreport.pdf>. Accessed February 3, 2022.

²⁸ California Air Resources Board (ARB). 2017. Strategies to Reduce Air Pollution Exposure Near High-Volume Roadways. Website: https://ww2.arb.ca.gov/sites/default/files/2017-10/rd_technical_advisory_final.pdf. Accessed February 3, 2022.

Reporting Value (MERV). In general, the higher the MERV for a filter, the greater the removal efficiency for one or more particle size bins. The particle removal efficiency of filters is strongly dependent on particle size. Both larger particles (i.e., greater than $\sim 1 \mu\text{m}$) and smaller particles (i.e., less than $\sim 0.1 \mu\text{m}$) are removed by typical fibrous media filters with greater efficiency than particle sizes in between $\sim 0.1 \mu\text{m}$ and $\sim 1 \mu\text{m}$. ASHRAE Standard 52.2-2012 evaluates the removal efficiency of a filter on a particle number-basis, albeit only for particle sizes $0.3 \mu\text{m}$ to $10 \mu\text{m}$.

The majority of particles (by number) in most outdoor environments are smaller than $0.3 \mu\text{m}$, and much of the $\text{PM}_{2.5}$ mass is often in the $0.5 \mu\text{m}$ to $1 \mu\text{m}$ size range. Thus, the $\text{PM}_{2.5}$ mass removal efficiency of a filter will vary depending on the filter's size-resolved removal efficiency for these particle sizes and the particle size distribution that passes through it. Average values for approximated outdoor-origin $\text{PM}_{2.5}$ removal efficiencies for several MERV-rated filters were derived from Stephens, Brennan, and Harriman.²⁹ Single-pass outdoor-origin $\text{PM}_{2.5}$ removal efficiencies range from less than 10 percent for MERV 6 to over 95 percent for MERV 16 and HEPA filters as shown in Figure 10.

In order to demonstrate a reduction in the risk of future residents, the use of air filters have been considered, as required under Title 24, Part 6, Subchapter 7, Section 150.0(m)12.C. Title 24 of the California Building Code requires that residential air filters meet a MERV of 13. MERV 13 filters would trap particles at an efficiency rate of 60 percent; however, the use of air filters is only effective when residents keep windows closed and use air passed through the filtration system. The proposed project has no direct control over the resident's operation of windows. Therefore, MM AIR-6a-16 has been included to relay this information to the residents in order for them to make their own informed decisions.



²⁹ Stephens, B., Brennan, T. and Harriman, L., 2016. Selecting ventilation air filters to reduce pm2. 5 of outdoor origin response. ASHRAE JOURNAL, 58(11), pp.10-10. Website: http://www.conforlab.com.br/wp-content/uploads/2016/10/2016Sep_012-021_HarrimanFiltersToReducePM2.5.pdf. Accessed February 3, 2022.

Source: Stephens, B., Brennan, T. and Harriman, L., 2016. Selecting ventilation air filters to reduce pm2.5 of outdoor origin response. ASHRAE JOURNAL, 58(11), pp.10-10. Website: http://www.conforlab.com.br/wp-content/uploads/2016/10/2016Sep_012-021_HarrimanFiltersToReducePM2.5.pdf. Accessed February 22, 2022.

Figure 3.3-1: Estimates of Particle Removal Efficiency for PM_{2.5} of Outdoor Origin for Filters Tested According to ASHRAE Standard 52.2-2012.2

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

Compliance with MM AIR-6a-1 through MM AIR-6a-16.

MM AIR-6a-16 All future residents of the planning area shall be provided with information that describes the potential risk from living near a freeway and that the incorporation of an advanced air filtration system has been provided to reduce that risk. The information shall also indicate that the residents have the option to open windows for circulation, however that by opening windows, they reduce or eliminate the effectiveness of the air filtration system within their unit for as long as the unit is open to unfiltered air.

Level of Significance After Mitigation

Compliance with existing regulatory programs, existing General Plan policies and mitigation measures, and MM AIR-6a-1 through MM AIR-6a-16 will serve to reduce the impacts of the proposed project to the extent feasible. However, because the construction and operation of future developments envisioned under the proposed project could expose sensitive receptors to significant quantities of criteria and toxic air contaminants even with the implementation of mitigation, the impacts of the proposed project remain significant and unavoidable.

Objectionable Odors

Impact AIR-6d: Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Impact Analysis

Odors can cause a variety of responses. The impact of an odor is dependent on interacting factors such as frequency (how often), intensity (strength), duration (in time), offensiveness (unpleasantness), location, and sensory perception. While offensive odors rarely cause any physical harm, they still can be very unpleasant, leading to considerable distress and often generating citizen complaints to local governments and regulatory agencies.

The SCAQMD's role is to protect the public's health from air pollution by overseeing and enforcing regulations. The SCAQMD's resolution activity for odor compliance is mandated under California Health & Safety Code Section 41700 and falls under SCAQMD Rule 402. This rule on Public Nuisance Regulation states: "A person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any

considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property.”

The SCAQMD does not provide a suggested screening distance for a variety of odor-generating land uses and operations. However, the San Joaquin Valley Air Pollution Control District (Valley Air District) does have a screening distance for odor sources. Those distances are used as a guide to assess whether nearby facilities could be sources of significant odors. Projects that would site a new receptor farther than the applicable screening distances from an existing odor source would not likely to have a significant impact. These screening distances by type of odor generator are listed in Table 3.3-14.

Table 3.3-14: Screening Levels for Potential Odor Sources

Odor Generator	Screening Distance
Wastewater Treatment Facilities	2 miles
Sanitary Landfill	1 mile
Transfer Station	1 mile
Composting Facility	1 mile
Petroleum Refinery	2 miles
Asphalt Batch Plant	1 mile
Chemical Manufacturing	1 mile
Fiberglass Manufacturing	1 mile
Painting/Coating Operations (e.g., auto body shop)	1 mile
Food Processing Facility	1 mile
Feed Lot/Dairy	1 mile
Rendering Plant	1 mile
Source: San Joaquin Valley Air Pollution Control District (Valley Air District) 2015.	

Construction-related Odors

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

Operational-related Odors

For odor sources listed above, the closest source to the planning area would be Gerber Collision & Glass (GCG), which is located 1.1 miles southwest of the planning area boundaries. It is anticipated that the GCG would include all necessary odor control systems to minimize odor emissions leaving their site operations. However, this potential odor source is also located at a sufficient buffer distance (per Table 3.3-14) to avoid any potential odor impacts.

The proposed project includes light industrial land uses, and so there is the potential for land uses typically considered to be associated with odors to be developed in the planning area. Land uses typically associated with odors may include wastewater treatment facilities, waste disposal facilities, or other stationary sources. The proposed project would also develop different types of residential and retail activities, which are not typical odor-generating land uses. In addition to existing regulatory programs and General Plan policies, mitigation measures required as part of the General Plan EIR No. 521³⁰ include:

- **Mitigation Measure 4.6.E-N1:** Locate potential new odor sources predominantly down- or cross-wind from existing sensitive receptors and potential new sensitive receptors predominantly upwind from existing odor sources. As indicated by the “Right-to-Farm” ordinance, agricultural uses that have operated for more than three years cannot be re-classified as a public or private nuisance by new development.
- **Mitigation Measure 4.6.E-N2:** Maintain an adequate buffer between potential new odor sources and receptors such that emitted odors are dissipated before reaching the receptors (minimum of 500 feet depending on odor source). As per the “right-to-farm” ordinance, agricultural uses that have been operated for more than three years cannot be re-classified as a public or private nuisance by new development.
- **Mitigation Measure 4.6.E-N3:** Design odor-emitting facilities such that odor emitters are located as far from potential receptors as possible. Also, balance stack heights to provide the maximum dispersion of odor between the stack and the nearest sensitive receptor.

Compliance with these mitigation measures, as already required for projects in the General Plan area, would further reduce objectionable odors. No further mitigation is required.

Level of Significance

Less than significant impact.

Mitigation Measures

No mitigation required.

³⁰ County of Riverside. 2015. Final Environmental Impact Report No. 521 for General Plan Update No. 960. Website: <https://planning.rctlma.org/General-Plan-Zoning/General-Plan/Riverside-County-General-Plan-2015/General-Plan-Amendment-No960-EIR-No521-CAP-February-2015>. Accessed February 23, 2022.

3.4 - Biological Resources

3.4.1 - Introduction

This section describes the existing biological setting and potential effects from proposed project implementation on the site and its surrounding area. The findings of this section are based on biological information and conservation requirements presented in the County of Riverside General Plan (General Plan) and results of a desktop-level biological analysis that evaluated regulatory requirements and biological resources potentially occurring in the planning area.

3.4.2 - Regulatory Framework

Federal

Endangered Species Act

The U.S. Congress passed the Endangered Species Act in 1973 to protect those species that are endangered or threatened with extinction. The Endangered Species Act is intended to operate in conjunction with the National Environmental Policy Act (NEPA) to help protect the ecosystems upon which endangered and threatened species depend.

The Endangered Species Act prohibits the “take” of endangered or threatened wildlife species. “Take” is defined to include harassing, harming, pursuing, hunting, shooting, wounding, killing, trapping, capturing, or collecting wildlife species or any attempt to engage in such conduct (Endangered Species Act § 3 (3)(19)). Harm is further defined to include significant habitat modification or degradation that results in death or injury to listed species by significantly impairing behavioral patterns (50 Code of Federal Regulations [CFR] § 17.3). Harass is defined as actions that create the likelihood of injury to listed species to such an extent as to significantly disrupt normal behavior patterns (50 CFR § 17.3). Actions that result in take can result in civil or criminal penalties.

The Endangered Species Act and Clean Water Act (CWA) Section 404 guidelines prohibit the issuance of wetland permits for projects that jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of habitat of such species. The United States Army Corps of Engineers (USACE) must consult with the United States Fish and Wildlife Service (USFWS) and/or the National Marine Fisheries Service (NOAA) when threatened or endangered species under their jurisdiction may be affected by a proposed project. In the context of the proposed project, the Endangered Species Act would be initiated if development resulted in take of a threatened or endangered species or if issuance of a Section 404 permit or other federal agency action could result in take of an endangered species or adversely modify critical habitat of such a species

Migratory Bird Treaty Act

Raptors (birds of prey), migratory birds, and other avian species are protected by a number of State and federal laws. The federal Migratory Bird Treaty Act (MBTA) prohibits the killing, possessing, or trading of migratory birds except in accordance with regulations prescribed by the Secretary of the Interior.

Bald and Golden Eagle Protection Act

The golden eagle (*Aquila chrysaetos*) and bald eagle (*Haliaeetus leucocephalus*) are also afforded additional protection under the Eagle Protection Act, amended in 1973 (16 United States Code [USC] § 669, *et seq.*) and the Bald and Golden Eagle Protection Act (16 USC §§ 668–668d).

Clean Water Act

The USACE regulates discharge of dredge or fill material into waters of the United States under Section 404 of the CWA. “Discharges of fill material” is defined as the addition of fill material into waters of the United States, including, but not limited to the following: placement of fill that is necessary for the construction of any structure, or impoundment requiring rock, sand, dirt, or other material for its construction; site-development fills for recreational, industrial, commercial, residential, and other uses; causeways or road fills; fill for intake and outfall pipes and subaqueous utility lines (33 CFR § 328.2(f)). In addition, Section 401 of the CWA (33 USC 1341) requires any applicant for a federal license or permit to conduct any activity that may result in a discharge of a pollutant into waters of the United States to obtain a certification that the discharge will comply with the applicable effluent limitations and water quality standards.

Waters of the United States include a range of wet environments such as lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, and wet meadows. Boundaries between jurisdictional waters and uplands are determined in a variety of ways depending on which type of waters is present. Methods for delineating wetlands and non-tidal waters are described below.

- Wetlands are defined as “those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions” (33 CFR § 328.3(b)). Presently, to be a wetland, a site must exhibit three wetland criteria: hydrophytic vegetation, hydric soils, and wetland hydrology existing under the “normal circumstances” for the site.
- The lateral extent of non-tidal waters is determined by delineating the ordinary high water mark (OHWM) (33 CFR § 328.4(c)(1)). The OHWM is defined by the USACE as “that line on shore established by the fluctuations of water and indicated by physical character of the soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas” [33 CFR § 328.3(e)].

State

California Endangered Species Act

The State of California enacted the California Endangered Species Act (CESA) in 1984. CESA pertains to State listed endangered and threatened species. CESA requires State agencies to consult with the California Department of Fish and Wildlife (CDFW) when preparing California Environmental Quality Act (CEQA) documents. The purpose of CESA is to ensure that the lead agency actions do not jeopardize the continued existence of a listed species or result in the destruction or adverse modification of habitat essential to the continued existence of those species, if there are reasonable

and prudent alternatives available (Fish and Game Code [FGC] § 2080). CESA directs agencies to consult with CDFW on projects or actions that could affect listed species, directs CDFW to determine whether jeopardy would occur, and allows CDFW to identify “reasonable and prudent alternatives” to a project, consistent with conserving the species. CESA allows CDFW to authorize exceptions to the State’s prohibition against take of a listed species if the take is incidental to carrying out an otherwise lawful project that has been approved under CEQA (FGC § 2081).

California Fish and Game Codes

The California Fish and Game Code defines “take” as “hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill” (FGC § 86). Except for take related to scientific research, all take of fully protected species is prohibited. Fully protected fish species are protected under Fish and Game Code Section 5515; fully protected amphibian and reptile species are protected under Section 5050; fully protected bird species are protected under Section 3511; and fully protected mammal species are protected under Section 4700. Fish and Game Code Section 3503 prohibits the killing of birds or the destruction of bird nests. Section 3503.5 prohibits the killing of raptor species and the destruction of raptor nests. Fish and Game Code Sections 2062 and 2067 define “endangered and threatened species.”

California Department of Fish and Wildlife Species of Concern

In addition to formal listing under the Endangered Species Act and CESA, species receive additional consideration by CDFW and local lead agencies during the CEQA process. Species that may be considered for review are included on a list of “Species of Special Concern,” developed by the CDFW. It tracks species in California whose numbers, reproductive success, or habitat may be threatened. In addition to Species of Special Concern, the CDFW identifies animals that are tracked by the California Natural Diversity Database (CNDDDB), but warrant no federal interest and no legal protection. These species are identified as “California Special Animals.”

Porter-Cologne Water Quality Control Act

The CDFW is a trustee agency that has jurisdiction under Fish and Game Code Section 1600, *et seq.* Under Fish and Game Code Sections 1602 and 1603, a private party must notify the CDFW if a proposed project would “substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake designated by the department, or use any material from the streambeds . . . except when the department has been notified pursuant to Section 1601.” Additionally, the CDFW may assert jurisdiction over native riparian habitat adjacent to aquatic features, including native trees over 4 inches in diameter at breast height (DBH). If an existing fish or wildlife resource may be substantially adversely affected by the activity, CDFW may propose reasonable measures that will allow protection of those resources. If these measures are agreeable to the parties involved, they may enter into an agreement with CDFW identifying the approved activities and associated mitigation measures.

Section 13260(a) of the Porter-Cologne Water Quality Control Act (contained in the California Water Code) requires any person discharging waste or proposing to discharge waste, other than to a community sewer system, within any region that could affect the quality of the waters of the State (all surface and subsurface waters) to file a report of waste discharge. The discharge of dredged or fill material may constitute a discharge of waste that could affect the quality of waters of the State.

All of the wetlands and waterways in the project site are waters of the State, which are protected under this act.

Historically, California relied on its authority under Section 401 of the CWA to regulate discharges of dredged or fill material to California waters. That section requires an applicant to obtain “water quality certification” from the State Water Resources Control Board (State Water Board) through its Regional Water Quality Control Boards (RWQCB) to ensure compliance with State water quality standards before certain federal licenses or permits may be issued. The permits subject to Section 401 include permits for the discharge of dredged or fill materials (CWA Section 404 permits) issued by the USACE. Waste discharge requirements under the Porter-Cologne Water Quality Control Act were typically waived for projects that required certification. With the recent changes that limited the jurisdiction of wetlands under the CWA, the State Water Board has needed to rely on the report of waste discharge process.

California Native Plant Society

The California Native Plant Society (CNPS) maintains a rank of plant species native to California that has low population numbers, limited distribution, or are otherwise threatened with extinction. This information is published in the Inventory of Rare and Endangered Vascular Plants of California. Potential impacts to populations of CNPS-ranked plants receive consideration under CEQA review. The following identifies the definitions of the CNPS ranks:

- **Rank 1A:** Plants presumed extirpated in California and either rare or extinct elsewhere
- **Rank 1B:** Plants Rare, Threatened, or Endangered in California and elsewhere
- **Rank 2A:** Plants presumed extirpated in California but common elsewhere
- **Rank 2B:** Plants rare, threatened, or endangered in California but more common elsewhere
- **Rank 3:** Plants about which more information is needed
- **Rank 4:** Watch List: Plants of limited distribution

Potential impacts to populations of CNPS-ranked plants receive consideration under CEQA review. All plants appearing on the CNPS List ranked 1 or 2 are considered to meet the State CEQA Guidelines Section 15380 criteria. Rank 3 and 4 plants do not automatically meet this definition. Rank 4 plants do not clearly meet CEQA standards and thresholds for impact considerations.¹

Regional and Local

County of Riverside General Plan

Riverside County (County) is known for its extraordinary environmental setting, which provides recreational, ecological, and scenic value. Open space areas, found in remote regions of the County as well as within Community Development areas, is one of the primary defining aspects of the County’s livability and character. In some instances, it is this open space that provides the separations between communities, helping to enhance the distinctiveness of communities in the County. The Riverside County Integrated Project Vision states:

¹ California Native Plant Society (CNPS). 2020. Considerations for Including CRPR 4 Plant Taxa in CEQA Biological Resource Impact Analysis. January 2020.

We value the unusually rich and diverse natural environment with which we are blessed and are committed to maintaining sufficient areas of natural open space to afford the human experience of natural environments as well as sustaining the permanent viability of the unique landforms and ecosystems that define this environment.

Poorly planned growth and development would threaten to eliminate or degrade this essential feature of the County. The Multipurpose Open Space Element addresses this issue in great detail. The policies below relate directly to preserving and enhancing open space through land use related methods. They include restrictions on development of open space, focusing urban growth, providing recreational and open space opportunities within the built environment, and achieving a balance between urban uses and open space/habitat.² The Land Use Element of the General Plan includes the following policies, which relate directly to preserving and enhancing open space through land use related methods.

LU 9.2 Require that development protect environmental resources by compliance with the Multipurpose Open Space Element of the General Plan and Federal and State regulations such as CEQA, NEPA, the Clean Air Act, and the Clean Water Act.

As addressed below and throughout this Draft Program Environmental Impact Report (Draft Program EIR), the proposed project, with incorporation of mitigation, will comply with all federal, State, regional, and local policies and regulations, including those provisions related to the General Plan, CEQA, the Clean Air Act (CAA), and CWA.

LU 9.4 Allow development clustering and/or density transfers in order to preserve open space, natural resources, cultural resources, and biologically sensitive resources. Wherever possible, development on parcels containing 100-year floodplains, blue-line streams and other higher-order watercourses, and areas of steep slopes adjacent to them shall be clustered to keep development out of watercourse and adjacent steep slope areas, and to be compatible with other nearby land uses.

Wetlands in the County might typically occur in low-lying areas that receive fresh water at the edges of lakes, ponds, streams, and rivers. Wetlands provide habitat for a wide variety of plants, invertebrates, fish, and larger animals, including many rare, threatened, or endangered species. The plants and animals found in wetlands include both those that are able to live on dry land or in the water and those that can live only in a wet environment. Wetlands in the County may include vernal pools, palm oases, or desert washes.³

The Multipurpose Open Space Element of the General Plan includes the following policy regarding wetlands:

² County of Riverside. 2015. Riverside County General Plan, Chapter 5: Multipurpose Open Space Element. Website: https://planning.rctlma.org/Portals/14/genplan/general_Plan_2017/elements/OCT17/Ch05_MOSE_120815.pdf?ver=2017-10-11-102103-833. Accessed January 22, 2022.

³ Ibid.

- OS 6.1** During the development review process, ensure compliance with the Clean Water Act’s Section 404 in terms of wetlands mitigation policies and policies concerning fill material in jurisdictional wetlands.

Western Riverside Multi-Species Habitat Conservation Plan

The Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) encompasses approximately 1.26 million acres (approximately 1,997 square miles). The MSHCP includes unincorporated and incorporated Riverside County land (excluding Indian land) west of the crest of the San Jacinto Mountains to the Orange County line. The MSHCP is the largest Habitat Conservation Plan ever attempted and covers multiple species and multiple habitats within multiple jurisdictions. The MSHCP covers a diverse landscape from urban cities to undeveloped foothills and montane forests. In addition to the presence of multiple habitats, the MSHCP stretches across the Santa Ana Mountains, Riverside Lowlands, San Jacinto Foothills, San Jacinto Mountains, Aqua Tibia Mountains, Desert Transition, and San Bernardino Mountain bio-regions.

The MSHCP serves as a Habitat Conservation Plan pursuant to Section 10(a)(1)(B) of the Endangered Species Act of 1973, as well as a Natural Communities Conservation Plan (NCCP) under the NCCP Act of 1991. It is used to allow incidental “take” of plant and animal species identified within the MSHCP. The purpose of the MSHCP is for the Wildlife Agencies to grant “take authorization” for otherwise lawful actions that may incidentally take or harm individuals of a species outside of preserve areas, in exchange for supporting assembly of a coordinated reserve system. Conservation and management duties, as well as implementation assurances, will be provided by the County and other signatory agencies or jurisdictions identified as permittees through a corresponding Implementation Agreement.

Habitat Evaluation and Acquisition Negotiation Process

To complement the conservation and management responsibilities assigned to the County, a property owner-initiated Habitat Evaluation and Acquisition Negotiation Process has also been developed for the MSHCP. The Habitat Evaluation and Acquisition Negotiation Process applies to property that may be needed for inclusion in the MSHCP Reserve or subjected to other MSHCP criteria. Under the incentive-based program, the County may obtain interests in property needed to implement the MSHCP over time. If it is determined that all or a portion of a property is needed for the MSHCP Reserve, various incentives or monetary compensation may be available to the property owner in exchange for the conveyance of property. Incentives are intended to provide a form of compensation to property owners who convey their property. Once a property interest is obtained, it will become part of the MSHCP Reserve.

Each area plan that is affected by the MSHCP contains maps that identify the areas potentially affected by the MSHCP, and identification of plant and animal species to be covered by MSHCP. Below are MSHCP-related policies from the General Plan.

- OS 17.1** Enforce the provisions of applicable MSHCP’s and implement related Riverside County policies when conducting review of possible legislative actions such as general plan amendments, zoning ordinance amendments, etc. including policies regarding the handling of private and public stand-alone applications for general

plan amendments, lot line adjustments and zoning ordinance amendments that are not accompanied by, or associated with, an application to subdivide or other land use development application. Every stand-alone application shall require an initial Habitat Evaluation and Acquisition Negotiation Process (HANS) assessment and such assessment shall be made by the Planning Department’s Environmental Programs Division. Habitat assessment and species specific focused surveys shall not be required as part of this initial HANS assessment for stand-alone applications but will be required when a development proposal or land use application to subsequently subdivide, grade or build on the property is submitted to the County.

OS 17.2 Enforce the provisions of applicable MSHCPs and implement related Riverside County policies when conducting review of development applications.

As addressed below, the proposed project, with incorporation of mitigation, will be consistent with the MSHCP.

The County’s multipurpose open space system will be created and maintained using several different techniques, all related to preservation of significant environmental resources. By preserving multi-species habitat; by creating and maintaining active and passive parks, recreation areas, and trail systems; by conserving natural and scenic resources; and avoiding natural hazard areas, a complete system of open space will be achieved that ensures the County’s “remarkable environmental setting” remains intact for future generations of citizens to enjoy. This section identifies policies for the preservation of environmentally sensitive land within the County, including but not limited to the land to be preserved through the MSHCPs.

The Multipurpose Open Space Element of the General Plan⁴ contains policies for the preservation of environmentally sensitive land within the County, including but not limited to the land to be preserved through the MSHCPs:

OS 18.1 Preserve multi-species habitat resources in the County of Riverside through the enforcement of the provisions of applicable MSHCPs, and through implementing related Riverside County policies.

OS 18.2 Provide incentives to landowners that will encourage the protection of significant resources in the County beyond the preservation and/or conservation required to mitigate project impacts.

Elsinore Area Plan

The Elsinore Area Plan (ELAP) contains the following policies relevant to biological resources:

⁴ County of Riverside. 2015. Riverside County General Plan, Chapter 5: Multipurpose Open Space Element. Website: https://planning.rctlma.org/Portals/14/genplan/general_Plan_2017/elements/OCT17/Ch05_MOSE_120815.pdf?ver=2017-10-11-102103-833. Accessed January 22, 2022.

- ELAP 16.1** Protect viable oak woodlands through adherence to the Oak Tree Management Guidelines adopted by Riverside County and the Vegetation section of the Multipurpose Open Space Element of the General Plan.
- ELAP 17.1** Protect sensitive biological resources in the Elsinore Area Plan through adherence to policies found in the Multiple Species Habitat Conservation Plans, Environmentally Sensitive Lands, Wetlands, and Floodplain and Riparian Area Management sections of the General Plan Multipurpose Open Space Element.
- ELAP 17.4** Conserve clay soils supporting sensitive plants such as Munz’s onion, many-stemmed dudleya, small-flowered morning glory and Palmer’s grapplinghook. (There is a Munz’s onion population of approximately 7,500 heads in Alberhill.)
- ELAP 17.5** Conserve wetlands including Temescal Wash, Collier Marsh, Alberhill Creek, Wasson Creek, and the lower San Jacinto River, (including marsh habitats and maintaining water quality).
- ELAP 17.6** Maintain upland habitat connection between North Peak Conservation Bank, Steele Peak, and Bureau of Land Management (BLM) lands.
- ELAP 17.7** Conserve Engelmann Oak Woodlands.
- ELAP 17.8** Conserve sensitive plants, including Parry’s spineflower, prostrate spineflower, Payson’s jewelflower, smooth tarplant, slender-horned spineflower, Couldte’s matijila poppy, Palomar monkeyflower, little mousetail, vernal barley, San Jacinto Valley crownscale, Coulter’s goldfields, heart-leaved pitcher sage, and the Quino checkerspot butterfly.
- ELAP 17.9** Conserve Travers-Willow-Domino soil series.
- ELAP 17.10** Conserve foraging habitat adjacency for raptors, sage scrubbed-grassland ecotone.
- ELAP 17.11** Conserve habitat in Sedco Hills to maintain connection between Granite Hills and Bundy Canyon Road.
- ELAP 17.12** Provide for connection across State Route 74 for birds and land species.

Mead Valley Area Plan

The Mead Valley Area Plan (MVAP) contains the following policies relevant to biological resources:

- MVAP 16.1** Protect viable oak woodlands through adherence to the Oak Tree Management Guidelines adopted by Riverside County.
- MVAP 17.2** Conserve clay soils in southern needlegrass grasslands and sandy-granitic soils within chaparral and coastal sage scrub habitats capable of supporting Payson’s jewelflower and long-spined spineflower, known to exist within the planning area.

- MVAP 17.3** Conserve existing populations of the California gnatcatcher and Bell’s sage sparrow in the Mead Valley planning area, including locations at Steele Peak Reserve and undeveloped lands to the north of this reserve and along its eastern fringes.
- MVAP 17.5** Conserve vernal pool complexes supporting thread-leaved brodiaea known to exist within Mead Valley.
- MVAP 17.6** Protect sensitive biological resources in Mead Valley Area Plan through adherence to policies found in the Multiple Species Habitat Conservation Plans, Environmentally Sensitive Lands, Wetlands, and Floodplain and Riparian Area Management sections of the General Plan Multipurpose Open Space Element.

Highway 74 Community Plan

The Highway 74 Community Plan (proposed project) does not set forth any additional goals and policies related to biological resources.

3.4.3 - Methodology

Literature Review

County consultant Biologists examined existing environmental documentation for the project site and immediate vicinity. This documentation included literature pertaining to habitat requirements of special-status species potentially occurring near the site, and federal register listings, protocols, and species data provided by the USFWS and CDFW. These and other documents are cited within this report.

The analysis of the proposed project was conducted at a programmatic level; thus a reconnaissance-level field survey was not conducted within the planning area. The level of analysis was limited to a desktop-level survey of the planning area and its immediate vicinity.

Topographic Maps and Aerial Photographs

A County consultant Biologist reviewed current United States Geological Survey (USGS) 7.5-minute topographic quadrangle map(s) and aerial photographs as a preliminary analysis of the existing conditions within the project site and immediate vicinity.⁵ Information obtained from the topographic maps included elevation, general watershed information, and potential drainage feature locations using Google Earth in conjunction with the United States Environmental Protection Agency (EPA) Watershed Assessment, Tracking, and Environmental Results System (WATERS).⁶ Aerial photographs provided a perspective of the current site conditions relative to on-site and off-site land use, plant community locations, and potential locations of wildlife movement corridors.

⁵ United States Geological Survey (USGS). 2021. National Geospatial Program. Website: https://www.usgs.gov/core-science-systems/national-geospatial-program/us-topo-maps-america?qt-science_support_page_related_con=4#qt-science_support_page_related_con. Accessed August 23, 2021.

⁶ United States Environmental Protection Agency (EPA). 2021. Watershed Assessment, Tracking and Environmental Results System (WATERS). Website: <https://www.epa.gov/waterdata/waters-watershed-assessment-tracking-environmental-results-system>. Accessed August 23, 2021.

Soil Surveys

The United States Department of Agriculture (USDA) has published soil surveys that describe the soil series (i.e., group of soils with similar profiles) occurring within a particular area.⁷ These profiles include major horizons with similar thickness, arrangement, and other important characteristics. The series are further subdivided into soil mapping units that provide specific information regarding soil characteristics. Many special-status plant species have a limited distribution based exclusively on soil type. Therefore, pertinent USDA soil survey maps were reviewed to determine the existing soil mapping units within the project site and to establish whether the soil conditions on-site are suitable for any special-status plant species.

Special-status Species Database Search

A list of threatened, endangered, and otherwise special-status species previously recorded within the project vicinity were compiled based on a search of the USFWS Information for Planning and Consultation (IPaC), the CNDDDB and the CNPS Electronic Inventory (CNPSEI) of Rare and Endangered Vascular Plants of California for the *Lake Elsinore, California*, USGS 7.5-minute Topographic Quadrangle Map and the eight surrounding quadrangles.^{8,9,10} The database search results can be found in Appendix D.

The CNDDDB Biogeographic Information and Observation System (BIOS 5) database was used to determine the distance between the known occurrences of special-status species and the project site.¹¹

Protected Trees

Prior to conducting the reconnaissance-level field survey, applicable County ordinances pertaining to tree preservation and protection were reviewed and ascertained whether tree replacement measures or permits for the removal of protected trees are required.

Jurisdictional Waters and Wetlands

Prior to conducting the reconnaissance-level survey, a County consultant Biologist reviewed EPA WATERS and aerial photography to identify potential natural drainage features and water bodies.¹² In general, all surface drainage features identified as blue-line streams on USGS maps and linear patches of vegetation are expected to exhibit evidence of flows and are considered potentially subject to State and federal regulatory authority as waters of the United States and/or State. A preliminary assessment was conducted to determine the location of any existing drainages and limits

⁷ Natural Resources Conservation Service (NRCS). 2021. Web Soil Survey (WSS). United States Department of Agriculture (USDA). Website: <https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>. Accessed August 23, 2021.

⁸ United States Fish and Wildlife Service (USFWS). 2021. Information for Planning and Consultation (IPaC). Website: <https://ecos.fws.gov/ipac/>. Accessed August 23, 2021.

⁹ California Department of Fish and Wildlife (CDFW). 2021. CNDDDB RareFind 5 California Natural Diversity Database Query for Special-Status Species. Website: <https://map.dfg.ca.gov/rarefind/view/RareFind.aspx>. Accessed August 23, 2021.

¹⁰ California Native Plant Society (CNPS). 2021. California Native Plant Society Rare and Endangered Plant Inventory. Website: <http://www.rareplants.cnps.org/>. Accessed August 23, 2021.

¹¹ California Department of Fish and Wildlife (CDFW). 2021. Biogeographic Information and Observation System (BIOS 5). Website: <https://map.dfg.ca.gov/bios/>. Accessed August 23, 2021.

¹² United States Environmental Protection Agency (EPA). 2021. Watershed Assessment, Tracking and Environmental Results System (WATERS). Website: <https://www.epa.gov/waterdata/waters-watershed-assessment-tracking-environmental-results-system>. Accessed August 23, 2021.

of project-related grading activities, to aid in determining whether a formal delineation of waters of the United States or State is necessary.

Western Riverside County Multiple Species Habitat Conservation Plan

Prior to conducting the reconnaissance-level survey, a County consultant Biologist reviewed the Western Riverside County Regional Riverside Conservation Authority (RCA) MSHCP Information Map to determine MSHCP conservation requirements for the proposed project.¹³

3.4.4 - Environmental Setting

The planning area largely consists of low density and rural residential development as well as areas of commercial, light industrial and mixed-use development. The remaining areas consist of open space that include natural and semi-natural habitats. The habitat types present within the planning area are discussed below.

Vegetation Communities

The following section discusses the vegetation communities/land cover types present within the boundaries of the planning area. The classification of the following vegetation communities is based on definitions contained in the MSHCP.¹⁴ These communities are depicted in Exhibit 3.4-1 and on the RCA MSHCP Information Map.¹⁵

Agricultural Land

Agricultural land includes several different land uses including field croplands, groves/orchards, dairy, livestock feed yards and pastureland. The vegetation present in these habitat types typically includes monocultures in the form of dense stands of row crops or trees in the case of field crops or orchards. Pasture lands often contain low-growing perennial grasses and legumes as well as other ruderal herbs (weeds).

The planning area contains a few small areas of agricultural land located mostly to the north of State Route (SR) 74 and Ethanac Road.

Coastal Sage Scrub

Coastal sage scrub is dominated by low-statured, aromatic, drought deciduous shrubs and subshrub species. Composition varies substantially depending on physical circumstances and the successional status of the habitat. Characteristic species of coastal sage scrub include California sagebrush (*Artemisia californica*), California buckwheat (*Eriogonum fasciculatum*), laurel sumac (*Malosma laurina*), California encelia (*Encelia californica*), and several species of sage (e.g., *Salvia mellifera*, *S. apiana*). Other common species include brittlebush (*E. farinosa*), lemonadeberry (*Rhus integrifolia*), sugarbush (*Rhus ovata*), yellow bush penstemon (*Keckiella antirrhinoides*), Mexican elderberry

¹³ Western Riverside County Regional Conservation Authority (RCA). 2021. MSHCP Information Map. Website: <https://wrcrca.maps.arcgis.com/apps/webappviewer/index.html?id=a73e69d2a64d41c29ebd3acd67467abd>. Accessed August 23, 2021.

¹⁴ Dudek & Associates, Inc. 2003. Western Riverside County Regional Multiple Species Habitat Conservation Plan (MSHCP). County of Riverside Transportation and Land Management Agency. Riverside, California.

¹⁵ Ibid.

(*Sambucus mexicana*), sweetbush (*Bebbia juncea*), boxthorn (*Lycium* spp.), shore cactus (*Opuntia littoralis*), coastal cholla (*O. prolifera*), tall prickly-pear (*Opuntia oricola*), and species of *Dudleya*.^{16,17}

Small pockets of coastal sage scrub habitat can be found throughout the entire length of the planning area. The largest area of continuous sage scrub habitat can be found west of SR-74 and south of Ethanac Road.

Developed/Disturbed Land

Developed land is characterized by permanent or semi-permanent structures, pavement, or hardscape, and landscaped areas that often require irrigation. The developed vegetation community includes land that has been constructed upon or otherwise covered with a permanent man-made surface. Areas where no natural land is evident, or because large amounts of debris or other materials have been placed upon it, may also be considered. Vegetation within the urban/developed land consists of ornamental landscape vegetation with little to no native species observed. Ornamental vegetation is often present in the form of tree groves, street strips, grass lawns, and shrub cover.

Ruderal (weed) communities are also common in disturbed areas, often occurring on roadsides and abandoned areas. Ruderal communities occupy waste areas and roadsides, often on heavily compacted soils. Typical species include pineapple-weed (*Chamomilla suaveolens*), common knotweed (*Polygonum arenastrum*), sow-thistle (*Sonchus oleraceus*), horseweed (*Conyza canadensis*), and goosefoot (*Chenopodium* spp.). Escaped ornamentals also may proliferate in ruderal communities. Some commonly escaped exotic species include acacias (*Acacia* spp.), pepper trees (*Schinus* spp.), pampas grass (*Cortaderia* spp.), brooms (*Cytisus* spp.), and English ivy (*Hedera helix*).¹⁸

Developed/Disturbed land makes up the largest land cover type present within the planning area and is present throughout.

Grassland

The MSHCP differentiates between valley and foothill grasslands and non-native grasslands. It is difficult to determine the species composition and classify mapped areas without field verification.

Valley and foothill grasslands occur in a variety of forms ranging from scattered perennial bunch grasses (typically *Nassella pulchra*, or *N. lepida*) with high abundance of non-native grasses and forbs to stands dominated by native perennial grasses in an assemblage of geophytes (plants with underground bulbs or corms), and herbaceous annual species. Native geophytes include the following species or genera: onion (*Allium* spp.), wild celery (*Apiastrum angustifolium*), common golden star (*Bloomeria crocea*), *Brodiaea* spp., *Calochortus* spp., blue dicks (*Dichelostemma capitata*), *Muilla* spp., blue-eyed grass (*Sisyrinchium bellum*), and *Dudleya* spp. Native herbaceous plants commonly found within valley and foothill grasslands include yellow fiddleneck (*Amsinckia*

¹⁶ Holland, R.F., 1986. Preliminary descriptions of the terrestrial natural communities of California. California Department of Fish and Game. Unpublished report. Sacramento, California.

¹⁷ Sawyer, J.O. and T. Keeler-Wolf. 1995. A Manual of California Vegetation. California Native Plant Society, Sacramento, California.

¹⁸ Holland, V.L. and D.J. Keil. 1995. California Vegetation. Kendall/Hunt Publishing Company, Dubuque, Iowa.

menziesii), *Calandrinia* spp., common calyptidium (*Calyptidium monardum*), suncup (*Camissonia* spp.), owl's clover (*Castilleja* spp.), Chinese houses (*Collinsia heterophylla*), *Cryptantha* spp., *Delphinium* spp., California poppy (*Eschscholzia californica*), *Gilia* spp., tarweed (*Hemizonia* spp.), coast goldfields (*Lasthenia californica*), common tidy-tips (*Layia platyglossa*), *Linanthus* spp., *Lomatium* spp., *Lotus* spp., *Lupinus* spp., *Microseris* spp., *Plagiobothrys* spp., *Sanicula* spp., checker mallow (*Sidalcea malvaeflora*), and clover (*Trifolium* spp.).^{19,20,21}

Non-native grasslands primarily are composed of annual grass species introduced from the Mediterranean basin and other Mediterranean-climate regions with variable presence of non-native and native herbaceous species.^{22,23} Non-native grasslands are dominated by several species of grasses: slender oat (*Avena barbata*), wild oat (*A. fatua*), fox tail chess (*Bromus madritensis*), soft chess (*B. hordeaceus*), ripgut grass (*B. diandrus*), barley (*Hordeum* spp.), rye grass (*Lolium multiflorum*), English ryegrass (*L. perrene*), rat-tail fescue (*Vulpia myuros*), Mediterranean schismus (*Schismus barbatus*) that have evolved to persist in concert with human agricultural practices.²⁴ Non-native grasslands also typically support an array of annual forbs from the Mediterranean-climate regions including red-stemmed filaree (*Erodium cicutarium*), broad-lobed filaree (*E. botrys*), mustard (*Brassica* spp.), short-podded mustard (*Hirschfeldia incana*), wild radish (*Raphanus sativus*), *Centaurea* spp., Italian thistle (*Carduus pycnocephalus*), artichoke thistle (*Cynara cardunculus*), common catchfly (*Silene gallica*), *Medicago* spp., and *Hypochaeris* spp. Disturbance-tolerant native species are sometimes present within non-native grasslands in low abundance. These species usually include shrubs such as *Lotus* spp., *Eriogonum* spp., *Lessingia* spp., *Isocoma*, spp., *Ericameria* spp., cacti (*Opuntia* spp.); perennial geophytes (*Dichelostemma capitata*); and herbaceous annuals such as doveweed (*Eremocarpus setigerus*), vinegar weed (*Trichostemma lanceolatum*), and tarweed (*Hemizonia* spp.).^{25,26,27}

Several areas of grassland habitat can be found within the boundaries of the planning area. The largest area of grassland habitat can be found north of Mazie Road and south of Ethanac Road.

Riparian Scrub, Woodland, Forest

Riparian communities typically consist of one or more deciduous tree species with an assorted understory of shrubs and herbs.²⁸ The transition between riparian habitats and adjacent non-

¹⁹ Holland, R.F., 1986. Preliminary descriptions of the terrestrial natural communities of California. California Department of Fish and Game. Unpublished report. Sacramento, California.

²⁰ Keeley, J. E. 1990. The California valley grassland. In: A.A. Schoenherr (ed.), Endangered plant communities of Southern California. California State University, Fullerton. Southern California Botanists, Special Publication No. 3.

²¹ Sims, P.L. and Risser, P.G. (2000) Grasslands. In: Barbour, M.G. and Billings, W.D., Eds., North American Terrestrial Vegetation, Second Edition. Cambridge: Cambridge University Press.

²² Baker, H.G. 1989. Sources of the naturalized grasses and herbs. In California grasslands. In: L.F. Huenneke and H.A. Mooney, (eds.) Grassland structure and function: California annual grasslands. Boston, MA: Kluwer Academic Publishers.

²³ Mack, R.N., 1989. Temperate grasslands vulnerable to plant invasions: characteristics and consequences. Biological invasions: a global perspective.

²⁴ Holland, V.L. and D.J. Keil. 1995. California Vegetation. Dubuque, Iowa: Kendall/Hunt Publishing Company.

²⁵ Holland, R.F., 1986. Preliminary descriptions of the terrestrial natural communities of California. California Department of Fish and Game. Unpublished report. Sacramento, California.

²⁶ Sawyer, J.O., Keeler-Wolf, T. and Evens, J.M., 1995. A manual of California vegetation. Sacramento, California: California Native Plant Society.

²⁷ Sims, P.L. and Risser, P.G. (2000) Grasslands. In: Barbour, M.G. and Billings, W.D., Eds., North American Terrestrial Vegetation, Second Edition. Cambridge: Cambridge University Press.

²⁸ Ibid.

riparian habitats often is abrupt. Vegetation height can vary from one to three meters in riparian scrub habitats to 30 meters in riparian forest habitats.²⁹

Riparian forest can include any combination of the following species along perennial stream channel banks: box elder (*Acer negundo*), big-leaf maple (*A. macrophyllum*), valley oak (*Quercus lobata*), coast live oak (*Q. agrifolia*), white alder (*Alnus rhombifolia*), Oregon ash (*Fraxinus latifolia*), California dogwood (*Cornus californica*), California bay (*Umbellularia californica*), sycamore (*Platanus racemosa*), Fremont's cottonwood (*Populus fremontii*), California walnut (*Juglans californica*), and several species of willow (*Salix lasiandra*, *S. lasiolepis*, *S. laevigata*, *S. gooddingii*, *S. exigua*), Mexican elderberry, wild grape (*Vitis girdiana*) and poison-oak (*Toxicodendron diversilobum*). Where the stream channel receives perennial flows in some years but intermittent flows in other years, alder species drop out of the vegetation. Where the stream channel receives only intermittent flow, the willow and cottonwood species become less common and the sycamore, coast live oak and California bay tend to move down into the channel. Along ephemeral stream channels, coast live oak and California walnut can grow within the channel as a continuum or ecotone from uplands on north-facing slopes.³⁰

Riparian scrub has the same potential species composition as riparian forest, but at a younger successional stage, either because of a more recent disturbance or more frequent flooding. In addition to the species listed in the description of riparian forest, riparian scrub also may include mulefat (*Baccharis salicifolia*).³¹

A few small, scattered areas of riparian vegetation can be found along the several drainages that intersect SR-74. The largest continuous area of riparian vegetation within the planning area can be found north of Mauricio Street and south of Telford Avenue.

Woodland and Forests

The RCA MSHCP Information Map does not differentiate between different woodland communities types such as oak woodlands, broad-leaved upland forests, riparian and ornamental woodlands.³² It is difficult to determine the species composition and classify mapped areas without field verification.

Within the planning area, oak woodlands dominated by coast live oak (*Quercus agrifolia*) are likely present. Other trees/shrubs that may be present within coast live oak woodlands include California walnut, toyon (*Heteromeles arbutifolia*), California bay, Engelmann oak (*Quercus engelmannii*), manzanita (*Arctostaphylos* spp.) California lilac (*Ceanothus* spp.) and laurel sumac.

Many understory plants in oak woodlands are shade tolerant and include wild blackberry (*Rubus ursinus*), snowberry (*Symphoricarpos mollis*), *Rhus* spp., currant (*Ribes* spp.), poison-oak and

²⁹ Grenfell, W.E. Jr. 1988. Montane Riparian in A guide to Wildlife Habitats of California. California Department of Forestry and Fire Protection (CAL FIRE).

³⁰ Faber, P.M., 1989. The ecology of riparian habitats of the Southern California coastal region: a community profile. United States Department of the Interior, Fish and Wildlife Service, Research and Development, National Wetlands Research Center.

³¹ Ibid.

³² Western Riverside County Regional Conservation Authority (RCA). 2021. MSHCP Information Map. Website: <https://wrcrca.maps.arcgis.com/apps/webappviewer/index.html?id=a73e69d2a64d41c29ebd3acd67467abd>. Accessed August 23, 2021.

herbaceous plants including bracken fern (*Pteridium aquilinum*), polypody fern (*Polypodium californicum*), fiesta flower (*Pholistorma auritum*) and miner's lettuce (*Claytonia perfoliata*).^{33,34}

A small area of woodland habitat can be found north of Ethanac Road and east of SR-74.

Special-status Plants and Wildlife

Special-status species are plant and animal species that have been afforded special recognition by federal, State, or local resource agencies or organizations. Listed and special-status species are of relatively limited distribution and may require specialized habitat conditions. Special-status species are defined as meeting one or more of the following criteria:

- Listed or proposed for listing under CESA or the Endangered Species Act;
- Protected under other regulations (e.g., MBTA);
- CDFW Species of Special Concern;
- Plant species ranked by the CNPS; or
- Receive consideration during environmental review under CEQA.

Listed and Special-status Plants

Table 3.4-1 identifies 16 special-status plant species including six State- or federally listed species that were recorded within a 5-mile radius of the planning area. The table also includes each species' status, required habitat, and potential to occur within the planning area (see Exhibit 3.4-2a).

³³ Holland, V.L. and D.J. Keil. 1995. California Vegetation. Dubuque, Iowa: Kendall/Hunt Publishing Company.

³⁴ Sawyer, J.O. and T. Keeler-Wolf. 1995. A Manual of California Vegetation. Sacramento, California: California Native Plant Society.

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Table 3.4-1: Special-status Plant Species Evaluated

Scientific Name Common Name	Status			Covered by MSHCP?	Habitat Description ⁴	Potential to Occur and Rationale ⁵
	USFWS ¹	CDFW ²	CNPS ³			
Dicots						
<i>Abronia villosa</i> var. <i>aurita</i> chaparral sand-verbena	—	—	1B.1	—	Chaparral, coastal scrub, desert dunes. Sandy areas. Elevation: 60–1570 m. Blooming period: (January) March–September	May be present. Suitable coastal sage scrub vegetation communities can be found within the Community Plan Boundary.
<i>Ambrosia pumila</i> San Diego ambrosia	FE	—	1B.1	Yes	Chaparral, coastal scrub, valley and foothill grassland. Sandy loam or clay soil; sometimes alkaline. In valleys; persists where disturbance has been superficial. Sometimes on margins or near vernal pools. Elevation: 3–580 m. Blooming period: April–October	May be present. Suitable coastal sage scrub and grassland vegetation communities can be found within the Community Plan Boundary.
<i>Atriplex coronata</i> var. <i>notatior</i> San Jacinto Valley crownscale	FE	—	1B.1	Yes	Playas, valley and foothill grassland, vernal pools. Alkaline areas in the San Jacinto River Valley. Elevation: 35–460 m. Blooming period: April–August	May be present. Suitable grassland vegetation communities can be found within the Community Plan Boundary.
<i>Atriplex parishii</i> Parish's brittlescale	—	—	1B.1	Yes	Vernal pools, chenopod scrub, playas. Usually on drying alkali flats with fine soils. Elevation: 4–1420 m. Blooming period: June–October	Unlikely to occur. Suitable vernal pool, playa or chenopod scrub vegetation communities are likely not present within the Community Plan Boundary.
<i>Centromadia pungens</i> ssp. <i>laevis</i> Smooth tarplant	—	—	1B.1	Yes	Occurs in alkali meadow, alkali scrub, and disturbed places in valley and foothill grassland, chenopod scrub, meadows, playas, and riparian woodland habitats. Bloom period: April–September Elevation: 0–640 m	May be present. Suitable grassland vegetation and riparian vegetation communities can be found within the Community Plan Boundary.

Scientific Name Common Name	Status			Covered by MSHCP?	Habitat Description ⁴	Potential to Occur and Rationale ⁵
	USFWS ¹	CDFW ²	CNPS ³			
<i>Chorizanthe parryi</i> var. <i>parryi</i> Parry's spineflower	—	—	1B.1	Yes	Occurs on sandy soils in chaparral, coastal sage and Riversidean alluvial fan sage scrub habitats. Elevation: 90–800 m Blooming period: April–June	May be present. Suitable coastal sage scrub vegetation communities can be found within the Community Plan Boundary. Several ephemeral drainages occur within the Community Plan Boundary.
<i>Chorizanthe polygonoides</i> var. <i>longispina</i> long-spined spineflower	—	—	1B.2	Yes	Chaparral, coastal scrub, meadows and seeps, valley and foothill grassland, vernal pools. Gabbroic clay. Elevation: 30–1630 m. Blooming period: April–July	May be present. Suitable coastal sage scrub and grassland vegetation communities can be found within the Community Plan Boundary.
<i>Dodecahema leptoceras</i> slender-horned spineflower	FE	SE	1B.1	—	Chaparral, cismontane woodland, coastal scrub (alluvial fan sage scrub). Flood deposited terraces and washes; associates include <i>Encelia</i> , <i>Dalea</i> , <i>Lepidospartum</i> , etc. Sandy soils. Elevation: 200–765 m. Blooming period: April–May	Unlikely to occur. Suitable coastal sage scrub and woodland vegetation communities can be found within the Community Plan Boundary. Several ephemeral drainages occur within the Community Plan Boundary. Species is believed to be locally extirpated.
<i>Dudleya multicaulis</i> many-stemmed dudleya	—	—	1B.2	Yes	Chaparral, coastal scrub, valley and foothill grassland. Grows in heavy, often clayey soils or grassy slopes. Elevation: 1–910 m. Bloom period: April–July	May be present. Suitable coastal sage scrub and grassland vegetation communities can be found within the Community Plan Boundary.
<i>Lasthenia glabrata</i> ssp. <i>coulteri</i> Coulter's goldfields	—	—	1B.1	Yes	Coastal salt marshes, playas, vernal pools. Usually found on alkaline soils in playas, sinks, and grasslands. Elevation: 1–1375 m. Blooming period: February–June	May be present. Suitable grassland vegetation communities can be found within the Community Plan Boundary.

Scientific Name Common Name	Status			Covered by MSHCP?	Habitat Description ⁴	Potential to Occur and Rationale ⁵
	USFWS ¹	CDFW ²	CNPS ³			
<i>Monardella hypoleuca</i> ssp. <i>intermedia</i> intermediate monardella	—	—	1B.3	—	Chaparral, cismontane woodland, lower montane coniferous forest (sometimes). Often in steep, brushy areas. Elevation: 195–1675 m. Blooming period: April–September	Unlikely to occur. Suitable chaparral, cismontane woodland, lower montane coniferous vegetation communities are not present within the Community Plan Boundary.
<i>Myosurus minimus</i> ssp. <i>apus</i> little mousetail	—	—	3.1	Yes	Vernal pools, valley and foothill grassland. Alkaline soils. Elevation: 20–640 m. Blooming period: March–June	May be present. Suitable grassland vegetation communities can be found within the Community Plan Boundary.
<i>Navarretia fossalis</i> spreading navarretia	FT	—	1B.1	—	Vernal pools, chenopod scrub, marshes and swamps, playas. San Diego hardpan and San Diego claypan vernal pools; in swales and vernal pools, often surrounded by other habitat types. Elevation: 15–850 m. Blooming period: April–June	Unlikely to occur. Suitable vernal pool, playa or chenopod scrub vegetation communities are likely not present within the Community Plan Boundary.
Monocots						
<i>Allium munzii</i> Munz's onion	FE	ST	1B.1	Yes	Chaparral, coastal scrub, cismontane woodland, pinyon and juniper woodland, valley and foothill grassland. Heavy clay soils; grows in grasslands and openings within shrublands or woodlands. Elevation: 375–1040 m. Blooming period: March–May	May be present. Suitable coastal sage scrub and grassland vegetation communities can be found within the Community Plan Boundary.
<i>Brodiaea filifolia</i> thread-leaved brodiaea	FT	SE	1B.1	Yes	Chaparral (openings), cismontane woodland, coastal scrub, playas, valley and foothill grassland, vernal pools. Usually associated with annual grassland and vernal pools; often surrounded by shrubland habitats. Occurs in openings on clay soils. Elevation: 15–1030 m. Blooming period: March–June	May be present. Suitable coastal sage scrub and grassland vegetation communities can be found within the Community Plan Boundary.

Scientific Name Common Name	Status			Covered by MSHCP?	Habitat Description ⁴	Potential to Occur and Rationale ⁵
	USFWS ¹	CDFW ²	CNPS ³			
<i>Orcuttia californica</i> California Orcutt grass	FE	SE	1B.1	Yes	Vernal pools. Elevation: 10–660 m. Blooming period: April–August	Unlikely to occur. Suitable vernal pool vegetation communities are likely not present within the Community Plan Boundary.
Code Designations						
¹ Federal Status: 2020 USFWS Listing		² State Status: 2020 CDFW Listing			³ CNPS: 2020 CNPS Listing	
ESU = Evolutionary Significant Unit is a distinctive population. FE = Listed as endangered under the Endangered Species Act. FT = Listed as threatened under the Endangered Species Act. FC = Candidate for listing (threatened or endangered) under the Endangered Species Act. FD = Delisted in accordance with the Endangered Species Act. FPD = Federally Proposed to be Delisted. MBTA = protected by the Migratory Bird Treaty Act — = Not federally listed		SE = Listed as endangered under the CESA. ST = Listed as threatened under the CESA. SSC = Species of Special Concern as identified by the CDFW. FP = Listed as fully protected under FGC. CFG = FGC = protected by FGC 3503.5 CR = Rare in California. — = Not State listed			Rank 1A = Plants species that presumed extinct in California. Rank 1B = Plant species that are rare, threatened, or endangered in California and elsewhere. Rank 2 = Plant species that are rare, threatened, or endangered in California, but more common elsewhere. Rank 3 = Plants about which we need more information—A Review List Rank 4 = Plants of limited distribution—A Watch List Blooming period: Months in parentheses are uncommon.	
⁴ Habitat Description: Habitat description adapted from CNDDDB and CNPS online inventory or other specified source. ⁵ Potential to Occur and Rationale: Location of recorded species occurrences determined by geospatial information from BIOS 5 or other specified source*.						
Sources: California Department of Fish and Wildlife (CDFW). 2021. CNDDDB RareFind 5 California Natural Diversity Database Query for Special-Status Species. Website: https://map.dfg.ca.gov/rarefind/view/RareFind.aspx . Accessed August 24, 2021. California Native Plant Society (CNPS). 2021. California Native Plant Society Rare and Endangered Plant Inventory. Website: http://www.rareplants.cnps.org/ . Accessed August 24, 2021. California Department of Fish and Wildlife (CDFW). 2021. Biogeographic Information and Observation System (BIOS 5). Website: https://map.dfg.ca.gov/bios/ . Accessed August 24, 2021. Calflora. 2021. Calflora: Information on California plants for education, research, and conservation. Website: http://www.calflora.org/ . Accessed August 24, 2021. United States Fish and Wildlife Service (USFWS). 2021. Information for Planning and Consultation (IPaC). Website: https://ecos.fws.gov/ipac/ . Accessed August 24, 2021.						

Listed and Special-Status Wildlife

Table 3.4-2 identifies 36 special-status wildlife species, including 10 State- or federally listed species that were recorded within a 5-mile radius of the planning area. The table also includes each species' status, required habitat, and potential to occur within the planning area (see Exhibit 3.4-2b).

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Table 3.4-2: Special-status Wildlife Species Evaluated

Scientific Name Common Name	Status		Covered by MSHCP?	Habitat Description ³	Potential to Occur and Rationale ⁴
	USFWS ¹	CDFW ²			
Amphibians					
<i>Spea hammondi</i> western spadefoot	—	— SSC	Yes	Occurs in open areas with sandy or gravelly soils in mixed woodlands, grasslands, coastal sage and Riversidean alluvial fan sage scrub, chaparral, sandy washes, lowlands, river floodplains, alluvial fans, playas, alkali flats, foothills, and mountains. Breeds in ephemeral rain pools that do not contain bullfrogs, fish, or crayfish.	May be present. Suitable woodland, grassland, coastal sage scrub and riparian vegetation communities can be found within the Community Plan Boundary. Several ephemeral drainages occur within the Community Plan Boundary.
Birds					
<i>Accipiter cooperii</i> Cooper's hawk	—	— CFG WL	Yes	Occurs in woodland habitats, chiefly of open, interrupted or marginal type. Builds its nest mainly in riparian growths of deciduous trees, often in canyon bottoms on river floodplains or live oak woodlands. Year-round resident in Southern California.	May be present. Suitable nesting habitat in the form of woodland vegetation communities can be found within the Community Plan Boundary. Suitable foraging habitat can be found within the open habitats found within the Community Plan Boundary.
<i>Agelaius tricolor</i> tricolored blackbird	—	ST SSC CFG	Yes	Forages in open habitats such as farm fields, pastures, cattle pens, large lawns. Highly colonial species, most numerous in Central Valley and vicinity. Largely endemic to California. Breeds in large freshwater marshes, dense stands of hydrophytic vegetation (cattails, bulrushes, etc.)	Unlikely to occur. Suitable freshwater marsh vegetation communities are likely not present within the Community Plan Boundary.
<i>Aimophila ruficeps canescens</i> Southern California rufous-crowned sparrow	—	— CFG WL	Yes	Occurs and nests on steep, often rocky hillsides with grass and forb patches in coastal sage and Riversidean alluvial fan sage scrub and sparse mixed chaparral habitats. Year-round resident in Southern California.	May be present. Suitable grassland and coastal sage scrub vegetation communities can be found within the Community Plan Boundary.

Scientific Name Common Name	Status		Covered by MSHCP?	Habitat Description ³	Potential to Occur and Rationale ⁴
	USFWS ¹	CDFW ²			
<i>Aquila chrysaetos</i> golden eagle	—	— FP WL	Yes	Rolling foothills, mountain areas, sage-juniper flats, and desert. Cliff-walled canyons provide nesting habitat in most parts of range; also, large trees in open areas.	Unlikely to occur. Suitable foraging habitat can be found within the Community Plan Boundary. This species is known to occur near mountainous areas and may occasionally fly over the planning area in search of food but is unlikely to nest within its boundaries.
<i>Artemisiospiza belli</i> Bell's sage sparrow	—	— CFG WL	Yes	Nests in chaparral dominated by fairly dense stands of chamise. Found in coastal sage scrub in south of range. Nest located on the ground beneath a shrub or in a shrub 6–18 inches above ground. Territories about 50 yards apart.	May be present. Suitable coastal sage scrub vegetation communities can be found within the Community Plan Boundary.
<i>Asio otus</i> long-eared owl	—	— SSC CFG	—	Often occurs in riparian bottomlands where tall willows and cottonwoods grow. May also occur in belts of live oak woodland paralleling stream courses. Frequently makes use of old nests of crows, hawks, or magpies for breeding. This species requires adjacent open land, productive of mice foraging.	May be present. Suitable nesting habitat in the form of riparian and woodland vegetation communities can be found within the Community Plan Boundary. Suitable foraging habitat can be found within the open habitats found within the Community Plan Boundary.
<i>Athene cunicularia</i> burrowing owl	—	— SSC CFG	Yes	Found in open, dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. A subterranean nester, dependent upon burrowing mammals, most notably the California ground squirrel (<i>Otospermophilus beecheyi</i>).	May be present. Suitable grassland vegetation communities can be found within the Community Plan Boundary. Much of the Community Plan Boundary lies within a MSHCP Burrowing Owl Survey Area.
<i>Charadrius nivosus</i> western snowy plover	FT MBTA	— SSC CFG	—	Sandy beaches, salt pond levees and shores of large alkali lakes. Needs sandy, gravelly or friable soils for nesting.	Unlikely to occur. Suitable aquatic habitat is likely not present within the Community Plan Boundary.

Scientific Name Common Name	Status		Covered by MSHCP?	Habitat Description ³	Potential to Occur and Rationale ⁴
	USFWS ¹	CDFW ²			
<i>Elanus leucurus</i> white-tailed kite	—	— FP CFG	Yes	Often found near foothills and valley margins with scattered oaks and river bottomlands or marshes next to deciduous woodland or isolated dense-topped trees for nesting and perching. Forages in open grasslands, meadows, or marshes.	May be present. Suitable nesting habitat in the form of riparian and woodland vegetation communities can be found within the Community Plan Boundary. Suitable foraging habitat can be found within the open habitats found within the Community Plan Boundary.
<i>Empidonax traillii extimus</i> southwestern willow flycatcher	FT MBTA	SE CFG	Yes	Occurs and nests in dense riparian woodlands. Long-distance migrant.	May be present. Suitable nesting habitat in the form of riparian vegetation communities can be found within the Community Plan Boundary.
<i>Eremophila alpestris actia</i> California horned lark	—	— WL	Yes	Occurs in short-grass prairie, "bald" hills, mountain meadows, open coastal plains, fallow grain fields, alkali flats. Nests in open areas with sparse vegetation. Year-round resident in Southern California.	May be present. Suitable nesting and foraging habitat can be found within the open habitats found within the Community Plan Boundary.
<i>Icteria virens</i> yellow-breasted chat	— MBTA	— SSC CFG	Yes	Summer resident of Southern California. Inhabits riparian thickets of willow and other brushy tangles near watercourses. Nests in low, dense riparian, consisting of willow, blackberry, wild grape; forages and nests within 10 feet of ground. Long-distance migrant.	May be present. Suitable nesting habitat in the form of riparian vegetation communities can be found within the Community Plan Boundary.
<i>Lanius ludovicianus</i> loggerhead shrike	—	— SSC CFG	Yes	Occurs and nests in broken woodlands, savanna, pinyon-juniper, Joshua tree, and riparian woodlands, desert oases, scrub and washes. Prefers open country for hunting, with perches for scanning, and fairly dense shrubs and brush for nesting.	May be present. Suitable nesting habitat in the form of woodland vegetation communities can be found within the Community Plan Boundary. Suitable foraging habitat can be found within the open habitats found within the Community Plan Boundary.
<i>Plegadis chihi</i> white-faced ibis	— MBTA	— CFG WL	Yes	Shallow freshwater marsh. Dense tule thickets for nesting, interspersed with areas of shallow water for foraging.	Unlikely to occur. Suitable aquatic habitat is likely not present within the Community Plan Boundary. Species is believed to be locally extirpated.

Scientific Name Common Name	Status		Covered by MSHCP?	Habitat Description ³	Potential to Occur and Rationale ⁴
	USFWS ¹	CDFW ²			
<i>Polioptila californica</i> coastal California gnatcatcher	FT	— SSC CFG	Yes	An obligate, permanent resident of coastal sage scrub below 2,500 feet in Southern California. May also be found in arid washes, on mesas, and slopes.	May be present. Suitable coastal sage scrub vegetation communities can be found within the Community Plan Boundary.
<i>Vireo bellii pusillus</i> least Bell's vireo	FE MBTA	SE	Yes	A summer resident of Southern California. Nests in low riparian habitat in the vicinity of water or in dry river bottoms. Nests placed along margins of bushes or in twigs projecting into pathways, usually willows, coyote bush, mule fat, or mesquite. Occurs below 2,000 feet. Long-distance migrant.	May be present. Suitable nesting habitat in the form of riparian vegetation communities can be found within the Community Plan Boundary.
Crustaceans					
<i>Streptocephalus woottoni</i> Riverside fairy shrimp	FE	—	Yes	Endemic to Western Riverside, Orange, and San Diego counties in areas of tectonic swales/earth slump basins in grassland and coastal sage scrub. Inhabit seasonally astatic pools filled by winter/spring rains. Hatch in warm water later in the season.	Unlikely to occur. Suitable vernal pool vegetation communities are likely not present within the Community Plan Boundary. Nearest known occurrence of this species is located approximately 3.3 miles south of the planning area.
<i>Branchinecta lynchi</i> vernal pool fairy shrimp	FT	—	Yes	Endemic to the grasslands of the Central Valley, Central Coast mountains, and South Coast mountains, in astatic rain-filled pools. Inhabit small, clear-water sandstone-depression pools and grassed swale, earth slump, or basalt-flow depression pools.	Unlikely to occur. Suitable vernal pool vegetation communities are likely not present within the Community Plan Boundary. Nearest known occurrence of this species is located approximately 11.6 miles east of the planning area.
Insects					
<i>Bombus crotchii</i> Crotch bumble bee	—	CE	—	Range of this species extends from Coastal California east to the Sierra-Cascade crest and south into Mexico. Food plant genera include Antirrhinum, Phacelia, Clarkia, Dendromecon, Eschscholzia, and Eriogonum.	May be present. Suitable food plants including Eschscholzia, and Eriogonum can be found within the Community Plan Boundary.

Scientific Name Common Name	Status		Covered by MSHCP?	Habitat Description ³	Potential to Occur and Rationale ⁴
	USFWS ¹	CDFW ²			
<i>Euphydryas editha quino</i> Quino checkerspot butterfly	FE	—	Yes	Occurs in grasslands, coastal sage scrub, chamise chaparral, red shank chaparral, juniper woodland, and semi-desert scrub habitats. Larval host plants are native species of plantain (<i>Plantago</i> sp.).	May be present. Suitable grassland and coastal sage scrub vegetation communities can be found within the Community Plan Boundary. Surveys would be needed to determine whether host plants are present.
Mammals					
<i>Chaetodipus fallax</i> northwestern San Diego pocket mouse	—	— SSC	Yes	Occurs in sandy, herbaceous areas, usually in association with rocks or coarse gravel, in coastal sage and Riversidean alluvial fan sage scrub, chaparral, and grasslands.	May be present. Suitable grassland and coastal sage scrub vegetation communities can be found within the Community Plan Boundary.
<i>Dipodomys merriami parvus</i> San Bernardino kangaroo rat	FE	CE SSC	Yes	Occurs on sandy loam substrates on first terraces and floodplains of washes in Riversidean alluvial fan sage scrub habitat.	Unlikely to occur. Suitable coastal sage scrub vegetation communities can be found within the Community Plan Boundary. Several ephemeral drainages occur within the Community Plan Boundary. Species is believed to be locally extirpated.
<i>Dipodomys stephensi</i> Stephens' kangaroo rat	FE	FT	Yes	Occurs primarily in annual and perennial grasslands, but also occurs in coastal sage scrub with sparse canopy cover. Can burrow into firm soil.	May be present. Suitable grassland and coastal sage scrub vegetation communities can be found within the Community Plan Boundary.
<i>Eumops perotis californicus</i> western mastiff bat	—	— SSC	—	Occurs in many open, semi-arid to arid habitats, including conifer and deciduous woodlands, coastal scrub, grasslands, chaparral. Roosts in crevices in cliff faces, high buildings, trees, and tunnels.	May be present. Suitable woodland, coastal sage scrub and grassland vegetation communities can be found within the Community Plan Boundary. Existing trees and buildings within the Community Plan Boundary may provide suitable roosting locations.
<i>Lasiurus xanthinus</i> western yellow bat	—	— SSC	—	Occurs in valley foothill riparian, desert riparian, desert wash, and palm oasis habitats. Roosts in skirts of dead fronds in both native and non-native palm trees.	May be present. Suitable woodland and riparian vegetation communities can be found within the Community Plan Boundary. Existing trees and buildings within the Community Plan Boundary may provide suitable roosting locations.

Scientific Name Common Name	Status		Covered by MSHCP?	Habitat Description ³	Potential to Occur and Rationale ⁴
	USFWS ¹	CDFW ²			
<i>Lepus californicus bennettii</i> San Diego black-tailed jackrabbit	—	— SSC	Yes	Intermediate canopy stages of shrub habitats and open shrub/herbaceous and tree/herbaceous edges. Coastal sage scrub habitats in Southern California.	May be present. Suitable grassland and coastal sage scrub vegetation communities can be found within the Community Plan Boundary.
<i>Onychomys torridus ramona</i> southern grasshopper mouse	—	— SSC	—	Desert areas, especially scrub habitats with friable soils for digging. Prefers low to moderate shrub cover. Feeds almost exclusively on arthropods, especially scorpions and orthopteran insects.	May be present. Suitable grassland and coastal sage scrub vegetation communities can be found within the Community Plan Boundary.
Reptiles					
<i>Anniella stebbinsi</i> southern California legless lizard	—	— SSC	—	Occurs in moist, loose soil in coastal sand dunes and a variety of interior habitats, including sandy washes and alluvial fans.	May be present. Several ephemeral drainages occur within the Community Plan Boundary.
<i>Arizona elegans occidentalis</i> California glossy snake	—	— SSC	—	Occurs in areas of rocky washes and loose, sandy soils and for burrowing in desert scrub grassland, coastal sage and Riversidean alluvial fan sage scrub, and chaparral habitats. Prefer open sandy areas with scattered brush, but also found in rocky areas.	May be present. Suitable grassland and coastal sage scrub vegetation communities can be found within the Community Plan Boundary. Several ephemeral drainages occur within the Community Plan Boundary.
<i>Aspidoscelis hyperythra</i> orange-throated whiptail	—	— WL	Yes	Inhabits low-elevation coastal sage and Riversidean alluvial fan sage scrub. Prefers washes and other sandy areas with patches of brush and rocks. Perennial plants necessary for its primary food: termites.	May be present. Suitable coastal sage scrub vegetation communities can be found within the Community Plan Boundary. Several ephemeral drainages occur within the Community Plan Boundary.
<i>Aspidoscelis tigris stejnegeri</i> San Diegan tiger whiptail	—	— SSC	—	Occurs in dry, open areas with sparse foliage in coastal sage and Riversidean alluvial fan sage scrub, chaparral, woodland, and riparian habitats.	May be present. Suitable coastal sage scrub, woodland and riparian vegetation communities can be found within the Community Plan Boundary. Several ephemeral drainages occur within the Community Plan Boundary.

Scientific Name Common Name	Status		Covered by MSHCP?	Habitat Description ³	Potential to Occur and Rationale ⁴
	USFWS ¹	CDFW ²			
<i>Phrynosoma blainvillii</i> coast horned lizard	—	— SSC	Yes	Inhabits open areas of sandy soil and low vegetation in valleys, foothills and semi-arid mountains. Found in grasslands, coniferous forests, woodlands, and chaparral, with open areas and patches of loose soil. Often found in lowlands along sandy washes with scattered shrubs and along dirt roads. Often found near ant hills feeding on ants.	May be present. Suitable coastal sage scrub, woodland and grassland vegetation communities can be found within the Community Plan Boundary. Several ephemeral drainages occur within the Community Plan Boundary.
<i>Crotalus ruber</i> red-diamond rattlesnake	—	— SSC	Yes	Occurs in arid, rocky areas in creosote scrub, coastal sage and Riversidean alluvial fan sage scrub, chaparral, oak and pine woodlands, grasslands, on cultivated areas.	May be present. Suitable coastal sage scrub, woodland and grassland vegetation communities can be found within the Community Plan Boundary.
<i>Emys marmorata</i> western pond turtle	—	— SSC	Yes	Occurs in ponds, marshes, rivers, streams and irrigation ditches, usually with aquatic vegetation, below 6,000 ft elevation. Needs basking sites and suitable (sandy banks or grassy open fields) upland habitat up to 0.5 km from water for egg-laying.	Unlikely to occur. Suitable aquatic habitat is likely not present within the Community Plan Boundary. Species is believed to be locally extirpated.
<i>Salvadora hexalepis virgulata</i> coast patch-nosed snake	—	— SSC	—	Brushy or shrubby vegetation in coastal Southern California. Require small mammal burrows for refuge and overwintering sites.	May be present. Suitable coastal sage scrub, woodland and grassland vegetation communities can be found within the Community Plan Boundary.

Code Designations

¹ Federal Status: 2020 USFWS Listing	² State Status: 2020 CDFW Listing
<p>ESU = Evolutionary Significant Unit is a distinctive population.</p> <p>FE = Listed as endangered under the Endangered Species Act.</p> <p>FT = Listed as threatened under the Endangered Species Act.</p> <p>FC = Candidate for listing (threatened or endangered) under the Endangered Species Act.</p> <p>FD = Delisted in accordance with the Endangered Species Act.</p> <p>FPD = Federally Proposed to be Delisted.</p> <p>MBTA = protected by the Migratory Bird Treaty Act</p> <p>— = Not federally listed</p>	<p>SE = Listed as endangered under the CESA.</p> <p>ST = Listed as threatened under the CESA.</p> <p>SSC = Species of Special Concern as identified by the CDFW.</p> <p>FP = Listed as fully protected under FGC.</p> <p>CFG = FGC = protected by FGC 3503.5</p> <p>CE = Candidate endangered under the CESA.</p> <p>WL = Species monitored by CDFW “Watch List”</p> <p>— = Not State listed</p>

Scientific Name Common Name	Status		Covered by MSHCP?	Habitat Description ³	Potential to Occur and Rationale ⁴
	USFWS ¹	CDFW ²			
³ Habitat Description: Habitat description adapted from CNDDDB or other specified source.* ⁴ Potential to Occur and Rationale: Location of recorded species occurrences determined by geospatial information from BIOS 5 or other specified source.*					
Sources: California Department of Fish and Wildlife (CDFW). 2021. CNDDDB RareFind 5 California Natural Diversity Database Query for Special-Status Species. Website: https://map.dfg.ca.gov/rarefind/view/RareFind.aspx . Accessed August 24, 2021. California Department of Fish and Wildlife (CDFW). 2021. Biogeographic Information and Observation System (BIOS 5). Website: https://map.dfg.ca.gov/bios/ . Accessed August 24, 2021. United States Fish and Wildlife Service (USFWS). 2021. Information for Planning and Consultation (IPaC). Website: https://ecos.fws.gov/ipac/ . Accessed August 24, 2021. Western Riverside County Regional Conservation Authority (RCA). 2011. Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) Biological Monitoring Program Vernal Pool Survey Report 2010. Riverside, CA. April 8, 2011. Website: https://wrc-rca.org/species/surveys/Vernal_Pool/RCA_2010_AR_TR_Monitor_Vernal_Pool.pdf					

Jurisdictional Waters

The planning area contains several drainages which may be considered jurisdictional by the USACE, RWQCB or CDFW. Exhibit 3.4-3 depicts these potentially jurisdictional drainages as “blue-line” streams.³⁵

Protected Trees

Riverside County Oak Tree Management Guidelines

The Riverside County Oak Tree Management Guidelines (approved by the Board of Supervisors on March 2, 1993) require that applications on properties that contain oak trees complete and submit a biological study to the County that details an inventory of on-site vegetation, identifies and quantifies impacts of the proposed project, and proposes avoidance or mitigation for any potential impacts to oak trees. The planning area likely includes many oak tree resources, and any project initiated within it would be required to comply with these guidelines.

Riverside Ordinance No. 559

Riverside Ordinance No. 559 regulates the removal of native trees in unincorporated areas of the County that are above 5,000 feet in elevation.³⁶

Western Riverside County MSHCP Consistency Analysis

Relationship to Criteria Cells, Cell Groups, and Conservation Areas

The planning area intersects two clusters of MSHCP Criteria Cells and borders at least four other Criteria Cells (Exhibit 3.4-4). These Criteria Cells form part of Existing Core 2, which RCA identifies as large habitats within the reserve that have the resources to support the species covered under the MSHCP. Much of the lands in Existing Core 2 are on Public/Quasi-Public Lands and parcels that have been acquired into the reserve system. Thus, the planning area contains parcels that are in or adjacent to existing conservation lands or within Criteria Cells targeted for conservation. Projects initiated on parcels within MSHCP Criteria Area Cells would be required to conduct studies, submit forms, and engage with the County as part of the Habitat Evaluation and Acquisition Negotiation Strategy (HANS) process. During the HANS process the County will determine whether the proposed project parcel contains elements important for conservation goals in the Criteria Cell and thus, needed for reserve assembly. Depending on the described MSHCP conservation requirements for each parcel and its biological condition, conservation on a project parcel could range from 0–100 percent. Projects that are on parcels that are in or adjacent to conserved lands in Existing Core 2 would be subject to Guidelines Pertaining to the Urban/Wildlands Interface.

Outside of Existing Core 2, the nearest Conservation Areas include Public/Quasi-Public Lands around Canyon Lake, located approximately 2.0 miles east of the planning area, and Public/Quasi-Public Lands in Cleveland National Forest, located approximately 4.0 miles southwest of the planning area.

³⁵ United States Environmental Protection Agency (EPA). 2021. Watershed Assessment, Tracking and Environmental Results System (WATERS). Website: <https://www.epa.gov/waterdata/waters-watershed-assessment-tracking-environmental-results-system>. Accessed August 23, 2021.

³⁶ County of Riverside. 2021. Code of Ordinances, Chapter 12.24. Website: https://library.municode.com/ca/riverside_county/codes/code_of_ordinances?nodeId=RICOCACOV01. Accessed August 23, 2021.

Covered Roads

There are several Covered Roads in the planning area (Exhibit 3.4-6). Projects initiated in the planning area that involve improvements to Covered Roads may be subject to MSHCP Covered Roads requirements, particularly projects within or adjacent to Conservation Areas. Requirements for specific Covered Roads are listed in MSHCP Sections 7.2, 7.3.4, and 7.3.5.

Covered Public Access Activities

Projects located in Conservation Areas that propose trails, facilities, and/or passive recreational activities would be subject to Covered Public Access Activities requirements.

Public Quasi-Public Lands

The planning area includes parcels that are in or adjacent to existing public or quasi-public lands or areas designated as Public/Quasi-Public Conserved Lands. Any projects initiated on or adjacent to Public Quasi-Public Lands would be subject to MSHCP requirements covering them.

Covered Species Survey Area Requirements

The planning area includes parcels that are located in the following covered species survey area:

- Burrowing Owl Survey Area (Exhibit 3.4-5)

The proposed project is therefore subject to survey requirements for burrowing owl. Initially, projects on parcels in the survey area would be subject to a burrowing owl habitat assessment on and adjacent (within 500 feet) to the project site, per MSHCP protocol and per CDFW (2012) and MSHCP protocols. Projects assessed as supporting burrowing owl habitat would be required to implement protocol breeding season burrowing owl surveys and pre-construction surveys per CDFW (2012) and MSHCP protocols. Those project sites that are determined to support burrowing owl(s) would need to consult with CDFW and develop a Burrowing Owl Mitigation Plan prior to project implementation.

The planning area does not include parcels that are located in any of the following covered species survey areas:

- Amphibians Survey Area
- Mammals Survey Area
- Delhi Sands Flower-loving Fly Survey Area
- Narrow Endemic Plants Survey Area
- Criteria Area Species

Protection of Species Associated with Riparian/Riverine Areas and Vernal Pools

The planning area contains riparian habitats that could support the occurrence of Riparian/Riverine bird species, including least Bell's vireo (*Vireo bellii pusillus*), southwestern willow flycatcher (*Empidonax traillii extimus*), and yellow-billed cuckoo (*Coccyzus americanus*). Projects on parcels that support suitable habitat for any of these species would be required to implement surveys and avoidance/mitigation measures.

The planning area likely does not support habitat for vernal pool fairy shrimp species and projects would not likely be subject to Vernal Pool or Vernal Pool Species requirements under the MSHCP. However, each project will need to evaluate whether vernal pool resources could be present as part of the MSHCP Consistency Analysis.

Any project initiated in the planning area that contains Riparian/Riverine Areas would need to conduct studies, surveys, permitting, and mitigation for any potential project impacts. Determinations of appropriate levels of mitigation would be made through Determination of Biologically Equivalent or Superior Preservation (DBESP) analyses. The DBESP would be required in addition to any State or federal requirements protecting waters and jurisdictional habitats associated with Riparian/Riverine Areas.

Guidelines Pertaining to the Urban/Wildlands Interface

All projects located within or adjacent to an existing conservation area, including those assembled within Existing Core 2, are subject to MSHCP Guidelines Pertaining to the Urban/Wildlands Interface.

MSHCP Best Management Practices

All projects initiated in the planning area are subject to implementing the MSHCP Best Management Practices (BMPs).

Stephens' Kangaroo Rat Habitat Conservation Plan

The planning area is located wholly within the Stephens' Kangaroo Rat Habitat Conservation Plan (SKR HCP) area. Projects in this planning area will therefore be subject to payment of a SKR HCP Mitigation Fee per gross acre for the proposed development. The Mitigation Fee will be based on the project type and will be paid to the Riverside County Habitat Conservation Authority.

3.4.5 - Thresholds of Significance

Section XIV of Appendix G to the State CEQA Guidelines addresses typical adverse effects to biological resources and includes the following threshold questions to evaluate the proposed project's impacts to biological resources.

Would the proposed project:

- a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or United States Fish and Wildlife Service?
- b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or United States Fish and Wildlife Service?
- c) Have a substantial adverse effect on State or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

- d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?
- e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?
- f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State Habitat Conservation Plan?

Significance thresholds are set forth in Riverside County's Environmental Assessment Checklist, are derived from Section XIV of Appendix G to the State CEQA Guidelines (listed above), and State that the proposed project would have a significant impact to biological resources if construction and/or operation if the project would:

7. Biological Resources

- a) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or State conservation plan?
- b) Have a substantial adverse effect, either directly or through habitat modifications, on any endangered, or threatened species as listed in Title 14 of the California Code of Regulations (Sections 670.2 or 670.5) or in Title 50, Code of Federal Regulations (Sections 17.11 or 17.12)?
- c) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or United States Wildlife Service?
- d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?
- e) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Wildlife or United States Fish and Wildlife Service?
- f) 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?
- g) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

3.4.6 - Project Impacts and Mitigation Measures

This section discusses potential impacts associated with the development of the proposed project and provides mitigation measures where appropriate.

Wildlife and Vegetation

Impact BIO-7(a): The proposed project would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or State conservation plan.

Impact Analysis

The planning area lies within the boundaries of the MSHCP and the SKR HCP. Therefore, any development within the planning area would need to demonstrate consistency with the MSHCP and compliance with applicable MSHCP requirements and would also be required to pay the SKR HCP Mitigation Fee.

Implementation of Mitigation Measure (MM) BIO-7(a), which includes compliance with all applicable MSHCP and SKR HCP requirements for each future implementing project proposed within the planning area would ensure that each development would have a less than significant impact.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

MM BIO-7(a) MSHCP and SKR HCP Compliance

All future implementing projects within the planning area would include payment the Stephens' Kangaroo Rat Habitat Conservation Plan (SKR HCP) Mitigation Fee and preparation of a Multiple Species Habitat Conservation Plan (MSHCP) Consistency Analysis report that would be submitted to the County to document each individual future implementing project's consistency with the goals, objectives, and requirements of the MSHCP. Additional surveys, studies, permitting, agency coordination, and/or reporting measures may be required for the project to maintain consistency with the MSHCP. Any such additional measures would be identified in the MSHCP Consistency Analysis report prepared for each project. The project applicant for all development projects proposed within the planning area would coordinate with the County and the RCA to submit all applicable forms, fees, and/or technical reports detailing any desktop analyses and/or biological field studies or surveys. Conditions that may apply to future development within the planning area include the following:

- The completion of any required MSHCP wildlife and plant protocol surveys, including riparian birds and burrowing owl.
- Evaluation of project impacts to Conservation Areas, Covered Roads, Covered Public Access Activities, Public Quasi-Public Lands, and Riparian/Riverine Areas.
- The preparation of Determination of Biologically Equivalent or Superior Preservation (DBESP), a mitigation plan required for any impacts to MSHCP resources such as Riparian/Riverine habitat, etc., if triggered by the proposed project.

- Participation in the Habitat Evaluation and Acquisition Negotiation Strategy (HANS) process to determine conservation requirements if the development project occurs within a Criteria Cell.
- Implementation of Guidelines Pertaining to the Urban/Wildlands Interface for projects located in or adjacent to Conservation Areas.
- The completion of any required mitigation and Best Management Practice (BMP) to offset impacts to any MSHCP-protected resources.

Level of Significance After Mitigation

Less than significant impact.

Impact BIO-7(b): The proposed project could have a substantial adverse effect, either directly or through habitat modifications, on any endangered, or threatened species, as listed in Title 14 of the California Code of Regulations (Sections 670.2 or 670.5) or in Title 50, Code of Federal Regulations (Sections 17.11 or 17.12)?

Impact Analysis

Development within the planning area has the potential to impact several plant and wildlife species listed under the Endangered Species Act and/or CESA. An impact to listed plant and wildlife species would be considered significant if project construction and/or operations result in either (1) direct harm resulting in injury or death; or (2) substantial, adverse changes in any of the physical conditions, including habitat loss/modification within the area affected by the project. Impacts to individual species shall be determined on project-by-project basis. Each State- or federally listed species that has the potential to be impacted from project implementation is discussed in detail below.

Of the six State- or federally listed plant species included in Table 3.4-1, four were determined to have potential to occur within the planning area due to the presence of potentially suitable habitat. These include:

1. Munz's onion
2. San Diego ambrosia
3. San Jacinto Valley crownscale
4. thread-leaf brodiaea

Of the 10 State- or federally listed wildlife species included in Table 3.4-2, five species were determined to have potential to occur within the planning area due to the presence of potentially suitable habitat. These include:

1. southwestern willow flycatcher
2. coastal California gnatcatcher
3. least Bell's vireo
4. Quino checkerspot butterfly
5. Stephens' kangaroo rat

As noted in Impact BIO-7(a), all proposed developments within the planning area would be required to comply with applicable MSHCP and SKR HCP requirements. In most cases, each project would complete (at minimum) an MSHCP Consistency Analysis and would pay the SKR HCP per-acre Mitigation Fee. Additional surveys, studies, or documentation may be required, which would be identified in the MSHCP Consistency Analysis completed for each project. If all special-status species with potential to occur on the project site are covered by the MSHCP or SKR HCP, no further work or mitigation would be required beyond those identified in the MSHCP Consistency Analysis. However, it may be possible that future implementing projects in the planning area support habitat for listed species that are not covered by the MSHCP or SKR HCP. If any State- or federally listed, non-covered species is assessed as having potential to occur on a future project site, the project proponent would be required to implement MM BIO-7(b), which is completion of a biological study to assess potential project impacts to these species, identify threshold of significance with a significance conclusion, and document the findings in a report. Additionally, future implementing projects may be required to incorporate additional mitigation depending on results of such future biological studies. The implementation of MM BIO-7(b) would allow each project proponent to identify potential impacts to State- or federally listed species not covered by the MSHCP and SKR HCP and avoidance or mitigation measures that would reduce impacts to less than significant levels.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

MM BIO-7(b) Completion of a Biological Study

For all future development plans within the planning area that could contain species that are listed but not covered by the Multiple Species Habitat Conservation Plan (MSHCP) or Stephens' Kangaroo Rat Habitat Conservation Plan (SKR HCP), or habitat conducive to hosting such species, the project applicant shall employ a qualified Biologist approved by the County to prepare a Biological Study to evaluate potential impacts to sensitive biological resources regulated by the United States Wildlife Service (USFWS), the California Department of Fish and Wildlife (CDFW), or other local, regional plans or policies that may result from the development of the specific project. The qualified Biologist shall conduct, at a minimum, a site-specific literature review, which shall consider the future development project, site location, Geographic Information System (GIS) information and known sensitive biological resources. The review shall assess the site for State or federally listed plants and/or wildlife, aquatic resources, sensitive natural communities, wildlife corridors or nurseries, or other regulated biological resources covered by the Endangered Species Act, or California Endangered Species Act (CESA) that could be affected by the proposed project. In some cases, such as a project site that is previously completely developed, a literature review would be sufficient for the Biologist to make a no impact and/or a less than significant impact determination for all six of the thresholds of significance for biological resources. In other cases, such as project sites that are all or partially undeveloped, a site survey may be needed to assess the biological conditions on-site. The qualified Biologist employed by each project applicant shall assess potential project impacts to non-listed, non-covered species,

identify threshold of significance with a significance conclusion, and document the findings in a report. Additionally, future implementing projects may be required to incorporate additional mitigation depending on results of such future biological studies.

Level of Significance After Mitigation

Less than significant impact.

Impact BIO-7(c): The proposed project could have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or United States Fish and Wildlife Service.

Impact Analysis

Development within the planning area has the potential to impact several non-listed special-status plant and wildlife species. An impact to listed plant and wildlife species would be considered significant if project operations result in either (1) direct harm resulting in injury or death; or (2) substantial, adverse changes in any of the physical conditions, including habitat loss/modification within the area affected by the proposed project. Impacts to individual species shall be determined on a project-by-project basis. Each non-listed special-status species that has the potential to be impacted from proposed project implementation is discussed in detail below.

Of the 10 non-listed special-status plant species included in Table 3.4-1, seven species were determined to have potential to occur within the planning area due to the presence of potentially suitable habitat. These include:

1. chaparral sand-verbena
2. Smooth tarplant
3. Parry's spineflower
4. long-spined spineflower
5. many-stemmed dudleya
6. Coulter's goldfields
7. little mousetail

Of the 26 non-listed special-status wildlife species included in Table 3.4-2, 22 species were determined to have potential to occur within the planning area due to the presence of potentially suitable habitat. These include:

1. western spadefoot
2. Southern California rufous-crowned sparrow
3. Bell's sage sparrow
4. Cooper's hawk
5. long-eared owl
6. white-tailed kite
7. yellow-breasted chat

8. loggerhead shrike
9. burrowing owl
10. California horned lark
11. northwestern San Diego pocket mouse
12. San Diego black-tailed jackrabbit
13. southern grasshopper mouse
14. western mastiff bat
15. western yellow bat
16. Southern California legless lizard
17. orange-throated whiptail
18. San Diegan tiger whiptail
19. coast horned lizard
20. glossy snake
21. red-diamond rattlesnake
22. coast patch-nosed snake

As discussed in Impact BIO-7(a), future implementing projects in the planning area would be required to complete (minimally) an MSHCP Consistency Analysis as described in MM BIO-7(a). Also, as discussed in Impact BIO-7(b), if, in implementing the MSHCP Consistency Analysis, any listed species not covered by the MSHCP or SKR HCP is assessed as having potential to occur on any future implementing project in the planning area, the project proponent would be required to prepare a biological study to analyze potential impacts to listed, non-covered species, as described in MM BIO-7(b). However, it may be possible that future implementing projects in the planning area support habitat for non-listed, special-status species that are not covered by the MSHCP or SKR HCP. If any non-listed, non-covered species is assessed as having potential to occur on a future project site, the project proponent would be required to implement MM BIO-7(b), which is completion of a biological study to assess potential project impacts to these species, identify threshold of significance with a significance conclusion, and document the findings in a report. Additionally, future implementing projects may be required to incorporate additional mitigation depending on results of such future biological studies. The implementation of these measures would allow each project proponent to identify potential impacts to non-listed, non-covered, special-status species and avoidance and mitigation measures that would reduce impacts to less than significant levels.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

MM BIO-7(b) would apply.

Level of Significance After Mitigation

Less than significant impact.

Impact BIO-7(d): The proposed project could interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.

Impact Analysis

Much of the planning area consists of developed/disturbed land and existing barriers including building, roadways, fences and other structures likely serve as obstacles that impede the movement of wildlife. As shown in Exhibit 3.4-4, development in the planning area would not interfere with any existing or proposed linkages between existing MSHCP conservation areas. Future development within the planning area has the potential to further impede the movement of wildlife. The construction of new roadways, in particular, could interfere with wildlife movement. Exhibit 3.4-5 depicts existing roadways in which future improvements are covered by the MSHCP. However, any impacts to wildlife movement would need to be determined on case-by-case basis, depending on the individual project.

If any features that facilitate wildlife movements are identified on a site, the project proponent would be required to implement MM BIO-7(b), which requires completion of a biological study to assess potential project impacts to these resources, identification of the threshold of significance with a significance conclusion, and documentation of the findings in a report. Additionally, future implementing projects may be required to incorporate additional mitigation depending on results of such future biological studies. The implementation of MM BIO-7(b) would allow each project proponent to identify potential impacts to wildlife movements and avoidance or mitigation measures that would reduce impacts to less than significant levels. The implementation of this measure shall reduce potential impacts to wildlife movement to less than significant levels on a project-by-project basis.

Additionally, implementation of future projects in the planning area may impact breeding and/or nesting activities of protected birds. Construction activities that occur during the avian nesting season (February 1 to August 31) could disturb nesting sites for bird species protected under the Fish and Game Code or MBTA. The removal of trees and other vegetation during the nesting season could result in direct harm to nesting birds, while noise, light, and other man-made disturbances may cause nesting birds to abandon their nests. Any such project impacts to active nests of bird species protected by the MBTA and/or Fish and Game Code would be considered significant. To ensure that potential project impacts to nesting birds are identified and reduced to a less than significant level, future project applicants shall implement MM BIO-7(c).

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

MM BIO-7(b) would apply.

MM BIO-7(c) Protection of Nesting Birds

For all future development plans within the planning area that contain habitats or features that could provide nesting habitat for bird species protected under the Migratory Bird Treaty Act (MBTA) and Fish and Game Code, the following measures shall apply:

1. Removal of native vegetation shall be limited to only those necessary to construct a proposed future project as reflected in the relevant project approval documents.
2. If a proposed future project requires vegetation to be removed during the nesting season, pre-construction surveys shall be conducted 7 days prior to tree removal to determine whether or not active nests are present.
3. If an active nest is located during a pre-construction survey, a qualified Biologist shall determine an appropriately sized avoidance buffer based on the species and anticipated disturbance level. A qualified Biologist shall delineate the avoidance buffer using Environmentally Sensitive Area (ESA) fencing, pin flags, and or yellow caution tape. The buffer zone shall be maintained around the active nest site(s) until the young have fledged and are foraging independently. No construction activities or construction foot traffic is allowed to occur within the avoidance buffer(s).
4. The qualified Biologist shall monitor the active nest during construction activities to prevent any potential impacts that may result from the construction of the proposed project until the young have fledged.

Level of Significance After Mitigation

Less than significant impact.

Impact BIO-7(e): **The proposed project could have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Wildlife or United States Fish and Wildlife Service.**

Impact Analysis

An impact to sensitive natural communities or riparian habitat would be considered significant if the proposed construction or operation results in substantial adverse changes to any of the physical conditions, such as the removal of vegetation within the area affected by the proposed project. Potential impacts to sensitive natural communities or riparian habitat that have the potential to be impacted are discussed in detail below.

The planning area may support natural vegetation communities that are considered sensitive by CDFW. Sensitive natural vegetation communities ranked S1 to S3 are protected under CEQA and subject to its environmental review processes. Project sites in the planning area that support sensitive natural vegetation communities could potentially cause impacts to these communities, which may be considered significant under CEQA. Any potential impacts to sensitive natural

communities caused by future implementing projects in the planning area would need to be mitigated. Therefore, any proposed development within the planning area that may impact sensitive natural communities shall be required to implement MM BIO-7(b), described previously.

Additionally, the planning area contains several drainages where riparian vegetation can be found. Riparian/Riverine habitat is protected under the MSHCP. Riparian vegetation found within the planning area is depicted in Exhibit 3.4-1. Development within the planning area may have direct impacts resulting in the loss of riparian vegetation and may adversely impact downstream water quality. Potential impacts to riparian habitat within the planning area are regulated by the MSHCP and CDFW and mitigation would be required. Any proposed development within the planning area that may impact Riparian/Riverine habitat shall implement MM BIO-7(a) and MM BIO-7(b), as described in Impact BIO-7(a) and Impact BIO-7(b). During the implementation of the MSHCP Consistency Analysis performed under MM BIO-7(a), the qualified Biologist employed by each project applicant shall assess potential project impacts to Riparian/Riverine habitats. Additional studies, documentation, or permitting, including preparation of Determination of Biologically Equivalent or Superior Preservation (DBESP), may be required, depending on the results of the MSHCP Consistency Analysis prepared for each project. During implementation of the biological study performed under MM BIO-7(b), the qualified Biologist employed by each project applicant shall assess potential project impacts to sensitive vegetation communities, identify threshold of significance with a significance conclusion, and document the findings in a report. Additionally, future implementing projects may be required to incorporate additional mitigation depending on results of such future biological studies.

The implementation of these measures would allow each project proponent to identify potential impacts to Riparian/Riverine habitat and other sensitive natural communities and avoidance and mitigation measures that would reduce impacts to less than significant levels.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

MM BIO-7(a) and MM BIO-7(b) would apply.

Level of Significance After Mitigation

Less than significant impact.

Impact BIO-7(f): The proposed project could 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.

Impact Analysis

An impact to State- or federally protected waters or wetlands would be considered significant if construction or operations of future development projects result in substantial, adverse physical changes (permanent or temporary) as a result of filling, water diversion or other hydrological interruption of protected waters and wetlands within the planning area. Physical changes that result

in adverse effects to downstream water quality could also be considered significant. Potential impacts to State- or federally protected waters or wetlands that have the potential to be impacted are discussed in detail below.

The planning area contains several drainages which may be considered jurisdictional by the USACE, RWQCB, or CDFW and would meet definitions of State- or federally protected waters. Exhibit 3.4-3 depicts these potentially jurisdictional drainages as “blue-line” streams.³⁷ Development within the planning area could result in direct impacts to these potentially jurisdictional drainages through the loss/modification of these features, as well as have adverse impacts on downstream water quality.

If any potentially jurisdictional drainage is identified, the project proponent would be required to implement MM BIO-7(b), which requires completion of a biological study to assess potential project impacts to the resource, identification of the threshold of significance with a significance conclusion, and documentation of the findings in a report. Additionally, future implementing projects may be required to incorporate additional permitting and mitigation depending on results of such future biological studies. The implementation of MM BIO-7(b) would allow each project proponent to identify potential impacts to wildlife movements and avoidance or mitigation measures that would reduce impacts to less than significant levels. If a potentially jurisdictional, State- or federally protected waters or wetlands are identified on any future implementing project in the planning area during the implementation of MM BIO-7(a), the project applicant shall employ a qualified Biologist to implement MM BIO-7(d) and BIO-7(e). These measures include the delineation of the jurisdictional limits of any potentially regulated waters or wetlands and the acquisition of permits from the respective regulatory agencies (USACE, RWQCB, or CDFW). Mitigation for impacts to State- or federally protected waters or wetlands, such as measures pertaining to on-site habitat restoration or off-site habitat acquisition, shall be prescribed in the regulatory permits. The implementation of these measures shall reduce potential impacts on State- or federally protected waters or wetlands to less than significant levels.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

MM BIO-7(d) Determination of the Extent of Impacts to Jurisdictional Waters and Wetlands

Any proposed development within the planning area that could impact any potentially jurisdictional waters or wetlands shall prepare a separate jurisdictional delineation report to establish the jurisdictional limits of any potentially regulated waters/wetlands.

MM BIO-7(e) Apply for Permits from Regulatory Agencies

Any project proponent that proposes impacts to jurisdictional waters or wetlands within the planning area shall consult with the California Department of Fish and Wildlife (CDFW) regarding a Section 1602 Streambed Alteration Agreement Permit,

³⁷ United States Environmental Protection Agency (EPA). 2021. Watershed Assessment, Tracking and Environmental Results System (WATERS). Website: <https://www.epa.gov/waterdata/waters-watershed-assessment-tracking-environmental-results-system>. Accessed August 23, 2021.

the United States Army Corps of Engineers (USACE) regarding a Clean Water Act (CWA) Section 404 Permit, and the Regional Water Quality Control Board (RWQCB) regarding a CWA Section 401 Certification. The project applicant shall be required to obtain these permits as a condition of approval and prior to the issuance of any grading, construction, or building permits from the County and prior to the commencement of any grading or construction activities. The project applicant shall implement the mitigation measures as prescribed in the permits.

Level of Significance After Mitigation

Less than significant impact.

Impact BIO-7(g): **The proposed project would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.**

Impact Analysis

Oak woodland resources may be located on parcels in the planning area that would be protected by County Oak Tree Management Guidelines. These guidelines require that a biological study be performed by a qualified Biologist for all applications on properties that contain oak trees. If any oak tree resources are present, the project proponent would be required to implement MM BIO-7(b), which requires completion of a biological study to provide an inventory of on-site vegetation, assessment of potential project impacts to the oaks, identification of the threshold of significance with a significance conclusion, and documentation of the findings in a report. Additionally, future implementing projects may be required to incorporate additional mitigation depending on results of such future biological studies. The implementation of MM BIO-7(b) would allow each project proponent to identify potential impacts to oak tree resources and avoidance or mitigation measures that would reduce impacts to less than significant levels.

- Compliance with the Multipurpose Open Space Element of the General Plan is consistent with LU 9.2, ELAP 17.1, MVAP 17.6.
- The bio study analyzing impacts on special-status species would be consistent with MVAP 17.3, MVAP 17.6, ELAP 17.8, ELAP 17.7, ELAP 17.4, ELAP 17.1, OS 18.1, LU 9.2.
- Compliance with the MSHCP would also be consistent with OS 17.1, OS 17.2, OS 18.1, ELAP 17.1, MVAP 17.6.
- The Oak Tree policy is consistent with ELAP 16.1 and MVAP 16.1.

Riverside Ordinance No. 559 regulates the removal of native trees in the unincorporated area of the County that is above 5,000 feet in elevation.³⁹ The planning area lies below 5,000 feet in elevation. Therefore, this ordinance would not be applicable to the planning area.

³⁹ County of Riverside. 2021. Code of Ordinances, Chapter 12.24. Website: https://library.municode.com/ca/riverside_county/codes/code_of_ordinances?nodeId=RICOCACOVO1. Accessed January 23, 2022.

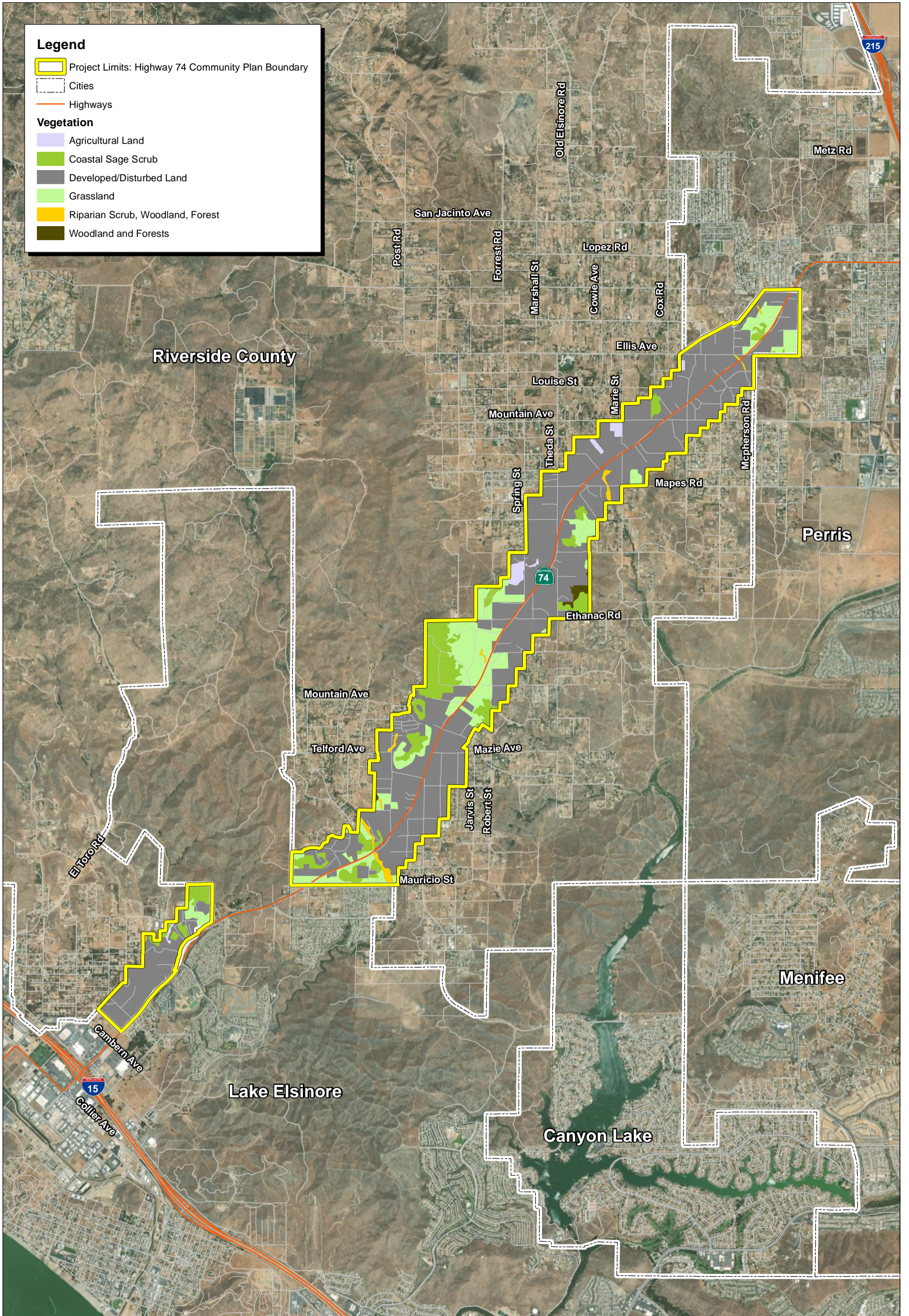
Level of Significance

Less than significant impact.

Mitigation Measures

MM BIO-7(b) would apply.

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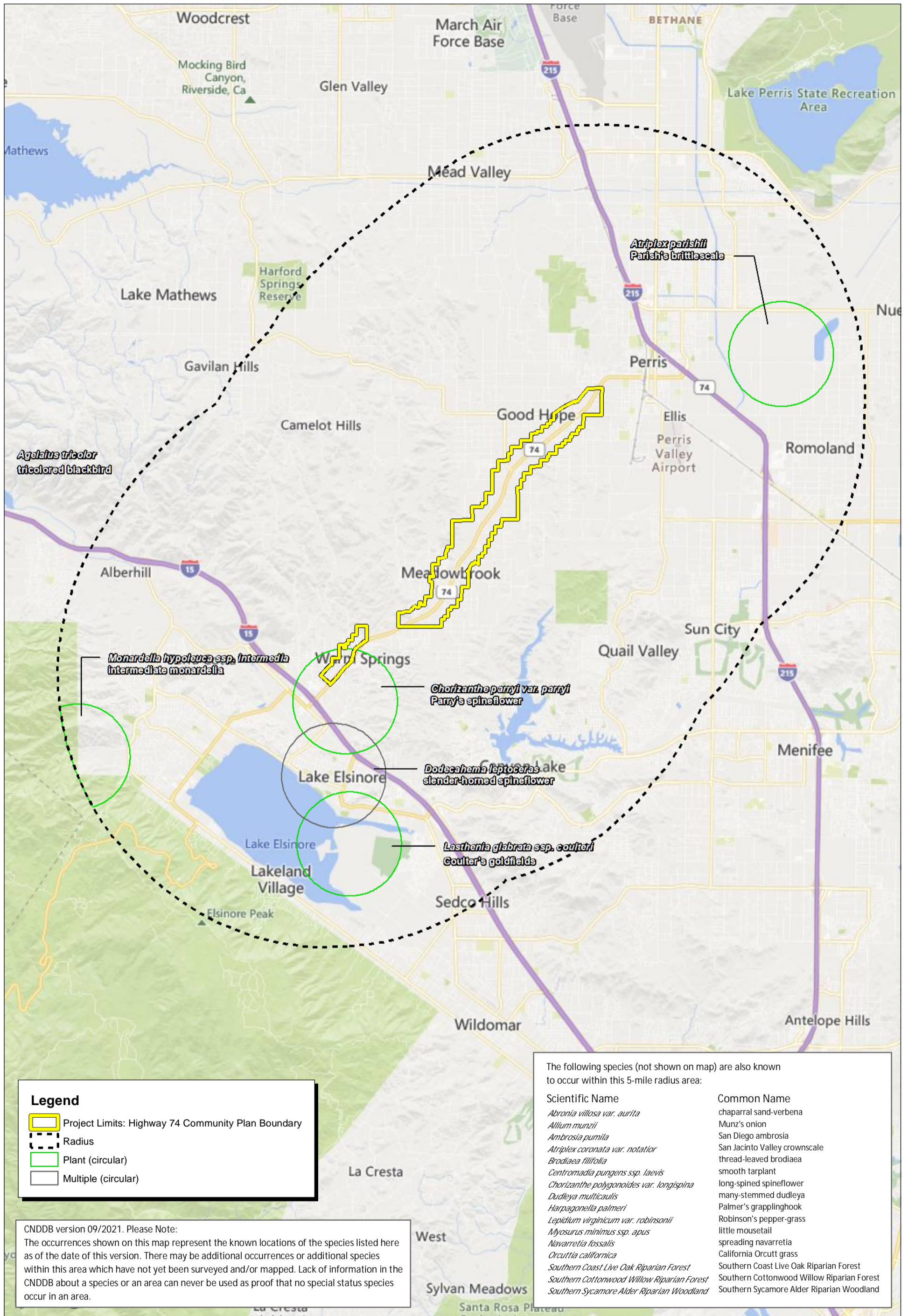


Source: ESRI Aerial Imagery, Riverside County GIS Data.



Exhibit 3.4-1
Highway 74 Planning Area Natural Communities

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Legend

- Project Limits: Highway 74 Community Plan Boundary
- Radius
- Plant (circular)
- Multiple (circular)

CNDDDB version 09/2021. Please Note:
 The occurrences shown on this map represent the known locations of the species listed here as of the date of this version. There may be additional occurrences or additional species within this area which have not yet been surveyed and/or mapped. Lack of information in the CNDDDB about a species or an area can never be used as proof that no special status species occur in an area.

The following species (not shown on map) are also known to occur within this 5-mile radius area:

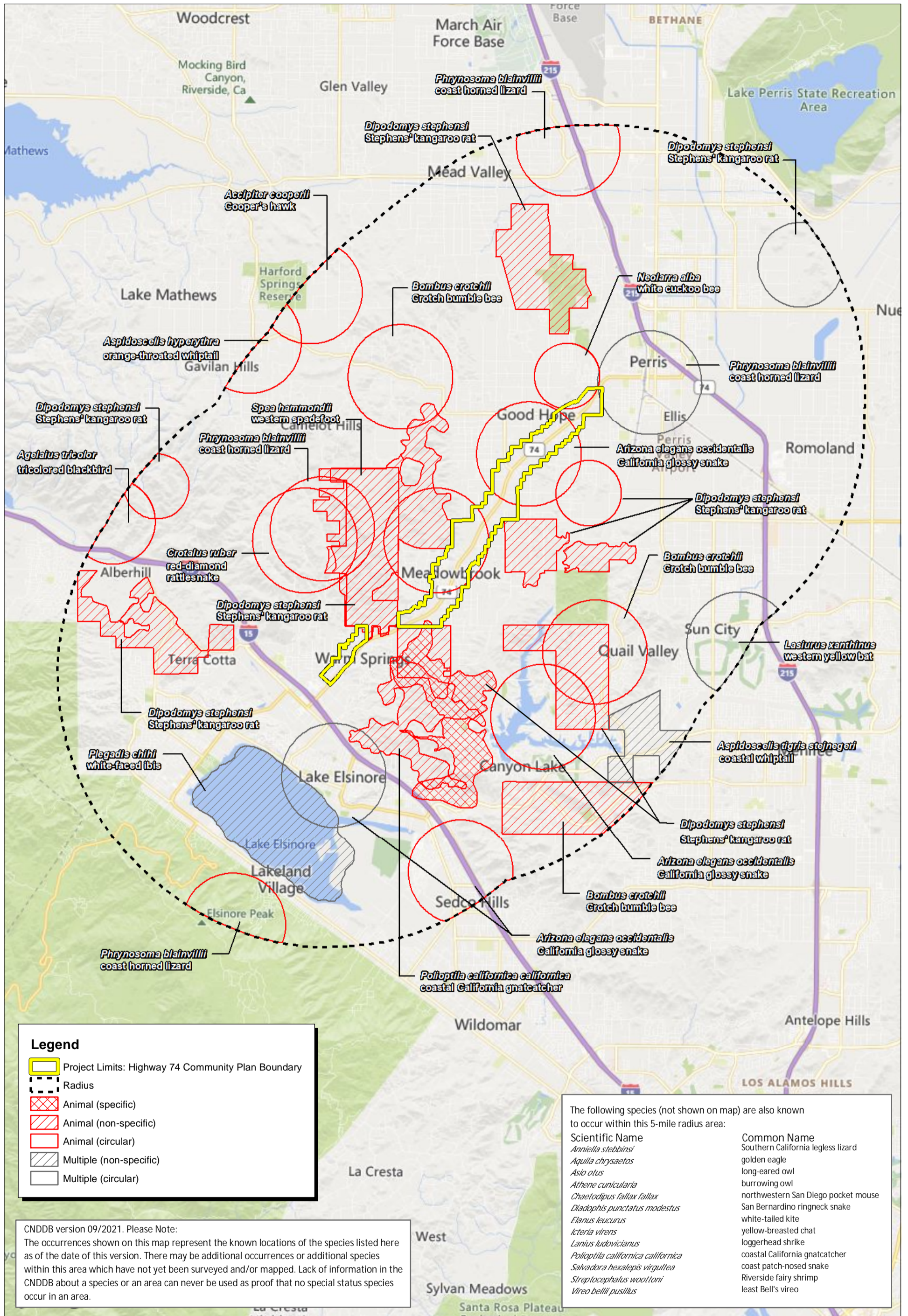
Scientific Name	Common Name
<i>Abronia villosa</i> var. <i>aurita</i>	chaparral sand-verbena
<i>Allium munzii</i>	Munz's onion
<i>Ambrosia pumila</i>	San Diego ambrosia
<i>Atriplex coronata</i> var. <i>notatior</i>	San Jacinto Valley crownscale
<i>Brodiaea filifolia</i>	thread-leaved brodiaea
<i>Centromadia pungens</i> ssp. <i>laevis</i>	smooth tarplant
<i>Chorizanthe polygonoides</i> var. <i>longispina</i>	long-spined spineflower
<i>Dudleya multicaulis</i>	many-stemmed dudleya
<i>Harpagonella palmeri</i>	Palmer's grapplinghook
<i>Lepidium virginicum</i> var. <i>robinsonii</i>	Robinson's pepper-grass
<i>Myosurus minimus</i> ssp. <i>apus</i>	little mouse-tail
<i>Navarretia fossalis</i>	spreading navarretia
<i>Orcuttia californica</i>	California Orcutt grass
<i>Southern Coast Live Oak Riparian Forest</i>	Southern Coast Live Oak Riparian Forest
<i>Southern Cottonwood Willow Riparian Forest</i>	Southern Cottonwood Willow Riparian Forest
<i>Southern Sycamore Alder Riparian Woodland</i>	Southern Sycamore Alder Riparian Woodland

Source: ESRI Aerial Imagery. California Natural Diversity Database (CNDDDB), September 2021.



Exhibit 3.4-2a
 CNDDDB-Recorded Plants and Terrestrial
 Communities Occurrences Within 5-Mile Radius

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Legend

- Project Limits: Highway 74 Community Plan Boundary
- Radius
- Animal (specific)
- Animal (non-specific)
- Animal (circular)
- Multiple (non-specific)
- Multiple (circular)

CNDDDB version 09/2021. Please Note:
 The occurrences shown on this map represent the known locations of the species listed here as of the date of this version. There may be additional occurrences or additional species within this area which have not yet been surveyed and/or mapped. Lack of information in the CNDDDB about a species or an area can never be used as proof that no special status species occur in an area.

The following species (not shown on map) are also known to occur within this 5-mile radius area:

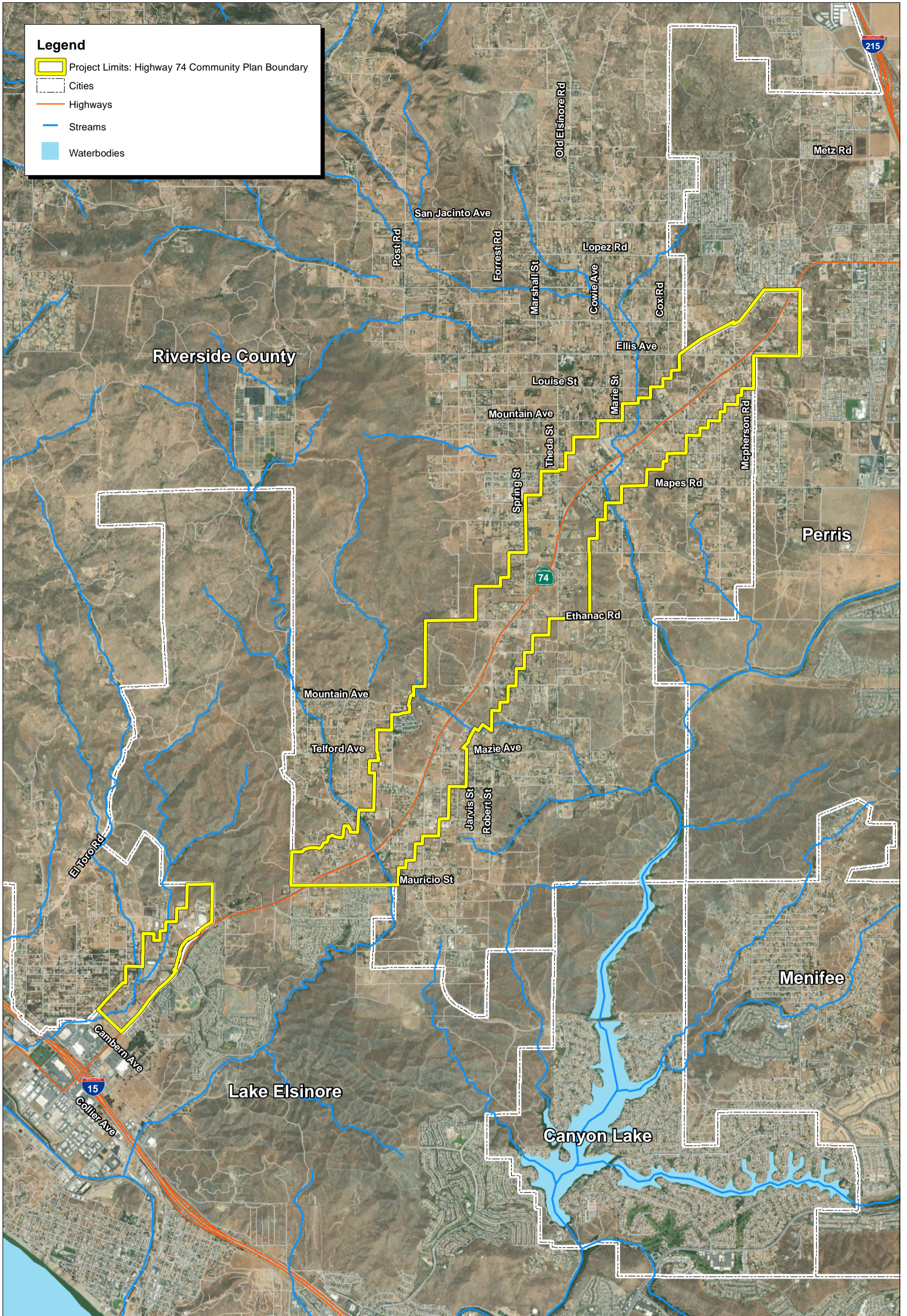
Scientific Name	Common Name
<i>Anniella stebbinsi</i>	Southern California legless lizard
<i>Aquila chrysaetos</i>	golden eagle
<i>Asio otus</i>	long-eared owl
<i>Athene cucularia</i>	burrowing owl
<i>Chaetodipus fallax fallax</i>	northwestern San Diego pocket mouse
<i>Diadophis punctatus modestus</i>	San Bernardino ringneck snake
<i>Elanus leucurus</i>	white-tailed kite
<i>Icteria virens</i>	yellow-breasted chat
<i>Lanius ludovicianus</i>	loggerhead shrike
<i>Polioptila californica californica</i>	coastal California gnatcatcher
<i>Salvadora hexalepis virgulata</i>	coast patch-nosed snake
<i>Streptocephalus woottoni</i>	Riverside fairy shrimp
<i>Vireo bellii pusillus</i>	least Bell's vireo

Source: ESRI Aerial Imagery. California Natural Diversity Database (CNDDDB), September 2021.



Exhibit 3.4-2b
 CNDDDB-Recorded Wildlife
 Occurrences Within 5-Mile Radius

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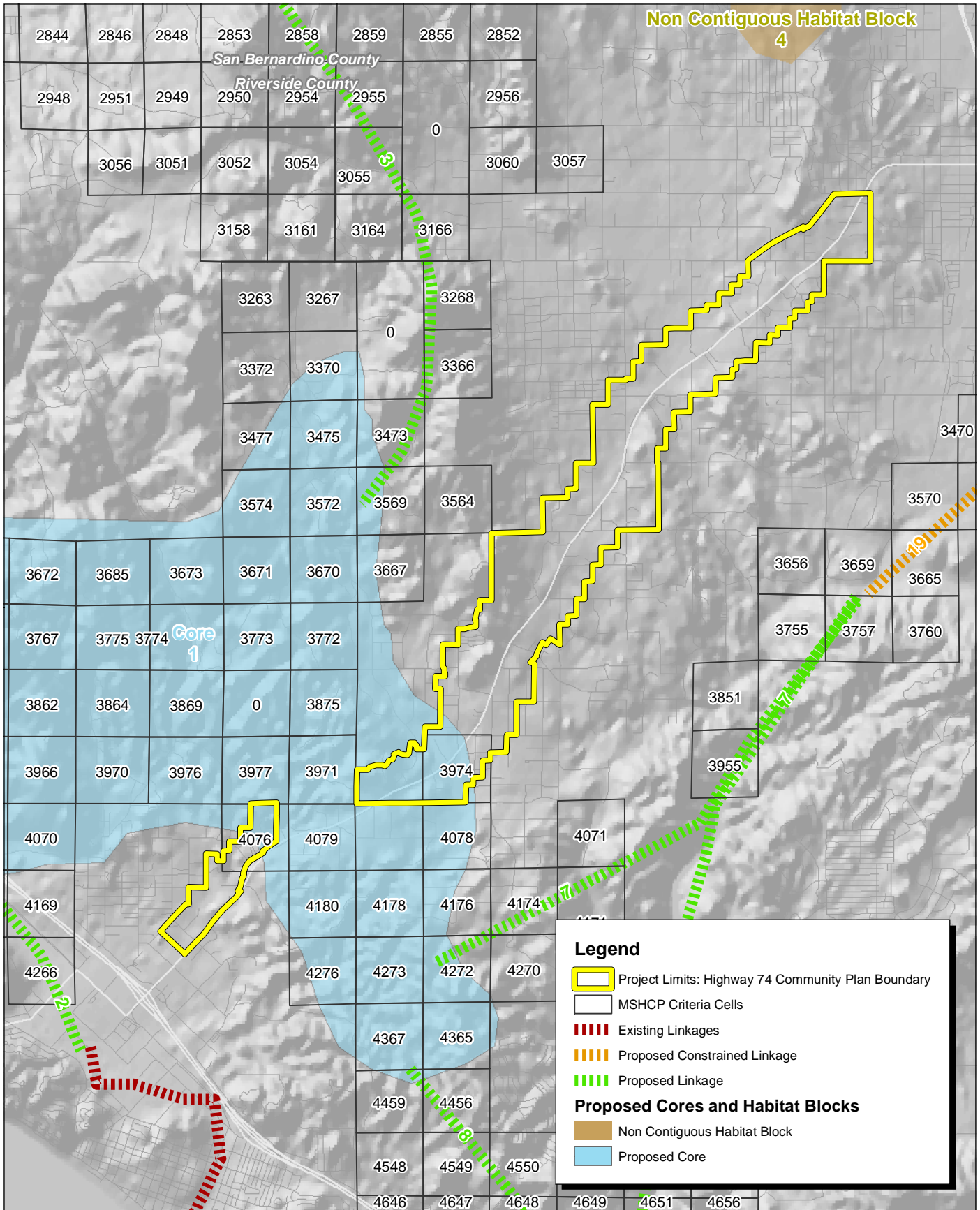


Source: ESRI Aerial Imagery, Riverside County GIS Data.



Exhibit 3.4-3
Potential Jurisdictional Features

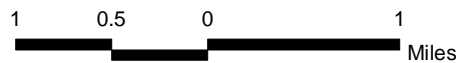
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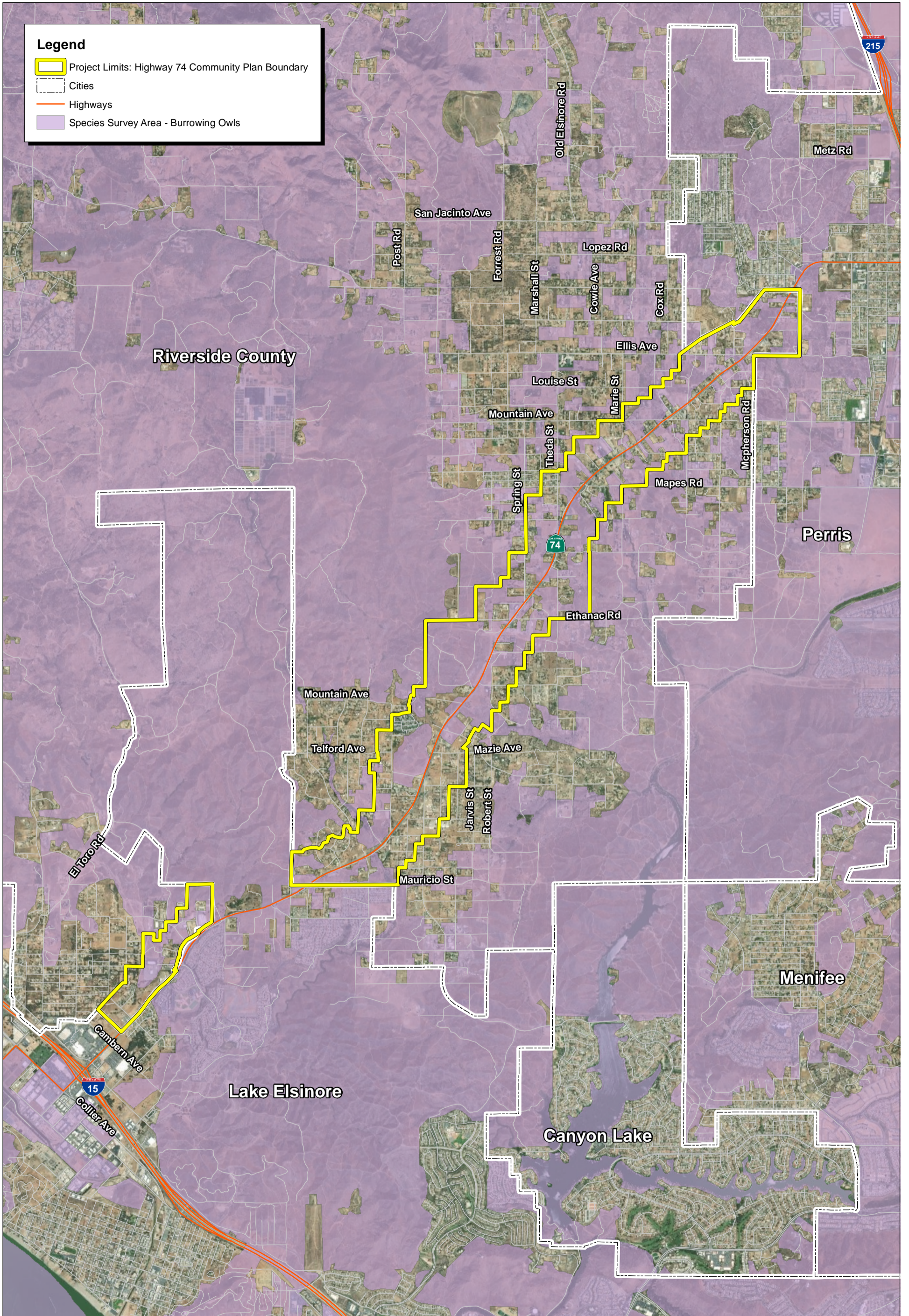
Source: USGS NED, Riverside County MSHCP, Census 2000 data.

Exhibit 3.4-4

MSHCP Criteria Areas and Conservation Lands



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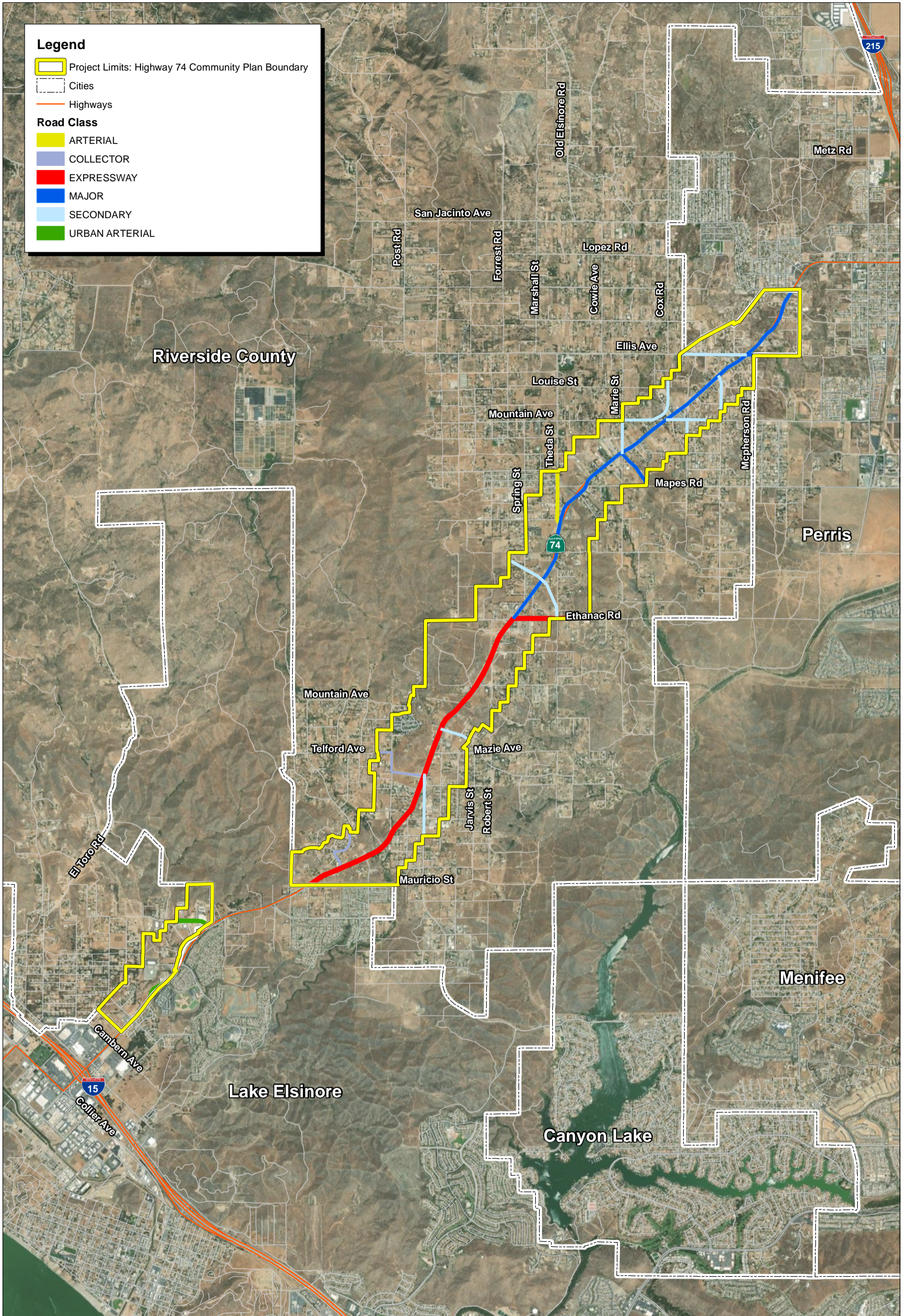
Source: ESRI Aerial Imagery. Riverside County GIS Data. Western Riverside County Regional Conservation Authority (RCA).

Exhibit 3.4-5

MSHCP Species Survey Area Map
Burrowing Owl



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Source: ESRI Aerial Imagery. Riverside County GIS Data. Western Riverside County Regional Conservation Authority (RCA).



Exhibit 3.4-6
MSHCP Covered Roads

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3.5 - Cultural Resources

3.5.1 - Introduction

This section of the Draft Program Environmental Impact Report (Draft Program EIR) addresses potential impacts related to cultural resources within the Highway 74 Community Planning Area (planning area) from implementation of the proposed project. The descriptions and analysis in this section are based on the information provided by a records search conducted at the Eastern Information Center (EIC), archival research, and a pedestrian survey as presented in the Phase I Cultural Resources Assessment (Phase I CRA) prepared for the proposed project.¹

The term “cultural resources” encompasses historic resources, archaeological resources, and burial sites, which are generally defined as follows:

- **Historic Resources:** Historic resources are associated with the recent past. In California, historic resources are typically associated with the Spanish, Mexican, and American periods in the State’s history and are generally less than 200 years old. Historic resources often take the form of buildings, structures, and other elements of the built environment.
- **Archaeological Resources:** Archaeology is the study of artifacts and material culture with the aim of understanding human activities and cultures in the past. Archaeological resources may be associated with prehistoric indigenous cultures as well as later historic periods.
- **Burial Sites and Cemeteries:** Burial sites and cemeteries are formal or informal locations where human remains have been interred. Burial sites may be associated with precontact indigenous cultures as well as later historic periods.

More specifically, cultural resources may be understood as resources that have been formally recognized by a lead agency and/or are listed or determined eligible for listing on the California Register of Historical Resources (CRHR) (Public Resources Code [PRC] § 5024.1, Title 14 California Code of Regulations [CCR] § 4852). It is notable that, the fact that a resource is not yet identified as a historical resource or found eligible for the CRHR does not preclude a lead agency from determining that said resource is a historical resource pursuant to Public Resources Code Sections 5020.1(j) or 5024.1. Under CEQA, a substantial adverse change in the significance of a historical resource would constitute a significant effect on the environment.

Information in this section is based on information provided by the following sources and reference materials:

- The California Built Environment Resource Directory.
- An EIC records search for a 1-mile radius surrounding the planning area.
- The National Register of Historic Places.
- The California Register of Historical Resources.

¹ Historic integrity refers to the authenticity of a property’s historic identity, evidenced by survival of physical characteristics that existed during the property’s prehistoric or historic period. Historic integrity is the composite of seven qualities: location, design, setting, materials, workmanship, feeling, association.

- The California Historical Landmarks List.
- The California Points of Historical Interest List.

3.5.2 - Environmental Setting

Following is an overview of the prehistory, ethnography, and historic background, providing a context in which to understand the background and relevance of sites and structures found in the planning area. This section is not intended to be a comprehensive review of the current resources available; rather, it serves as a general overview. Further details can be found in ethnographic studies, mission records, and major published sources.^{2,3,4,5,6,7}

Prehistoric Background

Fagan,⁸ Moratto,⁹ and Chartkoff and Chartkoff¹⁰ provide recent overviews of California archaeology and historical reviews of the inland Southern California coast, among other locales. An early and widely used regional chronology for coastal Southern California is Wallace's¹¹ four-part Horizon format, which was later updated and revised by Warren¹² and more recently by Chartkoff and Chartkoff¹³, and King.^{14,15} The sequence provides a framework that relates societal change to change in material culture; the advantages and weaknesses of Southern California chronological sequences are reviewed by Warren¹⁶ (in Moratto,¹⁷ Chartkoff and Chartkoff,¹⁸ and Heizer.¹⁹

Paleo Indian

In North America, radiocarbon dates from existing samples of archaeological materials demonstrate human presence as early as 15,000 years Before Present (BP).²⁰ The lithics from the earliest documented sites in North America (14,000 to 15,000 BP) include cores, flakes, and flake tools (with an absence of projectile points.²¹ The first known projectile points in North America are from 13,000

² Kroeber, A.L. 1925. Handbook of the Indians of California. Bulletin 78. Bureau of American Ethnology. Washington, D.C.: Smithsonian Institution.

³ Beardsley, R.K. 1948. "Cultural Sequences in Central California Archaeology." American Antiquity.

⁴ Bennyhoff, J. 1950. Californian Fish Spears and Harpoons. Berkeley: University of California Anthropological Records.

⁵ Chartkoff J.L. and K.K. Chartkoff. 1984. The Archaeology of California. Menlo Park: Stanford University Press.

⁶ Moratto, M.J. 1984. California Archaeology. San Diego: Academic Press.

⁷ Jones, T.L. and Kathryn A. Klar. 2007. California Prehistory. Lanham: AltaMira Press; Rowman & Littlefield Publishers, Inc.

⁸ Fagan, B.M. 2003. Before California: An Archaeologist Looks at Our Earliest Inhabitants. New York: Alta Mira Press.

⁹ Moratto, M.J. 1984. California Archaeology. San Diego. Academic Press.

¹⁰ Chartkoff J.L. and K.K. Chartkoff. 1984. The Archaeology of California. Menlo Park. Stanford University Press.

¹¹ Wallace, W.J. 1955. A Suggested Chronology for Southern California Coastal Archaeology. Southwestern Journal of Anthropology.

¹² Warren, C.N. 1968. Cultural Tradition and Ecological Adaptation on the Southern California Coast. Archaic Prehistory in the Western United States, C. Irwin-Will.

¹³ Chartkoff J.L. and K.K. Chartkoff. 1984. The Archaeology of California. Menlo Park. Stanford University Press.

¹⁴ King, Chester D. 1990. Evolution of Chumash Society: A Comparative Study of Artifacts used for Social System Maintenance in the Santa Barbara Channel Region before A. D. 1804. Garland Publications, New York.

¹⁵ King, Chester D. 2000. Early Southern California; Southern California Early Period. In Encyclopedia of Prehistory Volume 6: North America. Edited by P.N. Peregrine and M. Ember, pp. 144–157. Kluwer Academic/Plenum Publishers, New York.

¹⁶ Warren, C.N. 1968. Cultural Tradition and Ecological Adaptation on the Southern California Coast. Archaic Prehistory in the Western United States, C. Irwin-Will.

¹⁷ Moratto, M.J. 1984. California Archaeology. San Diego. Academic Press.

¹⁸ Chartkoff J.L. and K.K. Chartkoff. 1984. The Archaeology of California. Menlo Park. Stanford University Press.

¹⁹ Heizer, R.F., ed. 1978. Handbook of North American Indians, Vol. 8: California. Washington, D.C. Smithsonian Institution.

²⁰ Waters, M.R., J.L. Keene, S.L. Forman, E.R. Prewitt, D.L. Carlson, J.E. Wiederhold. 2018. Pre-Clovis projectile points at the Debra L. Friedkin site, Texas—Implications for the Late Pleistocene peopling of the Americas. Science Advances.

²¹ Waters, M.R., S.L. Forman, T.A. Jennings, L.C. Nordt, S.G. Driese, J.M. Feinberg, J.L. Keene, J. Halligan, A. Lindquist, J. Pierson, C.T. Hallmark, M.B. Collins, J.E. Wiederhold. 2011. The Buttermilk Creek complex and the origins of Clovis at the Debra L. Friedkin site, Texas.

years BP, with lanceolate fluted points (Clovis Complex) in sites from central and eastern North America, and stemmed projectile points from sites in areas of western North America^{22, 23, 24}. Glennan²⁵ provides an early study of the hypothesis of Pre-Clovis in Southern California. The oldest California radiocarbon date from archaeological materials, as of 2007, confirms a human presence in the northeastern part of the State (from site CA-SIS-218) as early as 13,500 years BP.²⁶ The radiocarbon date corresponds to the period of fluted points and fluted points have been found throughout California^{27,28} although projectile points and other chronologically and culturally informative materials are absent from the SIS-218 sample.

Archaic Period

During the early post glacial period after 8500 BP the Southern California climate became warmer and drier.²⁹ Groundstone artifacts that include manos and metates correspond to the Early Period. The Early Period in Southern California begins as early or earlier than 8,000 BP and ends by about 2,800 BP.³⁰ The Early Period corresponds to the earliest known sites in Southern California with year-round habitation and cemeteries. Manos and metates consist of a variety of types. Mano and metates of the Early Period in Southern California correspond to types from studies in the U.S. Southwest that efficiently grind small, oily annual and biennial wild seeds.^{31, 32, 33, 34, 35} Most annual and biennial wild seed plant types in Southern California are best adapted for warm and dry environments (e.g., *Hemizonia fasciculata*, which is a summer seed source). Annual and biennial seed crops are highly reliable, nutritious, and productive. Annual and biennial seed producers are also diverse and afford reliable seed production throughout the year. Compared to later periods, utilitarian artifacts are most frequently found with Early Period burials.

²² Jenkins, D.L., L.G. Davis, T.W. Stafford Jr., P.F. Campos, B. Hockett, G.T. Jones, L.S. Cummings, C. Yost, T.J. Connolly, R.M. Yohe II, S.C. Gibbons, M. Raghavan, M. Rasmussen, J.L.A. Paijmans, M. Hofreiter, B.M. Kemp, J.L. Barta, C. Monroe, M.T.P. Gilbert, E. Willerslev. 2012. Clovis Age Western Stemmed Projectile Points and Human Coprolites at the Paisley Caves.

²³ Beck, C. and G.T. Jones. 2010. Clovis and Western Stemmed: Population migration and the meeting of two technologies in the Intermountain West. *American Antiquity*.

²⁴ Glennan, William S. 1972. The Hypothesis of an Ancient, Pre-Projectile Point Stage in American Prehistory: Its Application and Validity in Southern California. Unpublished Anthropology doctoral dissertation, University of California, Los Angeles.

²⁵ Glennan, William S. 1972. The Hypothesis of an Ancient, Pre-Projectile Point Stage in American Prehistory: Its Application and Validity in Southern California. Unpublished Anthropology doctoral dissertation, University of California, Los Angeles

²⁶ Jones, Terry L. and Kathryn A. Klar. 2007. California Prehistory: Colonization, Culture, and Complexity, In *California Prehistory*, Edited by, Terry L. Jones and Kathryn A. Klar. Altimira Press, New York.

²⁷ Rondeau, Michael F. 2009. Fluted Points of the Far West. *Proceedings of the Society for California Archaeology*.

²⁸ Rondeau, Michael L., Jim Cassidy, and Terry L. Jones. 2007. Colonization Technologies: Fluted Projectile Points and the San Clemente Island Woodworking/Microblade Complex, In *California Prehistory*, Edited by, Terry L. Jones and Kathryn A. Klar. Altimira Press, New York.

²⁹ Fagan, B.M. 2003. *Before California: An Archaeologist Looks at Our Earliest Inhabitants*. New York: Alta Mira Press.

³⁰ King, Chester D. 1990. *Evolution of Chumash Society: A Comparative Study of Artifacts used for Social System Maintenance in the Santa Barbara Channel Region before A. D. 1804*. Garland Publications, New York.

³¹ Adams, Jenny. 1999. Refocusing the Role of Food-Grinding Tools as Correlates for Subsistence Strategies in the U.S. Southwest. *American Antiquity*.

³² Ciolek-Torrello, R. 1995. The Houghton Road Site, The Agua Caliente Phase, and the Early Formative Period in the Tucson Basin. *Kiva*.

³³ Gilman, P.A. 1988. Sedentism/Mobility, Seasonality, and Tucson Basin Archaeology. In *Recent Research on Tucson Basin Prehistory: Proceedings of the Second Tucson Basin Conference*, edited by W. H. Doelle and P. R. Fish. Anthropological Papers No. 10. Institute for American Research, Tucson.

³⁴ Lancaster, J. 1984. Groundstone Artifacts. In *The Galaz Ruin: A Prehistoric Mimbres Village in Southwestern New Mexico*, edited by R. Anyon and S. A. LeBlanc. University of New Mexico Press, Albuquerque.

³⁵ Whittlesey, S. 1995. Mogollon, Hohokam, and O'otam: Rethinking the Early Formative Period in Southern Arizona. *Kiva*.

Manos and metates are “kitchen tools” and concentrate within residential areas of Early Period habitation sites in Southern California.^{36,37} Other kinds of lithics that correspond to the Early Period include many kinds of core tools (e.g., hammers, choppers, and scraper planes), knives, bifaces, scrapers (many types), graters, burins, dart points, and compound bone fishhooks. Sedentism apparently increased in areas with abundant resources that were available for longer periods. Arid inland regions and offshore desert islands (e.g., San Nicolas Island) provided less opportunity for long term residence without trade and possibly for more mobile subsistence. The Early Period ends at about 2,800 BP.³⁸

Mark Q. Sutton, Professor Emeritus of Anthropology at CSU Bakersfield, has identified a regional complex called the Greven Knoll Complex. This complex is reimagined from the work completed by Sutton and Jill Gardener³⁹ which focused on the Encinitas Tradition. Their research indicates that the archaeological record of the early millingstone was not formally given a name but was regularly referred to as the “Inland Millingstone,” “Encinitas,” or “Topanga.”^{40,41} They proposed that the inland milling stone north of San Diego County be combined within the Greven Knoll Complex. This complex consists of three phases, and it is named after the type-site Greven Knoll that is located in Yucaipa, California. Both the Greven Knoll site and the Simpson site are a part of the Yucaipa’t Site (SBR-1000). The Greven Knoll site was approximately occupied between 5,000 and 3,000 BP. Phase I of the complex mainly contained material culture such as hammerstones, core tools, manos and metates, dart points, and cremations. However, in this phase mortars and pestles are absent. Sutton and Gardener have concluded that this phase approximately appeared 9,400 to 4,000 BP. Phase II is the period between 4,000 to 3,000 BP, and the material culture identified in this phase consists of core tools, discoidals, manos and metates. The difference in this phase is the minimal presence of mortars and pestles. Phase III is similar to Phase II, and includes hammerstones, choppers, scraper planes, manos and metates, Elko points, and discoidals. This phase is the period between 3,000 to 1,000 BP and demonstrates the dependence upon yucca and seeds. All three phases emphasized hunting as part of the subsistence economy. The processing of food technology does vary among the phases as it shifted from hunting to more of a plant-based diet. This may have been a result of the development of the mortars and pestles, as well as the climate (warm and dry) changes that caused tribal groups to migrate toward the coast.⁴²

³⁶ King, Chester D. and Michael Merrill. 2002. Significance of Ahmanson Ranch Archaeological Sites. Report Prepared for City of Calabasas by Topanga Anthropological Consultants, Topanga.

³⁷ Merrill, Michael L. 2015. Lattice Theory to Discover Spatially Cohesive Sets of Artifacts. In *Mathematics and Archaeology*, edited by Juan A. Barcelo and Igor Bagdanovic. CRC Press, Boca Raton.

³⁸ King, Chester D. 1990. *Evolution of Chumash Society: A Comparative Study of Artifacts used for Social System Maintenance in the Santa Barbara Channel Region before A. D. 1804*. Garland Publications, New York.

³⁹ Sutton, Mark Q. and Jill K. Gardener. 2010. Reconceptualizing the Encinitas Tradition of Southern California. *Pacific Coast Archaeological Society Quarterly* 42(4):1-64.

⁴⁰ Sutton, Mark Q. and Jill K. Gardener. 2010. Reconceptualizing the Encinitas Tradition of Southern California. *Pacific Coast Archaeological Society Quarterly* 42(4):1-64.

⁴¹ Garrison, Andrew J. and Brian F. Smith. 2021. A Phase I Cultural Resources Assessment for the Rancho De Alamo Project, TTM 37881, City of San Jacinto, Riverside County, California

⁴² Garrison, Andrew J. and Brian F. Smith. 2021. A Phase I Cultural Resources Assessment for the Rancho De Alamo Project, TTM 37881, City of San Jacinto, Riverside County, California

Middle Period

The Middle Period lasted from about 2800 BP to 750 BP.⁴³ Excavated assemblages retain many attributes of the Early Period but with more diverse artifact types. Middle Period sites can contain large-stemmed or notched small projectile points suggestive of bow and arrow use, especially near the end of the Period, and the use of portable grinding tools continued. Intensive use of mortar and pestles signaled processing of acorns as the primary vegetative staple as opposed to a mixed diet of seeds and acorns. Because of a general lack of data, neither the settlement and subsistence systems nor the cultural evolution of this Period are well understood, but it is very likely that the nomadic ways continued. It has been proposed that Sedentism increased with the exploitation of storable food resources, such as acorns, but coastal sites from the Period exhibit higher fishing activity than in previous periods. The first permanently occupied villages make their appearance in this Period.⁴⁴

Late Prehistoric

Extending from 750 BP to Spanish Contact in 1769, the Late Prehistoric includes changes in trade networks and political and secular economic subsystems. There was also a differentiation of types of political economies. Exploitation of marine resources continued to intensify. Assemblages characteristically contain projectile points, and toward the end of the Period the size of the points decreased and notched and stemmed bases appeared, which implies the use of the bow and arrow. Use of personal ornaments such as shell beads, were widely distributed east of the coast, suggesting well-organized and codified trade networks. Additional assemblages in this Period included steatite bowls, asphaltum, grave goods, and elaborate shell ornaments. The use of bedrock milling stations was widespread during this Horizon. Increased hunting efficiency and widespread exploitation of acorns provided reliable and storable food resources. Village size increased during this time, and some of these villages may have held 1,500 or more residents.⁴⁵ Analyses of skeletons showed that the first signs of malnutrition appeared in this Period, signaling greater competition for food resources.⁴⁶

The earliest part of this Period may have seen an incursion of Cupan-Takic speakers from the Great Basin (the “Shoshonean wedge”)⁴⁷ may have replaced the Hokan speakers in the area. At the time of Spanish conquest, Cupan-Takic speakers were distributed throughout Orange County, western Riverside County, and the Los Angeles Basin (Gabrieleño, Juaneño, and Cahuilla peoples). Serran-Takic speakers are now represented by the Serranos in the San Bernardino Mountains. Recent work⁴⁸ suggests that the “Shoshonean wedge” is misnamed—the original Los Angeles inhabitants replaced by the incoming Takic-speakers may have been Yuman speakers (similar to those in the California Delta region of the Colorado River) and not Hokan Salinan-Seri (Chumash) speakers as was suggested by Kroeber. The Takic branch consists of seven languages that are divided into three sub-branches, and they are as follows: Serrano, Gabrielino, and Luiseño-Cahuilla. The sub-branches are separated

⁴³ King, Chester D. 1990. Evolution of Chumash Society: A Comparative Study of Artifacts used for Social System Maintenance in the Santa Barbara Channel Region before A. D. 1804. Garland Publications, New York.

⁴⁴ Chartkoff J.L. and K.K. Chartkoff. 1984. The Archaeology of California. Menlo Park. Stanford University Press.

⁴⁵ Ibid.

⁴⁶ Fagan, B.M. 2003. Before California: An Archaeologist Looks at Our Earliest Inhabitants. New York: Alta Mira Press.

⁴⁷ Kroeber, A.L. 1925. Handbook of the Indians of California. Bulletin 78. Bureau of American Ethnology. Washington, DC. Smithsonian Institution.

⁴⁸ O’Neil, S. 2002. The Acjachemen in the Franciscan Mission System: Demographic Collapse and Social Change. Master Thesis, Department of Anthropology, CSU-Fullerton.

into two branches, Serran and Cupan. The Cupan branch is divided into two groups, the Luiseño/Juaneño and the other group is the Cahuilla/Cupeno. The Serran sub-branch is located in the northern portion of the Takic territory, and the Cupan sub-branch is located in the southern portion of the territory.⁴⁹

At the time of Spanish conquest, local indigenous groups were composed of constantly moving and shifting clans and cultures. Early ethnographers applied the concept of territorial boundaries to local indigenous groups purely as a conceptualization device, and the data was based on fragmented information provided to them from second-hand sources. At least three Native American groups, the Cahuilla, Gabrieleño, and Luiseño are known to have occupied or utilized resources within the vicinity of the project site at different points in history. A brief overview of these three tribal groups follows.

Native American Ethnohistoric Background

Luiseño

Of all the Southern California native groups, the Luiseño have been the most ethnographically studied and the literature is rich in detail. The Tribe was once affiliated with the San Luis Rey Mission at Oceanside, California. Historically, the Luiseño spoke a language that belongs to the Cupan group of the Takic subfamily of the Uto-Aztecan language family, a language family that includes the Shoshonean groups of the Great Basin.⁵⁰ The Luiseño occupational areas encompass over 1,500 square miles of Southern California⁵¹, as well as the Channel Islands.⁵² Luiseño villages were found along the Pacific Ocean from Agua Hedionda on the south to Aliso Creek on the northwest in present day Orange County. Their territory extended inland to Santiago Peak, to the eastern side of the Elsinore Fault Valley, moving southward to the east of Palomar Mountain, then to the southern slope above the Valley of San José, and finally returning to the sea along the Agua Hedionda Creek.⁵³ The villages were determined according to their proximity to a defined water source, access to a food-gathering locale, and whether they were situated in a defendable location.⁵⁴ Spatially, these villages were commonly located along valley bottoms, streams, or coastal strands. The Luiseño characteristically lived in sedentary and autonomous village groups. Ownership, whether tangible or intangible, ranged from communal to personal property that was either owned by the chief, an individual, a family, or by a group of individuals; therefore, one clan or family occupied several food-gathering locations and aggressively guarded these areas against other clans.^{55,56}

Luiseño thatched house structures were constructed of reeds, brush and/or bark, and any other locally available materials. The houses had a slightly conical roof with a floor that was usually excavated 2 feet below ground surface. All homes were built with a small fire pit in the center and a

⁴⁹ Sutton, Mark Q. 2009. People and Language: Defining the Takic Expansion into Southern California. *Pacific Coast Archaeological Society Quarterly*.

⁵⁰ Bean, L.J. and F.C. Shipek. 1978. Luiseño. In *Handbook of North American Indians*, Vol. 8: California, edited by R.F. Heizer, pp. 550–563. Washington, DC: Smithsonian Institution.

⁵¹ Kroeber, A.L. 1925. *Handbook of the Indians of California*. Bulletin 78. Bureau of American Ethnology. Washington, DC. Smithsonian Institution.

⁵² Sparkman, P.S. 2014 (1908). *The Culture of the Luiseño Indians*. Vol. 8, No. 4. University Press.

⁵³ Bean, L.J. and F.C. Shipek. 1978. Luiseño. In *Handbook of North American Indians*, Vol. 8: California, edited by R.F. Heizer, pp. 550–563. Washington, DC: Smithsonian Institution.

⁵⁴ Ibid.

⁵⁵ Sparkman, P.S. 2014 (1908). *The Culture of the Luiseño Indians*. Vol. 8, No. 4. University Press.

⁵⁶ Strong, W.D. 1929. *Aboriginal Society in Southern California*. University of California Publications in American Archaeology and Ethnology 26(1):1–358.

slight smoke hole in the roof just above the fire.^{57,58} These house structures were known by the Spanish term ramadas. The larger structures, such as ceremonial structures wamkis,” were typically constructed with forked posts supporting wood ceiling beams and were completely covered in thatch, which was lightly mixed with sand or soil. Ceremonial structures were located within the center of the village and enclosed with fencing. Raised altars with a skin and feather image upon them would sometimes be in the ceremonial area. Sweat houses were of similar thatch design to that of the smallerhouse pattern but varied in their construction in that they stood on two forked posts connected by a log and were shaped like an ellipse, with an entrance on one of the longer sides of the structure covered with a layer of mud.

The pottery associated with the Luiseño was constructed simply, made for functionality, and tended to lack ornamental design, although Bean and Shipek⁵⁹ note that if designs were included, “a simple line decoration was either painted or incised with a fingernail or stick.” The Luiseño made pots from the basis of a coil form, in which pieces of coiled clay were gradually added to the edge of the pot while it was being shaped with a wooden paddle and finished with a polishing stone. After completion, the pot was sunbaked and fired.⁶⁰ Typical uses of pottery were for cooking, water jugs, containers, and a water vessel with two spouts used while gathering food.⁶¹ Plant fibers were also commonly used for purposeful household implements, such as brooms, brushes, nets, pouches, twine, and cedar bark skirts for women. The process of creating such items from plant fiber tended to rely on soaking, stretching, and then rolling the fiber.^{62,63}

Ceremony and ritual were of great importance to all native peoples, and the Luiseño had their own variety of traditional practices. Frequently practiced ceremonies included multiple rituals for mourning the dead, the eagle dance, separate ceremonies for the initiation of boys and girls, and a summer and winter solstice celebration.^{64,65,66} These ceremonies offered gatherers an opportunity to witness reenactments, songs, and the oral recitation of their history.⁶⁷ Important equipment during rituals included blades made of obsidian, stone bowls, clay figurines, and headdresses constructed of eagle feathers.⁶⁸ Ritual dances were limited to three standard dances such as the fire dance, which was used during the Toloache Cult initiation for boys at puberty. Also, of great significance during the boys’ initiation were masterfully designed sand paintings, once thought to have originated in the

⁵⁷ Bean, L.J. and F.C. Shipek. 1978. Luiseño. In *Handbook of North American Indians*, Vol. 8: California, edited by R.F. Heizer, pp. 550–563. Washington, DC: Smithsonian Institution.

⁵⁸ Kroeber, A.L. 1925. *Handbook of the Indians of California*. Bulletin 78. Bureau of American Ethnology. Washington, DC. Smithsonian Institution.

⁵⁹ Bean, L.J. and F.C. Shipek. 1978. Luiseño. In *Handbook of North American Indians*, Vol. 8: California, edited by R.F. Heizer, pp. 550–563. Washington, DC: Smithsonian Institution.

⁶⁰ Sparkman, P.S. 2014 (1908). *The Culture of the Luiseño Indians*. Vol. 8, No. 4. University Press.

⁶¹ Ibid.

⁶² Ibid.

⁶³ Bean, L.J. and F.C. Shipek. 1978. Luiseño. In *Handbook of North American Indians*, Vol. 8: California, edited by R.F. Heizer, pp. 550–563. Washington, DC: Smithsonian Institution.

⁶⁴ Kroeber, A.L. 1925. *Handbook of the Indians of California*. Bulletin 78. Bureau of American Ethnology. Washington, DC. Smithsonian Institution.

⁶⁵ Sparkman, P.S. 2014 (1908). *The Culture of the Luiseño Indians*. Vol. 8, No. 4. University Press.

⁶⁶ Strong, W.D. 1929. *Aboriginal Society in Southern California*. University of California Publications in American Archaeology and Ethnology.

⁶⁷ Garbarino, M.S. and R.F. Sasso. 1994. *Native American Heritage*. Third Edition. Waveland Press.

⁶⁸ Bean, L.J. and F.C. Shipek. 1978. Luiseño. In *Handbook of North American Indians*, Vol. 8: California, edited by R.F. Heizer. Washington, DC: Smithsonian Institution.

Southwest, though presently culturally identified with the Luiseño.^{69,70,71} Although not necessarily limited to ritual, Heizer and Whipple⁷² comment that the Luiseño of Riverside County decorated their rock designs in the same form as that of the native peoples of the Great Basin, which appeared as pecked abstracts displayed on boulders.

Personal adornment was a common practice among the Luiseños. Ornamental items such as beads and pendants were made of clay, shell, stone, deer hooves, bear claws, and mica sheets. Men would wear ear and nose ornaments, sometimes made of bone or cane with beads attached. Body painting and tattooing were done purely for rituals.⁷³

The Luiseño encountered Europeans as early as 1796, with the arrival of the Gaspar de Portola expedition. The rapid decline of the population began with the spread of European diseases and ideas, coupled with the living conditions in the missions and the ranchos. Many coastal village people were moved into missions, and Indians from distant villages were moved into the San Juan Capistrano Mission where they taught, among many other things, the Spanish language, the Roman Catholic faith, and European crafts. San Luis Rey Mission's policy was to continue to maintain the settlement patterns of the Luiseño. When the missions became secularized in 1834, political imbalance among resulted in Indian revolts and uprising against the Mexican rancheros. Many Indians left the ranchos and missions and joined more inland groups. Some acquired land grants and entered the conventional Mexican culture.⁷⁴

Cahuilla

The project area is located in the region known to have been occupied by the Cahuilla Indians. Cahuilla territory was bounded on the north by the San Bernardino Mountains, on the east by the Orocopia Mountains, on the west by the Santa Ana River, the San Jacinto Plain, and the eastern slope of the Palomar Mountains, and on the south by Borrego Springs and the Chocolate Mountains.⁷⁵ The diversity of the territory provided the Cahuilla with a variety of foods. It has been estimated that the Cahuilla exploited more than 500 native and non-native plants.⁷⁶ Acorns, mesquite, screw beans, piñon nuts, and various types of cacti were used. A variety of seeds, wild fruits and berries, tubers, roots, and greens were also a part of the Cahuilla diet. A marginal agricultural existence provided corn, beans, squashes, and melons. Rabbits and small animals were also hunted to supplement the diet. During high stands of Ancient Lake Cahuilla, fish, migratory birds, and marshland vegetation were also taken for sustenance and utilitarian purposes.⁷⁷

⁶⁹ Bean, L.J. and F.C. Shipek. 1978. Luiseño. In Handbook of North American Indians, Vol. 8: California, edited by R.F. Heizer, pp. 550–563. Washington, DC: Smithsonian Institution.

⁷⁰ Garbarino, M.S. and R.F. Sasso. 1994. Native American Heritage. Third Edition. Waveland Press.

⁷¹ Kroeber, A.L. 1925. Handbook of the Indians of California. Bulletin 78. Bureau of American Ethnology. Washington, DC. Smithsonian Institution

⁷² Heizer, R.F. and M.A. Whipple. 1971. The California Indians: Source Book, 2nd Edition.

⁷³ Bean, L.J. and F.C. Shipek. 1978. Luiseño. In Handbook of North American Indians, Vol. 8: California, edited by R.F. Heizer. Washington, DC: Smithsonian Institution.

⁷⁴ Bean, L.J. and F.C. Shipek. 1978. Luiseño. In Handbook of North American Indians, Vol. 8: California, edited by R.F. Heizer. Washington, DC: Smithsonian Institution.

⁷⁵ Bean, Lowell John. 1978. Cahuilla. In Handbook of North American Indians, Volume 8, California. Edited by Robert F. Heizer, pp. 575-587. W.C. Sturtevant, general editor. Smithsonian Institution, Washington, DC.

⁷⁶ Bean, Lowell John and Katherine Siva Saubel. 1972. Temalpakh: Cahuilla Indian Knowledge and Use of Plants. Malki Museum, Banning, California.

⁷⁷ Bean, Lowell John. 1978. Cahuilla. In Handbook of North American Indians, Volume 8, California. Edited by Robert F. Heizer, pp. 575-587. W.C. Sturtevant, general editor. Smithsonian Institution, Washington, DC.

Structures within permanent villages ranged from small brush shelters to dome-shaped or rectangular dwellings. Villages were situated near water sources, in the canyons near springs, or on alluvial fans at man-made walk-in wells.⁷⁸ Mortuary practices entailed cremation of the dead. Upon a person's death, the body was bound or put inside a net and then taken to a place where the body would be cremated. Secondary interments also occurred. A mourning ceremony took place about a year after a person's death. During this ceremony, an image of the deceased was burned along with other goods.^{79, 80} Precontact Cahuilla population has been estimated to be as low as 2,500 to as high as 10,000. At the time of first contact with Europeans, around 1774, the Cahuilla numbered approximately 6,000. Although they were the first to encounter the Cahuilla, the Spanish had little to do with those of the desert region. Some of the Cahuilla who lived in the plains and valleys west of the desert and mountains, however, and were missionized through the asistencia located near present day San Bernardino. Cahuilla political, economic, and religious autonomy was maintained until 1877, when the United States government established Indian reservations in the region. Protestant missionaries came into the area to convert and civilize the Native American population. During this era, traditional cultural practices, such as cremation of the dead, were prohibited. Today, the Cahuilla resides on eight separate reservations in Southern California, located from Banning in the north to Warner Springs in the south and from Hemet in the west to Thermal in the east.⁸¹

Gabrieleño (Tongva)

Ethnographic accounts of Native Americans indicate that the Gabrieleño (or Tongva) once occupied the region that encompasses the project site. At the time of contact with Europeans, the Tongva were the main occupants of the southern Channel Islands, the Los Angeles Basin, much of Orange County, and extended as far east as the western San Bernardino Valley. The term "Gabrieleño" came from the group's association with Mission San Gabriel Arcangel, established in 1771. However, today the group prefers to be known by their ancestral name, Tongva. The Tongva are believed to have been one of the most populous and wealthy Native American tribes in Southern California prior to European contact, second only to the Chumash.^{82,83,84}

The Tongva occupied numerous villages with populations ranging from 50 to 200 inhabitants. Residential structures within the villages were domed, circular, and made from thatched tule or other available wood. Tongva society was organized by kinship groups, with each group composed of several related families who together owned hunting and gathering territories. Settlement patterns varied according to the availability of floral and faunal resources.^{85, 86, 87} Vegetable staples consisted

⁷⁸ Bean, Lowell John. 1972. *Mukat's People: The Cahuilla Indians of Southern California*. University of California Press, Berkeley.

⁷⁹ Lando, Richard and Ruby E. Modesto. 1977. *Temal Wakhish: A Desert Cahuilla Village*. *Journal of California Anthropology* 4:95-112

⁸⁰ Strong, W.D. 1929. *Aboriginal Society in Southern California*. University of California Publications in American Archaeology and Ethnology 26.

⁸¹ Bean, Lowell John. 1978. Cahuilla. In *Handbook of North American Indians, Volume 8, California*. Edited by Robert F. Heizer, pp. 575-587. W.C. Sturtevant, general editor. Smithsonian Institution, Washington, DC.

⁸² Bean, Lowell J. and Charles R. Smith. 1978. Gabrielino. In *Handbook of North American Indians, Volume 8, California*, pp. 538-549. Edited by R.F. Heizer. William C. Sturtevant, general editor. Smithsonian Institution, Washington DC.

⁸³ McCawley, William. 1996. *The First Angelinos: the Gabrielino Indians of Los Angeles*. Malki Museum Press, Morongo Indian Reservation, Banning, California.

⁸⁴ Moratto, M.J. 1984. *California Archaeology*. Academic Press: San Diego.

⁸⁵ Bean, Lowell J. and Charles R. Smith. 1978. Gabrielino. In *Handbook of North American Indians, Volume 8, California*, pp. 538-549. Edited by R.F. Heizer. William C. Sturtevant, general editor. Smithsonian Institution, Washington DC.

⁸⁶ McCawley, William. 1996. *The First Angelinos: the Gabrielino Indians of Los Angeles*. Malki Museum Press, Morongo Indian Reservation, Banning, California.

⁸⁷ Miller, Bruce W. 1991. *The Gabrielino*. Sand River Press, Los Osos, California

of acorns, chia, seeds, piñon nuts, sage, cacti, roots, and bulbs. Animals hunted included deer, antelope, coyote, rabbits, squirrels, rodents, birds, snakes, and the Tongva also fished.^{88, 89,90}

By the late 18th Century, Tongva population had significantly dwindled due to the introduction of diseases and dietary deficiencies. Tongva communities near the missions disintegrated as individuals succumbed to Spanish control, fled the region, or died. Later, many of the Tongva fell into indentured servitude to Anglo-Americans. By the early 1900s, few Tongva people had survived and much of their culture had been lost. However, in the 1970s, a revival of the Tongva culture began which continues today with growing interest and support.

Regional Historic Background

The Spanish Period (1769 to 1821)

A comprehensive historical review of Riverside County (1772 to 1893) is noted in Lech⁹¹ and other sources. The first Europeans to traverse the territory that constitutes modern Riverside County were Spanish soldier, Pedro Fages, and Father Francisco Garcés. This expedition to locate deserting soldiers eventually brought the group through the foothills of the San Jacinto Mountains, along Coyote Canyon, on the southern edge of Riverside County. They then continued into the Anza Valley, the San Jacinto Valley, Riverside, and eventually into San Bernardino and the Cajon Pass. Later, in 1774, Captain Juan Bautista de Anza would also utilize Coyote Canyon and enter the confines of modern Riverside County as his expedition searched for an overland route from Sonora to coastal Southern California. These expeditions sparked an influx of non-natives to Southern California, the Spanish being the first of these groups. Associated with the Spanish migration was the establishment of missions and military presidios along the coast of California. Although neither the missions nor presidios were ever located within the confines of modern Riverside County, their influence was far reaching. For example, land belonging to Mission San Gabriel extended to inland Southern California, east of the periphery of the Coachella Valley. Mission officials then converted portions of these holdings into ranchos during the Mexican Period.

The Mexican Period (1821–1848)

Administration of the Southern California ranchos shifted to Mexican hands in about 1824, but effective control did not occur until the early 1830s. The Mexican administrators began granting vast tracts of the original Mission properties to members of prominent families who had helped cut ties from the Spanish system. In 1838, title to the Mission San Gabriel's outpost in this area, the Jurupa Rancho, was granted to Juan Bandini, the appointed administrator of the Mission San Gabriel. This land grant was the first officially recognized Mexican land grant within modern Riverside County. The Jurupa Rancho consisted of roughly 30,000 acres, bounded by the Jurupa Hills to the north, the Santa Ana River to the south and east, and the Chino Rancho to the west.

⁸⁸ Bean, Lowell J. and Charles R. Smith. 1978. Gabrielino. In Handbook of North American Indians, Volume 8, California, pp. 538-549. Edited by R.F. Heizer. William C. Sturtevant, general editor. Smithsonian Institution, Washington DC.

⁸⁹ McCawley, William. 1996. The First Angelinos: the Gabrielino Indians of Los Angeles. Malki Museum Press, Morongo Indian Reservation, Banning, California

⁹⁰ Miller, Bruce W. 1991. The Gabrielino. Sand River Press, Los Osos, California

⁹¹ Lech, S., 2004. Along the old roads: a history of the portion of Southern California that became Riverside County, 1772-1893. Steve Lech.

During the Period of the Mexican ranchos, rancho owners were constantly harassed by thieves and native groups from the Mojave region. Groups whose intent was to steal horses and cattle often attacked the northern part of the Rancho San Bernardino, so much so that Juan Bandini donated the very northeastern portion of the Jurupa Rancho for resettlement in 1842. By 1843, Bandini further fragmented the Jurupa Rancho, selling a sizable portion to Benjamin D. Wilson, who then sold the property known as Jurupa (Rubidoux) Rancho to Louis Rubidoux in 1847. The Rancho would be further divided in the coming decade.

Riverside County

Riverside County is the fourth largest county in California in both size (7,206 square miles) and population (4,470,546 people). It is bordered by Orange County to the west, San Bernardino County to the north, San Diego County to the south, and the State of Arizona to the east. Riverside County was formed in 1893 from a small portion of San Bernardino County and a larger part of San Diego County⁹² and received its name from the already established City of Riverside.

The majority of Riverside County was made up of Rancho San Jacinto Viejo, which was given to Don José Antonio Estudillo; Sierra (Yorba) Rancho and Rincon Grant which were given to Bernardo Yorba through land grants that were given to prominent Spanish families by the Spanish Government.^{93,94} Following the establishment of the community of Riverside, it maintained the same agricultural business practices that brought commerce to the region, however, the success in fruit growing and export of goods, the profitable land, proximity to a water source, the arrival of several investors, and the acquisition of irrigation rights leading to the formation of the Riverside Land and Irrigation Company, Riverside was rapidly becoming an attractive destination to settle in.⁹⁵ The addition of the Southern Pacific Railroad in the region further facilitated the distribution of goods and travelers, bringing financial prosperity and more business to Riverside. Rapid growth meant that institutions needed to be formed to meet the needs of the growing population, and in 1891 the first attempt to form a new county was held.⁹⁶

Riverside continues to be one of the fastest growing counties in California with a population of 2,470,546 people.⁹⁷ Its ecological diversity, with rivers, deserts, mountains, and beaches, as well as affordable housing, the Wine Country near Temecula, and renowned University of California, Riverside, are key factors in the continued appeal of the County.

Highway 74: Ortega Highway

The Ortega Highway moves through the mountains from San Juan Capistrano to Lake Elsinore Valley. It started out as Indian foot trails and a fire trail along the creek. Several valley men envisioned a highway that would lead to the sea. These men, Sid Stephens, Carl Merrifield, Uede Jacobs, Adam

⁹² County of Riverside. 2022. Home | County of Riverside (rivco.org). Accessed February 17, 2022.

⁹³ Holmes, E.W., 1912. History of Riverside County, California: With Biographical Sketches of the Leading Men and Women of the County Who Have Been Identified with its Growth and Development from the Early Days to the Present. Historic Record Company.

⁹⁴ Brown, J. and Boyd, J., 1922. History of San Bernardino and Riverside Counties: With Selected Biography of Actors and Witnesses of the Period of Growth and Achievement. (Vol. 2). Western Historical Association.

⁹⁵ Holmes, E.W., 1912. History of Riverside County, California: With Biographical Sketches of the Leading Men and Women of the County Who Have Been Identified with its Growth and Development from the Early Days to the Present. Historic Record Company.

⁹⁶ Guinn, J.M., 1902. Historical and Biographical Record of Southern California: Containing a History of Southern California from Its Earliest Settlement to the Opening Year of the Twentieth Century. Chapman Publishing Company.

⁹⁷ United States Census Bureau. 2020. Website: <https://www.census.gov/quickfacts/riversidecountycalifornia>. Accessed October 19, 2020.

Keck began excavating the mountain road with wheelbarrows, slip scrapers, horse teams, and shovel in 1917. Their concerted effort paved the way for the creation of what is now Lake Elsinore. The fire trail was widened up the mountain through Jim Knott's ranch toward the west end of Grande Avenue. Worked reached the top of the mountain as far as the upper San Juan Camp and continuing to the Lower San Juan Camp and reaching to the current bridge that crosses San Juan Creek. In the early 1920s, James B. Lehigh initiated the enthusiasm for a modern road when he arrived in Elsinore. Mr. Lehigh surprised the local bankers when he deposited \$97,000 to open his account. Mr. Lehigh began investing in Elsinore after he become the vice president of the First National Bank; vice president of the building and loan association; vice president of the corporation associated with the local weekly newspaper; and the president of the chamber of commerce.

Del Crane, Elsinore's city engineer, was appointed by Mr. Lehigh as the chairman of the committee involved in the construction of the road. Mr. Crane distributed circulars, via airplane, all over Murrieta, Fallbrook, Temecula, San Diego, Escondido, Vista, San Bernardino, Redlands, Ontario, and back up the coast. The distributed circulars advertised the proposed highway, free barbecue and rodeo. As a result of this effort, approximately 300 cars from various counties attended the barbecue in the park, and both Riverside and Orange County supervisors attended as well. E.E. East, chief engineer for the Southern California Auto Club, proposed that the counties save the counties gas tax money and apply for the \$200,000 located within Sacramento Bank to get the Joint Highway District Act amended. This amendment would make way for the construction of the road to join two county seats. East's efforts resulted in the formation of the Joint Highway District that involved supervisors of both Riverside and Orange Counties.

Immediately after, the survey parties began work on both ends of the road and met at the county line. Both counties surveyed different routes up the mountain to find the best and most practical high gear road. In June 1929, 800 people witnessed the grounding breaking of the mountain unit for the Elsinore-San Juan Capistrano Highway-to-the-Sea. The ceremony was followed by an elaborate barbecue dinner. The construction of the Ortega Highway began in 1929 and ended in 1933. The Ortega Highway dedication ceremony was held at Jameson Point in August 1933. The highway was named in honor of Don José Francisco Ortega, who was a member of the Portola expedition and one of the founders of the San Juan Mission.⁹⁸

City of Lake Elsinore

Given the close proximity of the project to the City of Lake Elsinore, the following summary has been included to provide additional historical context. A recent analysis of Lake Elsinore history has been published by the Lake Elsinore Historical Society.⁹⁹ In it, it is stated that Julian Manriquez was granted the Rancho La Laguna in 1844 and it comprised almost 20,000 acres at that time. In 1851, Don Abel Stearns was able to acquire it and in 1858 sold it to Augustin Machado. Machado was the first permanent resident since the prehistoric era building an adobe off what is now Grand Avenue. Once the Machado house was established, the Butterfield Stage built a stopping place and rest area nearby. In 1865, Machado died, and the rancho was subsequently divided up among the family. In 1873, the Machado family sold all but 500 acres to an Englishman, Charles Sumner. In 1880, the lake

⁹⁸ The Ortega Highway. 2018. Website: <http://theortegahighway.com/OrtegaHighwayHistory.html>. Accessed January 11, 2023

⁹⁹ Lake Elsinore Historical Society. 2021. Welcome to the Lake Elsinore Historical Society Website. Accessed February 17, 2022.

was seen by Franklin Heald from the top of Mount Baldy and 3 years later in October 1883, he and two partners bought the property from the Sumners.

Lake Elsinore itself was first named “Elsinore” by developer Franklin H. Heald in 1883 at the suggestion of the wife of one of his partners, who provided the name after a castle in Denmark made famous by Shakespeare. The town was created as a subdivision during the California land boom of the early 1880s, a period in which many of the original Mexican land grants were purchased and subdivided by local developers who were backed by English or New York banks. In 1885, Santa Fe tracks were placed between the Riverside area and Elsinore through Railroad Canyon. On April 9, 1888, Lake Elsinore had been incorporated as a city.

The Lake was a source of pride to local townspeople, recreation, and helped to maintain the aquifer supplying drinking water for the residents, but like many playa lakes in Southern California, it is very shallow and subject to extreme fluctuations and desiccation without stabilization. In 1950, local residents became worried that water in the Lake would disappear as upstream agricultural interests and residential development was reducing lake levels year by year. In 1951, the Lake went dry and between 1954-1958 the Lake was dry until storms in 1958 placed a meager 7 feet of water in the Lake. The Lake was dry off and on until conservation and regional water planning refilled it in the early 1960s. The Lake has overflowed into Murrieta Creek eight times in the last 100 years: today this happens when the Lake reaches the 1,263-foot mark.

City of Perris

Given the close proximity of the project to the City of Perris, the following summary has been included to provide additional historical context. The City of Perris was established on April 18, 1911. It is named after California Southern Railroad Surveyor and Chief Engineer Fred T. Perris, who although never resided in the City, is credited with surveying Perris Valley where the railroad would eventually be built. The City of Perris, which was formerly called San Jacinto Plains, began as a small farming community that was initially inhabited by gold miners; however, the flat lands and moderate climate combined with the affordable land, appealed to the wave of settlers that arrived to the area after the discovery of gold.¹⁰⁰ The small town of Pinacate was located 1.7 miles south of downtown Perris. The town was known for the Pinacate Mining District that was established in 1878 as a result of the discovery of gold within the valley. The town contained a post office, businesses, and a depot. When the railroad was completed in 1882, many settlers migrated to the valley to claim homesteads and purchase railroad land at Pinacate. The town was reported to contain, at one point, 400 people. The demise of the town was the result of property disputes. In the 1980s the Pinacate Rock House Dugout was designated as a California Point of Historical Interest.^{101,102}

In 1886, the Perris line of the California Southern Railroad was constructed, connecting Perris with San Diego to the south and Barstow to the north. The addition of the rail line facilitated the export of goods that were cultivated in Perris. Among the goods that came out the town were alfalfa, oranges,

¹⁰⁰ City of Perris. 2020. Website: <https://www.cityofperris.org/our-city/about-perris/history#:~:text=Perris%20is%20named%20in%20honor,of%20Barstow%20and%20San%20Diego>. Accessed October 19, 2020.

¹⁰¹ City of Perris. 2023. Website: <https://www.cityofperris.org/our-city/about-perris/history#:~:text=Perris%20is%20named%20in%20honor,of%20Barstow%20and%20San%20Diego>. Accessed January 11, 2023.

¹⁰² The Perris Valley Historical & Museum Association. 2016. Images of the Past: Perris Valley. Arcadia Publishing, Charleston, South Carolina.

grapes, potatoes, and grains gaining the reputation and moniker as the fruit and vegetable basket of Riverside County. The rail line was short lived, having been devastated by heavy storms, ultimately giving California Southern Railroad no choice but to close the station down in the early 1890s. Following the closure of the rail line and foreseeing the need for a functioning water and irrigation system to support the agricultural market, the community of Perris petitioned to be incorporated. By 1911, the vote passed, and Perris officially became a city with a population of 300.¹⁰³

Rider Street, which runs east and west, is one of the main roads in Perris and named after Benjamin Harrod Rider, who purchased 160 acres of land (including the project location) on January 25, 1888. Rider acquired the land through a government land grant, which was paid with cash. Benjamin Rider was born in Maine in 1823 and came west after serving in the Civil War. Records indicated that he resided in Santa Barbara and Colton with his wife Anna before settling in Perris, California.

Today, Perris has a population of 79,291 and continues to grow.¹⁰⁴ After the construction of Lake Perris, the City became a vacation and retreat destination. In addition to Lake Perris, Perris hosts hot air ballooning competitions and is known as a desirable sky diving destination thanks to its uniformed flat terrain.

3.5.3 - Regulatory Framework

Federal

National Historic Preservation Act

The National Historic Preservation Act of 1966 (NHPA), as amended, established the National Register of Historic Places (NRHP), which contains an inventory of the nation’s significant prehistoric and historic properties. Under 36 Code of Federal Regulations 60, a property is recommended for possible inclusion on the NRHP if it is at least 50 years old, has integrity, and meets one of the following criteria:

- It is associated with significant events in history, or broad patterns of events.
- It is associated with significant people in the past.
- It embodies the distinctive characteristics of an architectural type, period, or method of construction; or it is the work of a master or possesses high artistic value; or it represents a significant and distinguishable entity whose components may lack individual distinction.
- It has yielded, or may yield, information important in history or prehistory.

Certain types of properties are usually excluded from consideration for listing in the NRHP, but they can be considered if they meet special requirements in addition to meeting the criteria listed above. Such properties include religious sites, relocated properties, graves and cemeteries, reconstructed properties, commemorative properties, and properties that have achieved significance within the past 50 years.

¹⁰³ The Perris Valley Historical & Museum Association. 2016. Images of the Past: Perris Valley. Arcadia Publishing, Charleston, South Carolina.

¹⁰⁴ United States Census Bureau. 2020. Website: <https://www.census.gov/quickfacts/riversidecountycalifornia>. Accessed October 19, 2020.

Archaeological Resources Protection Act

The Archaeological Resources Protection Act (ARPA) amended the Antiquities Act of 1906 (16 United States Code [USC] 431–433) and set a broad policy that archaeological resources are important to the nation and should be protected and required special permits before the excavation or removal of archaeological resources from public or Indian lands. The purpose of ARPA was to secure, for the present and future benefit of the American people, the protection of archaeological resources and sites that are on public lands and Indian lands, and to foster increased cooperation and exchange of information between governmental authorities, the professional archaeological community, and private individuals having collections of archaeological resources and data that were obtained before October 31, 1979.

American Indian Religious Freedom Act

AIRFA established federal policy to protect and preserve the inherent rights of freedom for Native American groups to believe, express, and exercise their traditional religions. These rights include but are not limited to access to sites, use and possession of sacred objects, and freedom to worship through ceremonials and traditional rites.

State

California Register of Historical Resources

As defined by Section 15064.5(a)(3)(A-D) of the CEQA Guidelines, a resource shall be considered historically significant if the resource meets the criteria for listing on the CRHR. The CRHR and many local preservation ordinances have employed the criteria for eligibility to the NRHP as a model, since the NHPA provides the highest standard for evaluating the significance of historic resources. A resource that meets the NRHP criteria is clearly significant. A resource that does not meet the NRHP standards may still be considered historically significant at a local or State level.

California Environmental Quality Act

CEQA specifies that a project that may cause a substantial adverse change in the significance of a historical resource is a project that may have a significant effect on the environment (State CEQA Guidelines § 15064.5(b)). The significance of a historical resource is impaired when a project demolishes or materially alters in an adverse manner those physical characteristics of a historical resource that convey its significance and that justify its eligibility for the CRHR. If there is a substantial adverse change in the significance of a historical resource, the preparation of an environmental impact report may be required (State CEQA Guidelines § 15065(a)).

For the purposes of CEQA, a resource shall be considered by a lead agency to be historically significant if the resource meets the criteria for listing in the CRHR. Codified in Public Resources Code Section 5024.1, the CRHR, recognizes buildings, structures, sites, districts, and objects, 45 years or older and which are significant in respect to American history, architecture, archaeology, engineering, or culture and at the local, State, or national level. Like the NRHP, resources must also retain integrity, although the level of integrity a resource must retain is less stringent for the CRHR than the NRHP. The CRHR also includes properties that are listed or have been formally determined eligible for listing on the NRHP or is a State Historic Landmark, or Historical Point of Interest.

Senate Bill 18

SB 18 states that prior to a local (city or county) government's adoption of any General Plan or Specific Plan, or amendment to General and Specific Plans, or a designation of open space land proposed on or after March 1, 2005, the city or county shall conduct consultations with California Native American Tribes for the purpose of preserving or mitigating impacts to Cultural Places. A Cultural Place is defined as:

- Native American sanctified cemetery, place of worship, religious or ceremonial site, or sacred shrine (PRC § 5097.9), or;
- Native American historic, cultural, or sacred site, that is listed or may be eligible for listing in the California Register of Historical Resources pursuant to Section 5024.1, including any historic or prehistoric ruins, any burial ground, or any archaeological or historic site (PRC § 5097.995).

According to the Government Code Section 65352.4, "consultation" is defined as:

The meaningful and timely process of seeking, discussing, and carefully considering the views of others, in a manner that is cognizant of all parties' cultural values and, where feasible, seeking agreement. Consultation between government agencies and Native American Tribes shall be conducted in a way that is mutually respectful of each party's sovereignty. Consultation shall also recognize the tribes' potential needs for confidentiality with respect to places that have traditional tribal cultural significance.

California Historical Building Code, California Code of Regulations, Title 24, Part 8

The California Historic Building Code (CHBC) applies to all qualified historical buildings or properties in the State. Its intent is to protect California's architectural heritage by recognizing the unique construction concerns inherent in maintaining and reusing historic buildings. The CHBC allows for alternative building regulations for permitting necessary repairs and modifications to ensure the preservation, rehabilitation, relocation, and related construction of a building and structures that are deemed to be of importance to the history, architecture, or culture of an area by the relevant local or State governmental jurisdiction. The CHBC regulations are meant to facilitate the rehabilitation or change of occupancy in a manner that "preserves their original or restored elements and features, to encourage energy conservation and a cost-effective approach to preservation, and to provide for reasonable safety from fire, seismic forces or other hazards for occupants and users of such buildings, structures and properties and to provide reasonable availability and usability by the physically disabled."

Health and Safety Code Sections 7052 and 7050.5

Section 7052 of the Health and Safety Code dictates that the disturbance of Native American cemeteries is a felony. Section 7050.5 requires that construction or excavation be stopped in the vicinity of discovered human remains until the County Coroner can determine whether the remains are those of a Native American. If determined to be of Native American origin, the coroner must contact the California NAHC within 24 hours of this identification. A NAHC representative would then identify a Native American Most Likely Descendant (MLD) to inspect the site and provide

recommendations for the proper treatment of the remains and associated grave goods. In addition, CEQA Guidelines Section 15064.5 specifies the procedures to be followed in case of the discovery of human remains on non-federal land. The disposition of Native American burials falls within the jurisdiction of the NAHC.

Public Resources Code Section 5097

Public Resources Code Section 5097 specifies the procedures to be followed in the event of the unexpected discovery of human remains on non-federal public lands. The disposition of Native American burials falls within the jurisdiction of the NAHC, which prohibits willfully damaging any historical, archaeological, or vertebrate paleontological site or feature on public lands.

California Native American Graves Protection and Repatriation Act, Health and Safety Code Section 8010 through 8030

In the California Health and Safety Code, Division 7, Part 2, Chapter 5, contains provisions designed to protect Native American cultural resources. The Act sets the State policy to ensure that all California Native American human remains, and cultural items are treated with due respect and dignity. The Act also provides the mechanism for disclosure and return of human remains and cultural items held by publicly funded agencies and museums in California. Likewise, the Act outlines the mechanism with which California Native American Tribes not recognized by the federal government may file claims to human remains and cultural items held in agencies or museums.

Native American Historic Resource Protection Act, Public Resources Code 5097

Section 5097 of the Public Resources Code addresses archaeological resources. Archaeological resources that are not “historical resources” may be “unique archaeological resources” as defined in Public Resources Code Section 21083.2, which also generally provides that “non-unique archaeological resources” are not analyzed under CEQA. Public Resources Code Section 21083.2, subdivision (g), defines “unique archaeological resource” as an archaeological artifact, object, or site that does not merely add to the current body of knowledge, but has a high probability of meeting any of the criteria identified in this section.

If an archaeological resource is neither a unique archaeological nor a historical resource, the effects of the project on that resource would not be considered a significant effect on the environment. It is sufficient that the resource and the effects on it be noted in an EIR, but the resource need not be considered further in the CEQA process. Additional applicable sections of the Public Resources Code include:

Section 5097.5: Provides that any unauthorized removal or destruction of archaeological or paleontological resources on sites located on public lands is a misdemeanor. As used in this section, “public lands” means lands owned by, or under the jurisdiction of, the State, or any city, county, district, authority, or public corporation, or any agency thereof.

Section 5097.98: Prohibits obtaining or possessing Native American artifacts or human remains taken from a grave or cairn and sets penalties for such acts.

Mills Act, 1972

The Mills Act provides economic incentives to private property owners to restore and preserve qualified historic buildings. This legislation allows local jurisdictions (cities and counties) to enter contracts with owners of qualified historic properties who are actively engaged in the restoration and maintenance of their historic properties while receiving property tax relief. A qualified historic property is defined as one that is "listed on any federal, state, county, or city register, including the National Register of Historic Places, California Register of Historical Resources, California Historical Landmarks, State Points of Historical Interest, and locally designated landmarks."¹⁰⁵

Local**County of Riverside**

County of Riverside General Plan

- LU 9.1** Provide for permanent preservation of open space lands that contain important natural resources, cultural resources, hazards, water features, watercourses including arroyos and canyons, and scenic and recreational values.
- OS 19.1** Cultural resources (both prehistoric and historic) are a valued part of the history of the County of Riverside.
- OS 19.3** Review proposed development for the possibility of cultural resources and for compliance with the cultural resources program.
- OS 19.4** To the extent feasible, designate as open space and allocate resources and/or tax credits to prioritize the protection of cultural resources preserved in place or left in an undisturbed state.
- OS 19.5** Exercise sensitivity and respect for human remains from both prehistoric and historic time periods and comply with all applicable laws concerning such remains.

Highway 74 Community Plan

The Highway 74 Community Plan does not set forth any additional goals and policies related to cultural resources.

3.5.4 - Methodology and Results

On June 29, 2017, a records search for the project area and a 1-mile radius beyond the planning area boundary was conducted at the EIC located at the University of California, Riverside. The current inventories of the NRHP, the CRHR, the California Historical Landmarks (CHL) list, the California Points of Historical Interest (CPHI) list, and the California Built Environment Resource Directory (BERD) for Riverside County were also reviewed to determine the existence of previously documented local historical resources.

¹⁰⁵ California Office of Historic Preservation (OHP). Website: <http://www.ohp.parks.ca.gov>. Accessed May 29, 2020.

The results of the EIC records search indicate that 213 cultural resources have been recorded within the 1-mile search radius. Of these 66 are located within the boundaries of the planning area. Of the area-specific survey reports, 106 are on file with the EIC that address areas within the 1-mile search radius, 17 of which address portions of the planning area, indicating that segments have been previously evaluated.

Cultural resources within and in the vicinity of the planning area include both prehistoric archaeological sites, and historic era buildings and structures. The southwestern end of the project area contains several prehistoric plant processing sites where numerous milling slicks have been documented. Some of these sites contained artifacts including flakes, scrapers, hammer stones, choppers, manos and metates. While not within the planning area, the 4th Street residential historic district of the City of Perris is located within 0.5 mile of the project area. This district contains several residential units dating to the first half of the 20th century, and additional unevaluated buildings and structures that may be eligible for the NRHP or CRHR are located within the planning area. Cultural resources located within the planning area also include contain segments of historical-period roads, and several sites related to prospecting and mining are located within 0.5 mile of the central part of the planning area.

The NRHP and BERD were also consulted as part of the records search process. Two properties within the planning area are listed in the NRHP. Ten properties within the planning area are listed in the BERD and are potentially eligible for inclusion on the NRHP. A summary of EIC records search results can be found in Appendix D.

3.5.5 - Thresholds of Significance

According to Appendix G, Environmental Checklist, of the State CEQA Guidelines, cultural resources impacts resulting from the implementation of the proposed project would be considered significant if the project would:

- a) Cause a substantial adverse change in the significance of a historical resource as pursuant to Section 15064.5.
- b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5.
- c) Disturb any human remains, including those interred outside of formal cemeteries.

Significance thresholds set forth in the Riverside County's Environmental Assessment Checklist form are derived from Section V of Appendix G to the State CEQA Guidelines (listed above), as modified by the 2018 updates to the CEQA Guidelines, and state that the proposed project would have a significant impact on cultural resources if construction and/or operation if the proposed project would:

8. Historic Resources

- a) Alter or destroy a historic site?

- b) Cause a substantial adverse change in the significance of a historical resource, pursuant to California Code of Regulations, Section as defined in Section 15064.5?

9. Archaeological Resources

- a) Alter or destroy an archaeological site?
- b) Cause a substantial adverse change in the significance of an archaeological resource, pursuant to California Code of Regulations, Section 15064.5?
- c) Disturb any human remains, including those interred outside of formal cemeteries?

3.5.6 - Project Impacts and Mitigation Measures

This section discusses potential impacts associated with the development of the proposed project and provides mitigation measures where appropriate.

Historic Resources

Impact CUL-8(a): The proposed project may alter or destroy a historic site.

AND

Impact CUL-8(b): The proposed project may cause a substantial adverse change in the significance of a historical resource, pursuant to California Code of Regulations, Section 15064.5.

Impact Analysis

A substantial adverse change in the significance of a historical resource is defined at Section 15064.5(b)(1) of the CEQA Guidelines as the “physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of a historical resource would be materially impaired.” Known historic buildings, districts and resource sites are located throughout the planning area, such as the Pinacate Mining District, as discussed in Section 3.5.2. Additional undesignated sites, and potentially unidentified sites, exist within the planning area as well.

This environmental analysis provides a programmatic-level review and does not evaluate any specific sites or development projects. Additionally, the proposed project itself does not approve or entitle any development project. Further, potential future development would be required to undergo project review at the time of project application and would be assessed for impacts to historic and cultural resources. While the Highway 74 Community Plan (proposed project) does not directly propose any adverse changes to any historical resources, future development allowed under the proposed project could affect known resources, or previously unidentified or undesignated resources. This would constitute a potentially significant impact.

As future implementing projects are considered by the County, each project would be evaluated for conformance with the General Plan, Municipal Code, and other applicable State regulations. Subsequent development and infrastructure projects would also be analyzed for potential

environmental impacts, consistent with requirements of CEQA. The General Plan includes policies and programs intended to reduce impacts to and conserve historical resources. Policies OS-19.2, OS-19.3, and OS-19.4 help ensure protection and preservation of historical resources by implementing a process where proposed developments are reviewed for the possibility of cultural resources being present. Specifically, OS 19.3 requires review of proposed development for the possibility of cultural resources and for compliance with the cultural resources program, which would include preparation of Phase I Cultural Resources Assessment and reviewing evaluating structured for CRHR eligibility on a project-by-project basis. Therefore, future implementing projects would comply with applicable regulations to ensure that project impacts related to cultural and historical resources are less than significant.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation required.

Archaeological Resources

Impact CUL-9(a): The proposed project may not alter or destroy an archaeological site.

AND

Impact CUL-9(b): The proposed project may cause a substantial adverse change in the significance of an archaeological resource, pursuant to California Code of Regulations, Section 15064.5.

Impact Analysis

Known archaeological resource sites are located within the planning area, and it is expected that additional undiscovered sites may exist in the planning area as well. Based on a review of information available at the EIC, only a small portion of the planning area has been previously surveyed for archaeological resources.

While the proposed project does not directly propose any adverse changes to any archaeological resources, future development from the proposed project could affect known or previously unidentified resources. Potential for additional archaeological sites to be present within the planning area exists, but varies by location. Prehistoric habitation sites, such as those known to be present within the County, tend to be situated along creeks and other areas with a reliable water supply, whereas task-specific sites, or resource procurement sites can be situated in almost any environment conducive to human activity. Buried prehistoric archaeological sites tend to be found on Holocene-age landforms, particularly alluvial fans, floodplains, and areas along rivers and streams.

As future development and infrastructure projects within the planning area are considered by the County, each project will be evaluated for conformance with the General Plan, Municipal Code, and other applicable State regulations. Subsequent development and infrastructure projects would also be analyzed for potential environmental impacts, consistent with requirements of CEQA. The General Plan includes policies and programs intended to reduce impacts to and conserve historical

resources. Policies OS-19.2, OS-19.3, and OS-19.4 help ensure protection and preservation of archaeological resources by implementing a process where proposed developments are reviewed for the possibility of cultural resources being present. Specifically, OS 19.3 requires review of proposed development for the possibility of cultural resources and for compliance with the cultural resources program, which would include preparation of Phase I Cultural Resources Assessment and reviewing evaluating structured for CRHR eligibility on a project-by-project basis. Furthermore, future implementing projects are required to implement the following County condition of approval related to discovery of unanticipated cultural resources during ground disturbance activities. Implementation of these policies and condition of approval would ensure that adverse effects on archaeological resources are reduced to a less than significant at the programmatic level, and individual projects would be evaluated on a case-by-case basis to analyze impacts.

Condition of Approval

Unanticipated Resources

The developer/permit holder or any successor in interest shall comply with the following for the life of this permit.

If during ground disturbance activities, unanticipated cultural resources* are discovered, the following procedures shall be followed:

All ground disturbance activities within 100 feet of the discovered cultural resource shall be halted and the Project Archaeologist shall call the County Archaeologist immediately upon discovery of the cultural resource. A meeting shall be convened between the developer, the Project Archaeologist, the Native American tribal representative, and the County Archaeologist to discuss the significance of the find. At the meeting with the aforementioned parties, a decision is to be made, with the concurrence of the County Archaeologist, as to the appropriate treatment (documentation, recovery, avoidance, etc.) for the cultural resource. Resource evaluations shall be limited to nondestructive analysis.

Further ground disturbance shall not resume within the area of the discovery until the appropriate treatment has been accomplished.

* A cultural resource site is defined, for this condition, as being a feature and/or three or more artifacts in close association with each other. Tribal Cultural Resources are also considered cultural resources.

** If not already employed by the project developer, a County approved Archaeologist and a Native American Monitor from the consulting tribe(s) shall be employed by the project developer to assess the significance of the cultural resource, attend the meeting described above, and continue monitoring of all future site grading activities as necessary.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation required.

Impact CUL-9(c): The proposed project may disturb any human remains, including those interred outside of formal cemeteries.

Impact Analysis

Excavation and construction activities allowed under the proposed project may uncover human remains that may not be marked in formal burial locations. Therefore, as future development and infrastructure projects are reviewed by the County, each project will be evaluated for conformance with the General Plan, Municipal Code, and other applicable State regulations. Under CEQA, human remains are protected under the definition of archaeological materials as being “any evidence of human activity.”

Public Resources Code Section 5097 has specific stop-work and notification procedures to follow when Native American human remains are inadvertently discovered during excavation and construction activities. This requirement, listed as a condition of approval below, applies to all construction projects within the planning area. Implementation would ensure that adverse effects on human remains are reduced to a less than significant at the programmatic level, and individual projects would be evaluated on a case-by-case basis to analyze impacts.

Condition of Approval

Human Remains

If human remains are found on this site, the developer/permit holder or any successor in interest shall comply with State Health and Safety Code Section 7050.5.

Pursuant to State Health and Safety Code Section 7050.5, if human remains are encountered, no further disturbance shall occur until the Riverside County Coroner has made the necessary findings as to origin. Further, pursuant to Public Resources Code Section 5097.98 (b), remains shall be left in place and free from disturbance until a final decision as to the treatment and their disposition has been made. If the Riverside County Coroner determines the remains to be Native American, the Native American Heritage Commission shall be contacted by the Coroner within the period specified by law (24 hours). Subsequently, the Native American Heritage Commission shall identify the “Most Likely Descendant.” The Most Likely Descendant shall then make recommendations and engage in consultation with the property owner concerning the treatment of the remains as provided in Public Resources Code Section 5097.98.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation required.

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3.6 - Energy

3.6.1 - Introduction

This section describes the existing energy setting in the planning area as well as the relevant regulatory framework. This section also evaluates the possible impacts related to energy that could result from implementation of the proposed project. Information in this section is based, in part, on project-specific energy calculation outputs included in Appendix C.

3.6.2 - Environmental Setting

Energy Basics

Energy is generally transmitted either in the form of electricity, measured in kilowatts (kW)¹ or megawatts (MW),² or natural gas measured in British Thermal Units (BTU), or cubic feet.³ Fuel, such as gasoline or diesel, is measured in gallons or liters.

Electricity

Electricity is used primarily for lighting, appliances, and other uses associated with the project.

Natural Gas

Natural gas is used primarily for heating, water heating, and cooking purpose and is typically associated with commercial and residential uses.

Fuel

Fuel is used primarily for powering off-road equipment, trucks, and passenger vehicles. The typical fuel types used are diesel and gasoline.

Electricity Generation, Distribution, and Use

State of California

According to the California Energy Commission (CEC), in 2020, the State of California generated approximately 190,913 gigawatt-hours (GWh) of electricity.⁴ Approximately 48.4 percent of this energy generation was sourced from natural gas, 33.4 percent from renewable sources (i.e., solar, wind, and geothermal), 9.4 percent from large hydroelectric sources, and the remaining 8.8 percent was sourced from coal, nuclear, oil, and other non-renewable sources. Additionally, California imported 81,663 GWh of electricity from other states in 2020.

According to the United States Energy Information Administration (EIA),⁵ in 2019, California ranked second in the nation in conventional hydroelectric generation, fourth in electricity production, and

¹ 1 kW = 1,000 watts; A watt is a derived unit of power that measure rate of energy conversion. 1 watt is equivalent to work being done at a rate of 1 joule of energy per second. In electrical terms, 1 watt is the power dissipated by a current of 1 ampere flowing across a resistance of 1 volt.

² 1 MW = 1 million watts

³ A unit for quantity of heat that equals 100,000 British thermal units. A British thermal unit is the quantity of heat required to raise the temperature of 1 pound of liquid water 1 degree Fahrenheit at a constant pressure of 1 atmosphere.

⁴ California Energy Commission (CEC). 2020 Total System Electric Generation. <https://www.energy.ca.gov/data-reports/energy-almanac/california-electricity-data/2020-total-system-electric-generation>. Accessed February 3, 2022.

⁵ United States Energy Information Administration (EIA). California State Profile and Energy Estimates. Website: <https://www.eia.gov/state/?sid=CA>. Accessed February 3, 2022.

first as a producer of electricity from solar, geothermal, and biomass resources. California leads the nation in solar thermal electricity capacity and generation.

Electricity and natural gas are distributed through the various electric load-serving entities (LSEs) in California. These entities include investor-owned utilities (IOUs), publicly owned LSEs, rural electric cooperatives, community choice aggregators, and electric service providers.

County of Riverside

Southern California Edison (SCE) provides electricity to the Riverside County area.

Project Site

SCE would provide electricity to the project site. As noted in the Project Description, the project site consists of residential, commercial, and industrial land uses. As a result, the existing single-family homes, auto/tire repair shops, nursery, landscape supply, trailer supply, home businesses, towing services, truck repair/rental, neighborhood markets, storage facilities, warehouses, and a California Department of Transportation (Caltrans) maintenance facility would all consume electricity.

Natural Gas Generation, Distribution, and Use

State of California

Natural gas is used for everything from generating electricity to cooking and space heating to an alternative transportation fuel. According to the CEC, in 2012 total natural gas demand in California for industrial, residential, commercial, and electric power generation was 2,313 billion cubic feet per year (BCF/year), up from 2,196 BCF/year in 2010.⁶ Demand in all sectors except electric power generation remained relatively flat for the last decade due in large part to energy efficiency measures, but demand for power generation rose about 30 percent between 2011 and 2012. In 2019, it was estimated that California consumed 2,218.7 trillion BTU of natural gas.⁷

Natural gas-fired generation has become the dominant source of electricity in California, as it fuels about 43 percent of electricity consumption followed by hydroelectric power. Because natural gas is a resource that provides load when the availability of hydroelectric power generation and/or other sources decrease, use varies greatly from year to year. The availability of hydroelectric resources, the emergence of renewable resources for electricity generation, and overall consumer demand are the variables that shape natural gas use in electric generation. Because of above average precipitation in 2011, natural gas used for electricity generation was 617 BCF, compared to lower precipitation years in 2010 and 2012 when gas use for electric generation was 736 BCF and 855 BCF, respectively.

County of Riverside

Southern California Gas Company (SoCalGas) provides natural gas service to the Riverside County area. SoCalGas is a subsidiary of Sempra Energy. SoCalGas is the nation's largest natural gas distribution utility and provides energy to 20.9 million consumers through 5.8 million meters in more

⁶ California Energy Commission (CEC). 2021. Supply and Demand of Natural Gas in California. Website: <https://www.energy.ca.gov/data-reports/energy-almanac/californias-natural-gas-market/supply-and-demand-natural-gas-california>. Accessed February 3, 2022.

⁷ United States Energy Information Administration (EIA). 2019. California Energy Consumption Estimates. Website: <https://www.eia.gov/state/print.php?sid=CA>. Accessed February 3, 2022.

than 500 communities. The company's service territory encompasses approximately 20,000 square miles throughout Central and Southern California.

Planning Area

SoCalGas provides natural gas service to the planning area. The planning area consists of single-family homes as well commercial and industrial facilities that would consume natural gas.

Fuel Use

State of California

The main category of fuel use in California is transportation fuel, specifically gasoline and diesel. Gasoline is the most used transportation fuel in California, with 97 percent of all gasoline sold in California being consumed by light duty cars, pickup trucks, and sport utility vehicles. Diesel is the second largest transportation fuel used in California. Nearly all heavy-duty trucks, delivery vehicles, buses, trains, ships, boats and barges, farm, construction and heavy duty military vehicles and equipment have diesel engines. In year 2020, it was estimated that 12.57 billion gallons of gasoline and 2.98 billion gallons of diesel were sold in California.⁸

County of Riverside

The main category of fuel use in the County of Riverside is transportation fuel (gasoline and diesel).⁹

Planning Area

The proposed planning area is currently being used by truck repair/rental shops, towing services and a Caltrans maintenance facility that would consume vehicle fuels.

3.6.3 - Regulatory Framework

Federal Regulations

Energy Independence and Security Act

The Energy Policy Act of 2005 created the Renewable Fuel Standard Program. The Energy Independence and Security Act of 2007 expanded this program by:

- Expanding the Renewable Fuel Standard Program to include diesel in addition to gasoline.
- Increasing the volume of renewable fuel required to be blended into transportation fuel from 9 billion gallons in 2008 to 36 billion gallons by 2022.
- Establishing new categories of renewable fuel, and setting separate volume requirements for each one.
- Requiring the United States Environmental Protection Agency (EPA) to apply lifecycle greenhouse gas (GHG) emission threshold standards to ensure that each category of renewable fuel emits fewer GHGs than the petroleum fuel it replaces.

⁸ California Energy Commission (CEC). 2020. A15 Report Responses vs. California Department of Tax and Fee Administration. Website: <https://www.energy.ca.gov/data-reports/energy-almanac/transportation-energy/california-retail-fuel-outlet-annual-reporting#notes>. Accessed February 3, 2022.

⁹ Riverside County Planning Department. 2019. Riverside County Climate Action Plan. Website: <https://planning.rctlma.org/CAP>. Accessed February 3, 2022.

This expanded Renewable Fuel Standard Program lays the foundation for achieving substantial reductions of GHG emissions from the use of renewable fuels, reducing the use of imported petroleum, and encouraging the development and expansion of the nation’s renewable fuels sector.

Signed on December 19, 2007, the Energy Independence and Security Act of 2007 (EISA) aims to:

- Move the United States toward greater energy independence and security.
- Increase the production of clean renewable fuels.
- Protect consumers.
- Increase the efficiency of products, buildings, and vehicles.
- Promote research on and deploy GHG capture and storage options.
- Improve the energy performance of the federal government.
- Increase U.S. energy security, develop renewable fuel production, and improve vehicle fuel economy.

EISA reinforces the energy reduction goals for federal agencies put forth in Executive Order 13423, as well as introduces more aggressive requirements. The three key provisions enacted are the Corporate Average Fuel Economy Standards, the Renewable Fuel Standard Program, and the appliance/lighting efficiency standards.

The EPA is committed to developing, implementing, and revising both regulations and voluntary programs under the following subtitles in EISA, among others:¹⁰

- Increased Corporate Average Fuel Economy Standards
- Federal Vehicle Fleets
- Renewable Fuel Standard
- Biofuels Infrastructure
- Carbon Capture and Sequestration

EPA and National Highway Traffic Safety Administration Light Duty Vehicle GHG Emission Standards and Corporate Average Fuel Economy Standards Final Rule

Congress first passed the Corporate Average Fuel Economy law in 1975 to increase the fuel economy of cars and light duty trucks. The law has become more stringent over time. On May 19, 2009, President Barack Obama put in motion a new national policy to increase fuel economy for all new cars and trucks sold in the United States. On April 1, 2010, the EPA and the Department of Transportation’s National Highway Traffic Safety Administration (NHTSA) announced a joint final rule establishing a national program that would reduce GHG emissions and improve fuel economy for new cars and trucks sold in the United States.

The first phase of the national program applied to passenger cars, light duty trucks, and medium duty passenger vehicles, covering model years 2012 through 2016. They required these vehicles to meet an estimated combined average emissions level of 250 grams of CO₂ per mile, equivalent to 35.5 miles per gallon if the automobile industry met this CO₂ level solely through fuel economy

¹⁰ United States Environment Protection Agency (EPA). Summary of the Energy Independence and Security Act. Website: <https://www.epa.gov/laws-regulations/summary-energy-independence-and-security-act>. Accessed February 3, 2022.

improvements. Together, these standards would have cut CO₂ emissions by an estimated 960 million metric tons and 1.8 billion barrels of oil over the lifetime of the vehicles sold under the program (model years 2012-2016).

The EPA and the NHTSA issued final rules on a second phase joint rulemaking, establishing national standards for light duty vehicles for model years 2017 through 2025 in August 2012.¹¹ The new standards for model years 2017 through 2025 apply to passenger cars, light duty trucks, and medium duty passenger vehicles. The final standards are projected to result in an average industry fleet wide level of 163 grams/mile of CO₂ in model year 2025, which is equivalent to 54.5 miles per gallon (mpg) if achieved exclusively through fuel economy improvements.

The EPA and NHTSA issued final rules for the first national standards to reduce GHG emissions and improve fuel efficiency of heavy duty trucks and buses on September 15, 2011, which became effective November 14, 2011. For combination tractors, the agencies proposed engine and vehicle standards that began in the 2014 model year and would have achieved up to a 20 percent reduction in CO₂ emissions and fuel consumption by the 2018 model year. For heavy duty pickup trucks and vans, the agencies proposed separate gasoline and diesel truck standards, which were to be phased in starting in the 2014 model year and would achieve up to a 10 percent reduction for gasoline vehicles, and a 15 percent reduction for diesel vehicles by 2018 model year (12 and 17 percent respectively if accounting for air conditioning leakage). Lastly, for vocational vehicles, the engine and vehicle standards would have achieved up to a 10 percent reduction in fuel consumption and CO₂ emissions from the 2014 to 2018 model years.

The State of California has received a waiver from the EPA to have separate, stricter Corporate Average Fuel Economy Standards. Although global climate change did not become an international concern until the 1980s, efforts to reduce energy consumption began in California in response to the oil crisis in the 1970s, resulting in the incidental reduction of GHG emissions. In order to manage the State's energy needs and promote energy efficiency, Assembly Bill (AB) 1575 created the CEC in 1975.

State Regulations

California Assembly Bill 1493: Pavley Regulations and Fuel Efficiency Standards

California AB 1493, enacted on July 22, 2002, required the California Air Resources Board (ARB) to develop and adopt regulations that reduce GHGs emitted by passenger vehicles and light duty trucks. Implementation of the regulation was delayed by lawsuits filed by automakers and by the EPA's denial of an implementation waiver. The EPA subsequently granted the requested waiver in 2009, which was upheld by the U.S. District Court for the District of Columbia in 2011.¹²

The standards were to be phased in during the 2009 through 2016 model years. When fully phased in, the near-term (2009–2012) standards were to result in an approximately 22 percent reduction

¹¹ United States Environmental Protection Agency (EPA). 2012. EPA and NHTSA Set Standards to Reduce Greenhouse Gases and Improve Fuel Economy for Model Years 2017-2025 Cars and Light Trucks. Website: <https://www.nhtsa.gov/document/fact-sheet-epa-and-nhtsa-propose-standards-reduce-greenhouse-gas-emissions-and-improve>. Accessed February 3, 2022.

¹² California Legislative Information. 2002. Clean Car Standards—Pavley, Assembly Bill 1493. Website: https://leginfo.ca.gov/faces/billNavClient.xhtml?bill_id=200120020AB1493. Accessed February 3, 2022.

compared with the 2002 fleet, and the mid-term (2013–2016) standards were to result in about a 30 percent reduction.

The second phase of the implementation for the Pavley Bill was incorporated into amendments to the Low Emission Vehicle (LEV) Program referred to as LEV III or the Advanced Clean Cars program. The Advanced Clean Car program combines the control of smog-causing pollutants and GHG emissions into a single coordinated package of requirements for model years 2017 through 2025. The regulation will reduce GHGs from new cars by 34 percent from 2016 levels by 2025. The new rules will reduce pollutants from gasoline and diesel-powered cars, and deliver increasing numbers of zero-emission technologies, such as full battery electric cars, newly emerging plug-in hybrid electric vehicles and hydrogen fuel cell cars. The regulations will also ensure adequate fueling infrastructure is available for the increasing numbers of hydrogen fuel cell vehicles planned for deployment in California.¹³

California Code of Regulations Title 13: Motor Vehicles

California Code of Regulations, Title 13: Division 3, Chapter 10, Article 1, Section 2485: Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling. This measure seeks to reduce public exposure to diesel particulate matter 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 5 consecutive minutes at any location, or operate a diesel-fueled auxiliary power system for greater than 5 minutes at any location when within 100 feet of a restricted area.

California Code of Regulations, Title 13: Division 3, Chapter 9, Article 4.8, Section 2449: General Requirements for In-Use Off-Road Diesel-Fueled Fleets. This measure regulates oxides of nitrogen (NO_x), diesel particulate matter (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 5 consecutive minutes or less.

California Senate Bill 1078: Renewable Electricity Standards

On September 12, 2002, Governor Gray Davis signed Senate Bill (SB) 1078, requiring California to generate 20 percent of its electricity from renewable energy by 2017. SB 107 changed the due date to 2010 instead of 2017. On November 17, 2008, Governor Arnold Schwarzenegger signed Executive Order S-14-08, which established a Renewable Portfolio Standard target for California requiring that all retail sellers of electricity serve 33 percent of their load with renewable energy by 2020. Governor Schwarzenegger also directed the ARB (Executive Order S-21-09) to adopt a regulation by July 31, 2010, requiring the State’s LSEs to meet a 33 percent renewable energy target by 2020. The ARB Board approved the Renewable Electricity Standard on September 23, 2010, by Resolution 10-23.

¹³ California Air Resources Board (ARB). 2013. Final 2017 Scoping Plan and Appendices. Website: <https://ww2.arb.ca.gov/our-work/programs/ab-32-climate-change-scoping-plan/2017-scoping-plan-documents>. Accessed February 3, 2022.

California

Senate Bill 350: Clean Energy and Pollution Reduction Act

In 2015, the State legislature approved and the Governor signed SB 350, which reaffirms California's commitment to reducing its GHG emissions and addressing climate change. Key provisions include an increase in the Renewable Portfolio Standard (RPS), higher energy efficiency requirements for buildings, initial strategies toward a regional electricity grid, and improved infrastructure for electric vehicle charging stations. Provisions for a 50 percent reduction in the use of petroleum statewide were removed from the Bill due to opposition and concern that it would prevent the Bill's passage. Specifically, SB 350 requires the following to reduce Statewide GHG emissions:¹⁴

- Increase the amount of electricity procured from renewable energy sources from 33 percent to 50 percent by 2030, with interim targets of 40 percent by 2024, and 25 percent by 2027.
- Double the energy efficiency in existing buildings by 2030. This target will be achieved through the California Public Utility Commission, the CEC, and local publicly owned utilities.
- Reorganize the Independent System Operator (ISO) to develop more regional electrify transmission markets and to improve accessibility in these markets, which will facilitate the growth of renewable energy markets in the western United States.

California Senate Bill 100: Renewable Portfolio Standard Program

On September 10, 2018, Governor Newsom signed SB 100, requiring California electricity utility providers to supply all in-state end users with electricity sourced from renewable sources. Specifically, SB 100 accelerates the goals expressed under SB 1078 and requires that the program achieve 50 percent of electricity sourced from renewables by December 31, 2026, 60 percent by December 31, 2030, and 100 percent of electricity sourced from carbon-free sources by December 31, 2045. For clarification, renewable sources, as described herein, includes all renewable sources (e.g., solar, small hydro, wind) but notably omits large-scale hydroelectric and nuclear electricity generation; carbon-free sources include all renewable sources as well as large-scale hydroelectric and nuclear electricity generation.

California Code of Regulations Title 24

Part 6 (Energy Efficiency Standards for Residential and Nonresidential Buildings)

California Code of Regulations, Title 24, Part 6 (California's Energy Efficiency Standards for Residential and Nonresidential Buildings), was first adopted in 1978 in response to a legislative mandate to reduce California's energy consumption. The standards are updated periodically to allow consideration and possible incorporation of new energy efficient technologies and methods. Energy efficient buildings require less electricity; therefore, increased energy efficiency reduces fossil fuel consumption and decreases GHG emissions. The 2019 Building Energy Efficiency Standards went into effect on January 1, 2020.¹⁵

¹⁴ California Legislative Information. 2015. Senate Bill 350 Clean Energy and Pollution Reduction Act of 2015. Website: https://leginfo.ca.gov/faces/billNavClient.xhtml?bill_id=201520160SB350. Accessed February 3, 2022.

¹⁵ California Energy Commission (CEC). 2019. Building Energy Efficiency Standards. <https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards/2019-building-energy-efficiency>. Accessed February 3, 2022.

Part 11 (California Green Building Standards Code)

California Code of Regulations, Title 24, Part 11, is a comprehensive and uniform regulatory code for all residential, commercial, and school buildings that went in effect January 1, 2011. The code is updated on a regular basis, with the most recent update consisting of the 2019 California Green Building Standards Code (CALGreen) that became effective January 1, 2020. Local jurisdictions are permitted to adopt more stringent requirements, as State law provides methods for local enhancements. CALGreen recognizes that many jurisdictions have developed existing construction and demolition ordinances, and defers to them as the ruling guidance provided they provide a minimum 50 percent diversion requirement. CALGreen also provides exemptions for areas not served by construction and demolition recycling infrastructure. The California Building Standards Code (CBC) provides the minimum standard that buildings need to meet in order to be certified for occupancy, which is generally enforced by the local building official.

California Public Utilities Code

The California Public Utilities Commission (CPUC) regulates privately owned telecommunication, electric, natural gas, water, railroad, rail transit, and passenger transportation companies. It is the responsibility of the CPUC to (1) assure California utility customers safe, reliable utility service at reasonable rates; (2) protect utility customers from fraud; and (3) promote a healthy California economy. The Public Utilities Code, adopted by the legislature, defines the jurisdiction of the CPUC.

Local Regulations**County of Riverside General Plan**

The County of Riverside General Plan (General Plan) contains policies related to energy efficiency, energy conservation, and renewable energy in its Air Quality Element, Land Use Element, and Multipurpose Open Space Element.¹⁶

Air Quality Element

The following policies from the County's Air Quality Element are relevant to the proposed project and support energy conservation through promoting recycling efforts, reducing Vehicle Miles Traveled (VMT), improving energy efficiency of homes and businesses, conserving water, and increasing alternative energy sources.

- AQ 5.1** Utilize source reduction, recycling and other appropriate measures to reduce the amount of solid waste disposed of in landfills.
- AQ 5.2** Adopt incentives and/or regulations to enact energy conservation requirements for private and public developments.
- AQ 5.3** Update, when necessary, the County's Policy Manual for Energy Conservation to reflect revisions to the County Energy Conservation Program.

¹⁶ Riverside County Planning Department. 2018. Riverside County General Plan, Air Quality Element. Website: <https://planning.rctlma.org/General-Plan-Zoning/General-Plan>. January 14, 2022.

- AQ 5.4** Encourage the incorporation of energy efficient design elements, including appropriate site orientation and the use of shade and windbreak trees to reduce fuel consumption for heating and cooling.
- AQ 20.1** Reduce VMT by requiring expanded multi-modal facilities and services that provide transportation alternatives, such as transit, bicycle and pedestrian modes. Improve connectivity of the multi-modal facilities by providing linkages between various uses in the developments.
- AQ 20.2** Reduce VMT by facilitating an increase in transit options. In particular, coordinate with adjacent municipalities, transit providers and regional transportation planning agencies to develop mutual policies and funding mechanisms to increase the use of alternative transportation.
- AQ 20.3** Reduce VMT and GHG emissions by improving circulation network efficiency.
- AQ 20.4** Reduce VMT and traffic through programs that increase carpooling and public transit use, decrease trips and commute times, and increase use of alternative-fuel vehicles.
- AQ 20.5** Reduce emissions from standard gasoline vehicles, through VMT, by requiring all new residential units to install circuits and provide capacity for electric vehicle charging stations.
- AQ 20.6** Reduce emissions from commercial vehicles, through VMT, by requiring all new commercial buildings, in excess of 162,000 square feet, to install circuits and provide capacity for electric vehicle charging stations.
- AQ 20.7** Reduce VMT through increased densities in urban centers and encouraging emphasis on mixed use to provide residential, commercial and employment opportunities in closer proximity to each other. Such measures will also support achieving the appropriate jobs-housing balance within the communities.
- AQ 20.8** Reduce VMT by increasing options for non-vehicular access through urban design principles that promote higher residential densities with easily accessible parks and recreation opportunities nearby.
- AQ 20.9** Reduce urban sprawl in order to minimize energy costs associated with infrastructure construction and transmission to distant locations, and to maximize protection of open space.
- AQ 20.10** Reduce energy consumption of the new developments (residential, commercial and industrial) through efficient site design that takes into consideration solar orientation and shading, as well as passive solar design.

Energy

- AQ 20.11** Increase energy efficiency of the new developments through efficient use of utilities (water, electricity, natural gas) and infrastructure design. Also, increase energy efficiency through use of energy efficient mechanical systems and equipment.
- AQ 20.12** Support programs to assist in the energy efficient retrofitting of older affordable housing units to improve their energy efficiency, particularly residential units built prior to 1978 when California Code of Regulations Title 24 energy efficiency requirements went into effect.
- AQ 20.13** Reduce water use and wastewater generation in both new and existing housing, commercial and industrial uses. Encourage increased efficiency of water use for agricultural activities.
- AQ 20.14** Reduce the amount of water used for landscaping irrigation through implementation of County Ordinance 859 and increase use of non-potable water.
- AQ 20.15** Decrease energy costs associated with treatment of urban runoff water through greater use of bioswales and other biological systems.
- AQ 20.18** Encourage the installation of solar panels and other energy efficient improvements and facilitate residential and commercial renewable energy facilities (solar array installations, individual wind energy generators, etc.).
- AQ 20.19** Facilitate development and siting of renewable energy facilities and transmission lines in appropriate locations.
- AQ 20.21** Provide homeowner education programs on the various voluntary ways in which they may reduce their homes' GHG emissions, e.g., improving home insulation, adding solar energy capabilities, and providing information on energy saving landscaping techniques.

Land Use Element

The following policy from the County's Land Use Element is relevant to the proposed project and supports energy conservation through promoting renewable energy resources.

- LU 17.1** Permit and encourage solar energy systems as an accessory use to any residential, commercial, industrial, mining, agricultural or public use.
- LU 17.2** Permit and encourage, in an environmentally and fiscally responsible manner, the development of renewable energy resources and related infrastructure, including but not limited to, the development of solar power plants in the County of Riverside.

Multipurpose Open Space Element

The following policies from the County's Multipurpose Open Space Element are relevant to the proposed project and support energy conservation through promoting renewable energy resources.

- OS 10.1** Provide for orderly and efficient wind energy development in a manner that maximizes beneficial uses of the wind resource and minimizes detrimental effects to the residents and the environment of the County.
- OS 10.2** Continue the County's Wind Implementation Monitoring Program (WIMP) in order to study the evolution of wind energy technology, identify means to solve environmental and community impacts, and provide for an ability to respond with changes in the County's regulatory structure.
- OS 11.1** Enforce the State Solar Shade Control Act, which promotes all feasible means of energy conservation and all feasible uses of alternative energy supply sources.
- OS 11.2** Support and encourage voluntary efforts to provide active and passive solar access opportunities in new developments.
- OS 11.3** Permit and encourage the use of passive solar devices and other state-of-the-art energy resources.
- OS 11.4** Encourage site-planning and building design that maximizes solar energy use/potential in future development applications.
- OS 16.2** Specify energy efficient materials and systems, including shade design technologies, for County buildings.

Riverside County Climate Action Plan

The Riverside County Climate Action Plan (CAP) contains reduction measures designed to conserve energy and reduce GHG emissions. Several of these reduction measures reinforce the State regulations described above, including energy efficiency standards for lighting, electricity, and natural gas energy efficiency, increased combined heat and power, and industrial energy efficiency measures. Other reduction measures in the Riverside County CAP would implement policies from the County's General Plan, listed above, related to building energy efficiency, energy conservation, and renewable energy production. The Riverside County CAP also contains measures that support energy efficiency and renewable energy through education, training, and financing programs. Other measures in the Riverside County CAP support substituting traditional gas-powered landscaping equipment with electric equipment, expanding tree planting, and reducing the heat island effect by promoting cool roofs, cool pavements, and parking lot shading.¹⁷

Elsinore Area Plan

The ELAP includes the communities of Warm Springs and Meadowbrook, which are within the planning area, as well as the City of Lake Elsinore. The ELAP sets forth the following policies related to energy:¹⁸

¹⁷ Riverside County Planning Department. 2019. Riverside County Climate Action Plan. Website: <https://planning.rctlma.org/CAP>. Accessed on February 3, 2022.

¹⁸ County of Riverside. 2021. Elsinore Area Plan. Website: https://planning.rctlma.org/Portals/14/genplan/2021/ELAP_6.29.21.pdf. Accessed October 12, 2021.

- Policy ELAP 5.1** Encourage consolidation of parcels to promote better land use development and project design.
- Policy ELAP 5.2** Where feasible the development of frontage/service roads should be encouraged to increase and facilitate access from Highway 74 to residential, commercial, and industrial sites.
- Policy ELAP 5.3** The Mixed-Use Area (MUA) Land Use Designation may be found consistent with any nonresidential zoning classification that implements the intent of the land use designation or provides for a community serving use(s).
- Policy ELAP 5.4** Development should be coordinated with Riverside Transit Agency (RTA) to ensure bus routes are identified and bus stops are provided to adequately serve community residents.
- Policy ELAP 5.6** Development should promote a reduction of vehicle miles traveled (VMT) and livable and resilient neighborhoods that provide housing, goods and services, open space, and multi-modal transportation options within proximity to each other.
- Policy ELAP 5.9** Developments should be encouraged to design and locate convenient pedestrian and bicycle connections, bus, or shuttle connections, that increase connections to adjacent and nearby communities and cities, businesses, parks and open space areas, and new transit access opportunities.

Additionally, the following policy applies to Neighborhood 2 of the Highway 74 planning area:

- Policy ELAP 5.13** Encourage complete streets, which include sidewalks, greenbelts, and trails to facilitate use by pedestrians and bicyclists where such facilities are well separated from parallel or cross through traffic to ensure pedestrian and cyclist safety.

Mead Valley Area Plan

According to the MVAP, scenic resources include Highway 74 where it connects with I-215 in the southern portion of the MVAP, and the Motte-Rimrock Reserve and Steele Peak. The MVAP sets forth the following policies related to energy:¹⁹

- Policy MVAP 3.1** Encourage consolidation of parcels to promote better land use development and project design.
- Policy MVAP 3.2** Where feasible the development of frontage/service roads should be encouraged to increase and facilitate access from Highway 74 to residential, commercial, and industrial sites.

¹⁹ County of Riverside. 2019. Mead Valley Area Plan. Website: https://planning.rctlma.org/Portals/14/genplan/2019/ap/MVAP_062618.pdf. Accessed October 12, 2021.

- Policy MVAP 3.3** The Mixed-Use Area (MUA) Land Use Designation may be found consistent with any nonresidential zoning classification that implements the intent of the land use designation or provides for a community serving use(s).
- Policy MVAP 3.4** Development should be coordinated with Riverside Transit Agency (RTA) to ensure bus routes are identified and bus stops are provided to adequately serve community residents.
- Policy MVAP 3.6** Development should promote vehicle miles traveled (VMT) and livable and resilient neighborhoods that provide housing, goods and services, open space, and multi-model transportation options within proximity to each other.
- Policy MVAP 3.9** Developments should be encouraged to design and locate convenient pedestrian and bicycle connections, bus or shuttle connections, that increase connections to adjacent and nearby communities and cities, businesses, parks and open space areas, and new transit access opportunities.

Additionally, the following MVAP policy applies to Neighborhood 1 of the Highway 74 planning area:

- Policy MVAP 3.13** Encourage “complete streets” which include street configurations that include sidewalks, greenbelts, and trails to facilitate use by pedestrians and bicyclists where such facilities are well separated from parallel or cross through traffic to ensure pedestrian and cyclist safety.

Highway 74 Community Plan

The Highway 74 Community Plan (proposed project) sets forth the following general policies related to energy:

1. Encourage consolidation of parcels to promote better land use development and project design.
2. Where feasible the development of frontage/service roads should be encouraged to increase and facilitate access from Highway 74 to residential, commercial, and industrial sites.
3. Development should be coordinated with Riverside Transit Agency (RTA) to ensure bus routes are identified and bus stops are provided to adequately serve community residents.
4. Development should promote a reduction of VMT and livable and resilient neighborhoods that provide housing, goods and services, open space, and multi-model transportation options within proximity to each other.
5. Developments should be encouraged to design and locate convenient pedestrian and bicycle connections, bus, or shuttle connections, that increase connections to adjacent and nearby communities and cities, businesses, parks and open space areas, and new transit access opportunities.

In addition to the policies discussed above, each neighborhood also has neighborhood-specific policies.

Neighborhood 1

This neighborhood presents opportunity to serve as an entry point from the City of Perris to the planning area, that provides a sense of uniqueness, and contains commercial and clean industry establishments, that support residential components that facilitate a “live, work, and play” environment.

Neighborhood 1 Policies

- N 1.2** Encourage complete streets, which include sidewalks, greenbelts, and trails to facilitate use by pedestrians and bicyclists where such facilities are well separated from parallel or cross through traffic to ensure pedestrian and cyclist safety.
- N 1.3** The County should work with RTA to address any deficiencies or disconnection of transit routes through the neighborhood.

Neighborhood 2

This neighborhood presents opportunity to serve as an entry point from the City of Elsinore to the planning area, that provides a sense of uniqueness, and contains commercial and clean industry establishments, that support residential components that facilitate a “live, work, and play” environment.

Neighborhood 2 Policies

- N 2.2** Encourage complete streets, which include sidewalks, greenbelts, and trails to facilitate use by pedestrians and bicyclists where such facilities are well separated from parallel or cross through traffic to ensure pedestrian and cyclist safety.

Neighborhood 3

This neighborhood presents the opportunity to provide local employment to residents.

Neighborhood 3 Policy

- N 3.1** Encourage effective and comprehensive coordination efforts with the City of Lake Elsinore regarding planning, including circulation policies, that affect commercial and industrial development/entitlement activity.

3.6.4 - Methodology

For the purposes of this Draft Program Environmental Impact Report (Draft Program EIR), the approach to analysis for energy use is based on the 2019 CEQA Guidelines Appendix F (Energy Conservation). CEQA Guidelines Appendix F is focused on energy conservation through the efficient use of energy resources. Estimates of energy consumption associated with the proposed project are based, in part, on information provided by the California Emissions Estimator Model (CalEEMod) output included in this Draft Program EIR as Appendix C. CalEEMod contains energy intensity rates for the various land uses selected (see Section 3.8, Greenhouse Gas Emissions, for detailed information on how energy estimates are determined).

Furthermore, the proposed project is assessed for whether the project would conflict with or obstruct a State or local plan for renewable energy or energy efficiency. To achieve this, the proposed project is assessed for its consistency with State goals and plans related to energy efficiency and renewable energy.

3.6.5 - Thresholds of Significance

According to Appendix G, Environmental Checklist of the CEQA Guidelines, as well as Riverside County’s environmental checklist, energy impacts resulting from the implementation of the proposed project would be considered significant if the project would:

- a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation.
- b) Conflict with or obstruct a State or local plan for renewable energy or energy efficiency.

3.6.6 - Project Impacts and Mitigation Measures

This section discusses potential impacts associated with the development of the project and provides mitigation measures where appropriate.

Energy Consumption Impacts

Impact ENER-10(a): Would the proposed project result in potentially significant environmental impacts due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

Impact Analysis

A significant impact would occur if the proposed project would result in the inefficient, wasteful, or unnecessary use of energy.

Construction

During construction, the proposed project would result in energy consumption through the combustion of fossil fuels in construction vehicles, worker commute vehicles, and construction equipment, and the use of electricity for temporary buildings, lighting, and other sources. It is not anticipated that natural gas would be consumed as part of project construction. Fossil fuels used for construction vehicles and other energy-consuming equipment would be used during site clearing, grading, paving, and building construction. The types of equipment could include gasoline- and diesel-powered construction and transportation equipment, including trucks, bulldozers, frontend loaders, forklifts, and cranes.

Based on CalEEMod estimations within the modeling output files used to estimate GHG emissions associated with future development projects under the Community Plan, construction-related vehicle trips would result in approximately 901.6 million VMT, and consume an estimated 35,092,800 gallons of gasoline and diesel combined during future development projects construction phases (Appendix C).²⁰ Additionally, on-site construction equipment would consume an estimated

²⁰ Construction-related vehicle fuel was calculated by dividing the VMT for each phase of construction by the corresponding fuel efficiencies. The EMFAC2014 web database was used to calculate fuel efficiencies based on worker, vendor, and hauling fleet mixes,

2,072,623 gallons of diesel fuel (Appendix C).²¹ Limitations on idling of vehicles and equipment and requirements that equipment be properly maintained would result in fuel savings. California Code of Regulations, Title 13, Sections 2449 and 2485, limit idling from both on-road and off-road diesel-powered equipment and are enforced by the ARB. Additionally, given the cost of fuel, contractors and owners have a strong financial incentive to avoid wasteful, inefficient, and unnecessary consumption of energy during construction.

Other equipment could include construction lighting, field services (office trailers), and electrically driven equipment such as pumps and other tools. Single-wide mobile office trailers, which are commonly used in construction staging areas, generally range in size from 160 square feet to 720 square feet. A typical 720-square-foot office trailer would consume approximately 112,377 kilowatt-hour (kWh) during the approximately 17-year construction period (Appendix C).²² Due to the temporary nature of construction and the financial incentives for developers and contractors to use energy-consuming resources in an efficient manner, the construction phase of the proposed project would not result in wasteful, inefficient, and unnecessary consumption of energy. Therefore, the construction-related impacts related to electricity and fuel consumption would be less than significant.

Operation

Electricity and Natural Gas

Operation of the proposed project would consume energy as part of building operations and transportation activities. Building operations for future development projects would involve energy consumption for multiple purposes including, but not limited to, building heating and cooling, refrigeration, lighting, and electronics. Based on CalEEMod energy use estimations, operations for both the residential and commercial land use buildout would consume approximately 13.7 million kWh of electricity and an estimated 168.0 million BTU of natural gas on an annual basis (Appendix C).

Future development projects would be designed and constructed in accordance with the County's latest adopted energy efficiency standards, which are based on the California Title 24 energy efficiency standards. Title 24 standards include a broad set of energy conservation requirements that apply to the structural, mechanical, electrical, and plumbing systems in a building. For example, the Title 24 Lighting Power Density requirements define the maximum wattage of lighting that can be used in a building based on its square footage. Title 24 additionally requires new low-rise residential developments to include rooftop solar systems meeting a minimum system capacity consistent with calculations contained in Title 24, Part 6, Subchapter 8. Title 24 standards, widely regarded as the most advanced energy efficiency standards, would help reduce the amount of energy required for lighting, water heating, and heating and air conditioning in buildings and promote energy conservation.

and VMT was calculated by multiplying trip length by number of trips for each phase of construction. These calculations and assumptions can be found in the Appendix C.

²¹ On-site construction fuel consumption is the sum of diesel fuel usage of each type of equipment during each phase of construction. Diesel fuel usage was calculated for each type of construction equipment by multiplying the number of pieces of equipment by usage hours by horsepower by load factor by number of days and by an estimated fuel usage value of 0.05 gallons of diesel fuel per horsepower-hour. These calculations and assumptions can be found in Appendix C.

²² Electricity use for field services was calculated by multiplying the estimated annual electricity use for a single-wide mobile office trailer by the number of years of construction for the proposed project. These calculations and assumptions can be found in the Energy appendix.

The reduction measures of the Riverside County CAP reinforce these State standards. The General Plan additionally includes energy conservation policies designed to reduce energy demand through improving energy efficiency of homes and businesses, facilitating residential and commercial renewable energy, and promoting recycling and water conservation efforts. For example, the General Plan's Air Quality policies aim to adopt incentives and/or regulations to enact energy conservation requirements and encourage energy efficient design for private and public developments. The Air Quality policies also promote the increased densities, mixed use, electric vehicles, and improved circulation to reduce VMT and energy consumption. The Land Use policies would encourage the development of renewable energy resources and related infrastructure. The proposed project also encourages urban greening, complete streets, improved public transit services and transportation circulation. Future development projects envisioned under the proposed project would be required to comply with stipulations originating from these General Plan and CAP policies; however, when these policies do not stipulate requirements for individual development projects, they focus on actions to be taken by the County and would not be applicable to future development projects. As such, compliance with the applicable General Plan and CAP policies would help avoid building energy consumption that would be considered wasteful, inefficient, or unnecessary. Therefore, the operational impact related to building electricity and natural gas consumption would be less than significant.

Fuel

Operational energy would also be consumed during vehicle trips associated with future development projects envisioned under the proposed project. Fuel consumption would be primarily related to vehicle use by residents, visitors, and employees associated with future development projects. Based on CalEEMod energy use estimations, project-related vehicle trips in its first fully operational year of 2040 would result in approximately 287.9 million VMT and consume an estimated 7,910,258 gallons of gasoline and diesel combined, annually (see Appendix C).

The planning area encompasses a 6.8-mile corridor of Highway 74 between the City of Lake Elsinore and the City of Perris in western Riverside County. The existing transportation facilities and future development projects would provide future residents, visitors, and employees associated with the planning area with access to better circulation and more convenient public transportation, thus further reducing fuel consumption demand. For these reasons, operational-related transportation fuel consumption would not result in a significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources. Therefore, the operational impact related to vehicle fuel consumption would be less than significant.

Level of Significance

Less than significant impact.

Mitigation Measures

No mitigation required.

Energy Efficiency and Renewable Energy Standards Consistency

Impact ENER-10(b): Conflict with or obstruct a State or Local plan for renewable energy or energy efficiency?

Impact Analysis

A significant impact would occur if the proposed project would conflict with or obstruct a State or local plan for renewable energy or energy efficiency.

Construction

As discussed under Impact ENER-10(a), the proposed project would result in energy consumption through the combustion of fossil fuels in construction vehicles, worker commute vehicles, and construction equipment, and the use of electricity for temporary buildings, lighting, and other sources. California Code of Regulations Title 13, Sections 2449 and 2485, limit idling from both on-road and off-road diesel-powered equipment and are enforced by the ARB. The proposed project would comply with these regulations. There are no policies at the local level applicable to energy conservation specific to the construction phase. Thus, it is anticipated that construction of the proposed project would not conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing energy use or increasing the use of renewable energy. Therefore, construction-related energy efficiency and renewable energy standards consistency impacts would be less than significant.

Operation

California's RPS requires that 33 percent of electricity retail sales be served by renewable energy sources by 2020. The proposed project would be served with gas provided by SoCalGas. SoCalGas offers renewable natural gas captured from sources like dairies, wastewater treatment plants and landfills.²³ The proposed project would be served with electricity provided by SCE. In 2020, SCE obtained 30.9 percent of its electricity from renewable energy sources, while the remaining electricity was sourced from nuclear (8.4 percent), natural gas (15.2 percent), and large hydroelectric (3.3 percent). While SCE's 2020 RPS reporting showed that only 30.9 percent of electricity sales sourced from eligible renewable sources, the RPS requirements apply to a 3-year average of utility provider electricity sourcing to allow for fluctuations in market demand and supply availability. Nonetheless, the proposed project's electricity provider is required to meet the State's 2020 objective of 33 percent and is making progress toward the State's 2024 RPS target of 44 percent. The proposed project's electricity demands would also be required to meet the State's future objective of 60 percent electricity from renewable energy sources by 2030.²⁴

The State's Title 24 energy efficiency standards establishes mandatory measures for residential buildings, including material conservation and resource efficiency. The proposed project would be required to comply with these mandatory measures. The proposed project would also comply with the California Building Codes Standards requiring proposed low-rise residential buildings to include rooftop solar systems. In addition, per the CBC, the proposed building would be required to provide

²³ Southern California Gas Company (SoCalGas). Renewable Gas. Website: <https://www.socalgas.com/sustainability/renewable-gas>. Accessed February 3, 2022.

²⁴ Southern California Edison (SCE). 2020 Power Content Label. Website: <https://www.energy.ca.gov/filebrowser/download/3902>. Accessed February 3, 2022.

wiring that would allow installation of electric vehicle (EV) charging equipment in any private garages or carports.

Policies AQ 20.5 and AQ 20.8 of the General Plan support conservation of transportation fuel by requiring all new residential units to install circuits and provide capacity for EV charging stations, and by increasing options for non-vehicular access through urban design principles that promote higher residential densities with easily accessible parks and recreation opportunities nearby. Policies AQ 20.10 and AQ 20.11 of the General Plan are aimed at reducing the energy consumption of new developments through efficient site design that takes into consideration solar orientation and shading, as well as passive solar design, and through efficient use of utilities (water, electricity, natural gas) and infrastructure design, as well as increasing energy efficiency through the use of energy efficient mechanical systems and equipment.²⁵ Future development projects would be required to comply with these County-mandated policies. Other policies that promote energy conservation at the local level are voluntary.

Compliance with the aforementioned mandatory measures would ensure that future development projects would not conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing energy use or increasing the use of renewable energy. Therefore, operational energy efficiency and renewable energy standards consistency impacts would be less than significant.

Level of Significance

Less than significant impact.

Mitigation Measures

No mitigation required.

²⁵ Riverside County Planning Department. 2021. Riverside County General Plan. Website: <https://planning.rctlma.org/General-Plan-Zoning/General-Plan>. Accessed February 3, 2022.

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3.7 - Geology and Soils

3.7.1 - Introduction

This section describes the existing geologic conditions, including geologic and seismic hazards, for the Highway 74 Community Plan area (planning area), summarizes the applicable regulatory framework, identifies potential significant impacts regarding geology, soils, and seismicity for development within the planning area, and provides mitigation measures to reduce impacts to a less than significant level. Setting information for this section is drawn from regional geologic reports and maps from the United States Geological Survey (USGS), the California Geological Survey, the Natural Resources Conservation Service (NRCS), the County of Riverside General Plan (General Plan), the County of Riverside General Plan Environmental Impact Report (General Plan EIR), and other public sources.

3.7.2 - Environmental Setting

The planning area is located between the City of Lake Elsinore and the City of Perris in western Riverside County.

Regional Geologic Setting

The planning area is located in western Riverside County, which is a seismically active region in Southern California. The major faults in the area include the San Andreas Fault and the San Jacinto Fault. The closest Alquist-Priolo Earthquake Fault Zone is the San Jacinto Fault Zone, located 10.5 miles northeast of the planning area, in the City of San Jacinto.

Earthquake risk is very high in the most heavily populated western portion of the County and the Coachella Valley due to the presence of two of California's most active fault zones, the San Andreas and San Jacinto Fault Zones. The San Bernardino Mountain segment of the San Andreas Fault, while not within the boundaries of this area plan, does have enormous influence on the seismic activity of the region. Other smaller faults associated with the San Andreas Fault system also have the potential for generating earthquakes that would result in strong ground shaking and perhaps surface rupture. A further complication associated with fault activity is liquefaction, which can occur with ground shaking, in areas where certain soil conditions and shallow groundwater levels exist.

Seismic and Geologic Hazards

This section describes the hazards associated with the geologic conditions and the potential for seismic events in the planning area.

Fault Rupture

Surface rupture occurs when the ground surface is broken due to fault movement during an earthquake. Active fault zones in the vicinity of the planning area are shown on Exhibit 3.7-1. The location of surface rupture generally can be assumed to be along an active major fault trace.

As shown in Exhibit 3.7-1, there are no active fault zones within the planning area boundaries. The nearest fault zone is the Elsinore Fault, located 1.5 miles southwest of the planning area. This fault is

not part of the Alquist-Priolo Earthquake Fault Zone. The nearest Alquist-Priolo Earthquake Fault Zone is the San Jacinto Fault Zone, located 10.5 miles northeast of the planning area; therefore, fault rupture would not be expected to be a potential hazard in the planning area, which is outside the mapped Alquist-Priolo Earthquake Fault Zone.

Seismic Shaking

Seismic shaking (or ground shaking) is a general term referring to all aspects of motion of the earth’s surface resulting from an earthquake and is normally the major cause of damage during seismic events. The extent of ground shaking is controlled by the magnitude and intensity of the earthquake, distance from the epicenter, and local geologic conditions. Magnitude is a measure of the energy released by an earthquake; it is assessed by seismographs that measure the amplitude of seismic waves. Intensity is a subjective measure of the perceptible effects of seismic energy at a given point and varies with distance from the epicenter and local geologic conditions. The Modified Mercalli Intensity (MMI) Scale is the most commonly used scale for measurement of the subjective effects of earthquake intensity and is further described in Table 3.7-1. Intensity can also be quantitatively measured using accelerometers (strong motion seismographs) that record ground acceleration at a specific location, a measure of force applied to a structure under seismic shaking. Although the Elsinore Fault, located 1.5 miles southwest of the planning area, is the closest fault, any of the regional faults shown in Exhibit 3.7-1 are capable of producing significant ground shaking in the Community Plan area.

Table 3.7-1: Modified Mercalli Scale

Richter Magnitude Correlation (M ^a)	Category	Definition
≤ 3	I	Not felt except by a very few under especially favorable circumstances.
	II	Felt only by a few persons at rest, especially on upper floors of buildings. Delicately suspended objects may swing.
	III	Felt quite noticeably indoors, especially on upper floors of buildings, but many people do not recognize it as an earthquake. Standing motor cars may rock slightly. Vibration like passing of truck. Duration estimated.
4	IV	During the day felt indoors by many, outdoors by few. At night, some awakened. Dishes, windows, doors disturbed; walls make cracking sound. Sensation like heavy truck striking building. Standing motor cars rocked noticeably.
	V	Felt by nearly everyone, many awoken. Some dishes, windows, etc., broken; a few instances of cracked plaster; unstable objects overturned. Disturbances of trees, poles, and other tall objects sometimes noticed. Pendulum clocks may stop.
5	VI	Felt by all, many frightened and run outdoors. Some heavy furniture moved; a few instances of fallen plaster or damaged chimneys. Damage slight.

Richter Magnitude Correlation (M ^a)	Category	Definition
6	VII	Everybody runs outdoors. Damage negligible in building of good design and construction; slight to moderate in well-built ordinary structures; considerable in poorly built or badly designed structures; some chimneys broken. Noticed by persons driving motor cars.
	VIII	Damage slight in specially designed structures; considerable in ordinary substantial buildings, with partial collapse; great in poorly built structures. Panel walls thrown out of frame structures. Fall of chimneys, factory stacks, columns, monuments, walls. Heavy furniture overturned. Sand and mud ejected in small amounts. Changes in well water. Persons driving motor cars disturbed.
7	IX	Damage considerable in specially designed structures; well-designed frame structures thrown out of plumb; great in substantial buildings, with partial collapse. Buildings shifted off foundations. Ground cracked conspicuously. Underground pipes broken.
8 ≤	X	Some well-built wooden structures destroyed; most masonry and frame structures destroyed with foundations; ground badly cracked. Rails bent. Landslides considerable from riverbanks and steep slopes. Shifted sand and mud. Water splashed (slopped) over banks.
	XI	Few, if any, (masonry) structures remain standing. Bridges destroyed. Broad fissures in ground. Underground pipelines completely out of service. Earth slumps and land slips in soft ground. Rails bent greatly.
	XII	Damage total. Practically all works of construction are damaged greatly or destroyed. Waves seen on ground surface. Lines of sight and level are distorted.

Source: California Geological Survey. 2002.

Ground Failure

Liquefaction is the rapid transformation of saturated, loose, fine-grained sediment to a fluid-like state because of earthquake ground shaking. In the process, the soil undergoes transient loss of strength, which commonly causes ground displacement or ground failure to occur.

Since saturated soils are a necessary condition for liquefaction, soil layers in areas where the groundwater table is near the surface have higher liquefaction potential than those in which the water table is located at greater depths. Liquefaction has resulted in substantial loss of life, injury, and damage to property. In addition, liquefaction increases the hazard of fires because of explosions induced when underground gas lines break and because the breakage of water mains substantially reduces fire suppression capability. In general, where there is any potential for liquefaction, site-specific studies are needed to determine the extent of the hazard if development were to occur. Lateral spreading is a form of horizontal displacement of soil toward an open channel or other “free” face, such as an excavation boundary. Ground shaking, especially when inducing liquefaction, may cause lateral spreading toward unsupported slopes. Areas most prone to lateral spreading are those that consist of fill material that has been improperly engineered, that have steep, unstable banks, and that have high groundwater tables. Damage caused by liquefaction and lateral spreading is

generally most severe when liquefaction occurs within 15 to 20 feet of the ground surface. As shown in Exhibit 3.7-1, portions of the planning area are mapped as having very low to moderate susceptibility to liquefaction. The southernmost portion of the planning area is mapped as having very high susceptibility to liquefaction.

Landslides and Slope Failure

The strong ground motions that occur during earthquakes are capable of inducing landslides, generally where unstable slope conditions already exist. In addition, heavy precipitation events can induce mudflows or debris flows in areas where soils on a hillslope or in a stream channel becomes saturated and unstable.

Slope failure can occur as either rapid movement of large masses of soil (“landslide”) or slow, continuous movement (“creep”). The primary factors influencing the stability of a slope are: (1) the nature of the underlying soil or bedrock; (2) the geometry of the slope (height and steepness); (3) rainfall; and (4) the presence of previous landslide deposits. Landslides are commonly triggered by unusually high rainfall and the resulting soil saturation, by earthquakes, or by a combination of these conditions. Exhibits 3.7-2a and 3.7-2b depict the location of steep slopes. Steep slopes greater than a 25 percent angle are located primarily in the hillsides east of Highway 74 near Mapes Road (Exhibit 3.7-2) and west of Highway 74 in undeveloped areas near Ethanac Road and Peach Street, near Walnut Street, and north of El Toro Cut Off Road (Exhibit 3.7-2b).

Soils

Expansive Soils

Expansion and contraction of volume can occur when expansive soils undergo alternating cycles of wetting (swelling) and drying (shrinking). During these cycles, the volume of the soil changes markedly. Because of such volume changes, structural damage to building and infrastructure may occur if the potentially expansive soils were not considered in building design and during construction.

Expansive soils have a significant amount of clay particles which can give up water (shrink) or take on water (swell). The change in volume exerts stress on buildings and other loads placed on these soils. The occurrence of these soils is often associated with geologic units having marginal stability. Expansive soils can be widely dispersed and can be found in hillside areas as well as low-lying alluvial basins.

Expansion testing and mitigation are required by current grading and building codes. Special engineering designs are used effectively to alleviate problems caused by expansive soils. These designs include the use of reinforcing steel in foundations, drainage control devices, over-excavation, and backfilling with non-expansive soil. For new development, future problems with expansive soils can be largely prevented through proper site investigation, soils testing, foundation design, and quality assurance during grading operations as required by the Riverside County Building Code. Active enforcement, peer review, and homeowner involvement are required to maintain these standards. Homeowners are important because moisture control and modified drainage can minimize the effects of expansive soils. Homeowners should be educated about the importance of maintaining a constant level of moisture below their foundation. Excessive swelling and shrinkage cycles can result in distress to improvements and structures.

Although expansive soils are now routinely alleviated through the Riverside County Building Code, problems related to past inadequate codes constantly appear. Expansive soils are not the only cause of structural distress in existing structures. Poor compaction and construction practices, settlement, and landslides can cause similar damage but require different mediation efforts. Once expansion has been verified as the source of the problem, mitigation can be achieved through reinforcement of the existing foundation or, alternatively, through the excavation and removal of expansive soils in an affected area.¹

Subsidence

Subsidence refers to the sudden sinking or gradual downward settling and compaction of soil and other surface material with little or no horizontal motion. It may be caused by a variety of human and natural activities, including earthquakes. The primary hazards associated with subsidence are increased flooding hazards and damage to underground utilities. Other effects of subsidence include changes in the gradients of stormwater and sanitary sewer drainage systems in which the flow is gravity-driven.

Land subsidence and fissuring have been well-documented in Riverside County. Most of the early documented cases of subsidence affected only agricultural land or open space. As urban areas have expanded, so too have the impacts of subsidence on structures for human occupancy. Ground subsidence and associated fissuring in Riverside County have resulted from both falling and rising groundwater tables. In addition, many fissures have occurred along active faults that bound the San Jacinto Valley and the Elsinore Trough.

Subsidence typically occurs throughout a susceptible valley. In addition, differential displacement and fissures occur at or near the valley margin and along faults. In the County of Riverside, the worst damage to structures as a result of regional subsidence may be expected at the valley margins. Alluvial valley regions are especially susceptible.²

Settlement and Differential Settlement

Differential settlement or subsidence could occur if buildings or other improvements were built on low-strength foundation materials (including imported fill) or if improvements straddle the boundary between different types of subsurface materials (e.g., a boundary between native material and fill). Although differential settlement generally occurs slowly enough that its effects are not dangerous to inhabitants, it can cause significant building damage over time.

Soil Collapse

Hydroconsolidation, or soil collapse, typically occurs in recently deposited Holocene (less than 10,000 years old) soils that were deposited in an arid or semi-arid environment. Soils prone to collapse are commonly associated with man-made fill, wind-laid sands and silts, and alluvial fan and mudflow sediments deposited during flash floods. These soils typically contain minute pores and voids. The soil particles may be partially supported by clay or silt or chemically cemented with carbonates. When saturated, collapsible soils undergo a rearrangement of their grains and the water removes the cohesive

¹ County of Riverside. 2019. Riverside County General Plan, Chapter 6, Safety Element, County of Riverside General Plan. Website: https://planning.rctlma.org/Portals/14/genplan/2019/elements/Ch06_Safety_080619.pdf. Accessed August 24, 2021.

² Ibid.

(or cementing) material. Rapid, substantial settlement results. An increase in surface water infiltration, such as from irrigation, or a rise in the groundwater table, combined with the weight of a building or structure, can initiate settlement and cause foundations and walls to crack.

In the County of Riverside, collapsible soils occur predominantly at the base of the mountains, where Holocene-age alluvial fan and wash sediments have been deposited during rapid runoff events. In addition, some windblown sands may be vulnerable to collapse and hydroconsolidation. Typically, differential settlement of structures occurs when lawns or plantings are heavily irrigated in close proximity to the structures foundation. Forensic indications of collapsible soils include:

- Tilting floors;
- Cracking or separation in structures;
- Sagging floors; or
- Non-functional windows and doors.

3.7.3 - Regulatory Framework

Federal Regulations

National Earthquake Hazards Reduction Program

The National Earthquake Hazards Reduction Program (NEHRP) was established by the U.S. Congress when it passed the Earthquake Hazards Reduction Act of 1977, Public Law 95–124. In establishing the NEHRP, Congress recognized that earthquake-related losses could be reduced through improved design and construction methods and practices, land use controls and redevelopment, prediction techniques and early-warning systems, coordinated emergency preparedness plans, and public education and involvement programs. The four basic goals remain unchanged:

- Develop effective practices and policies for earthquake loss reduction and accelerate their implementation.
- Improve techniques for reducing earthquake vulnerabilities of facilities and systems.
- Improve earthquake hazards identification and risk assessment methods, and their use.
- Improve the understanding of earthquakes and their effects.

Several key federal agencies contribute to earthquake mitigation efforts. There are four primary NEHRP agencies:

- National Institute of Standards and Technology of the Department of Commerce
- National Science Foundation
- USGS of the Department of the Interior
- Federal Emergency Management Agency (FEMA) of the Department of Homeland Security

Implementation of NEHRP priorities is accomplished primarily through original research, publications, and recommendations to assist and guide State, regional, and local agencies in the development of plans and policies to promote safety and emergency planning.

State Regulations

Alquist-Priolo Earthquake Fault Zoning Act

The Alquist-Priolo Earthquake Fault Zoning Act (Public Resources Code [PRC] §§ 2621 to 2630) was passed in 1972 to provide a Statewide mechanism for reducing the hazard of surface fault rupture to structures used for human occupancy. The main purpose of the Act is to prevent the siting of buildings used for human occupancy across the traces of active faults. It should be noted that the Act addresses the potential hazard of surface fault rupture and is not directed toward other earthquake hazards, such as seismically induced ground shaking or landslides.

The law requires the State Geologist to identify regulatory zones (known as Earthquake Fault Zones or Alquist-Priolo Earthquake Fault Zones) around the surface traces of active faults and to depict these zones on topographic base maps, typically at a scale of 1 inch to 2,000 feet. Earthquake Fault Zones vary in width, although they are often 0.75-mile wide. Once published, the maps are distributed to the affected cities, counties, and State agencies for their use in planning and controlling new or renewed construction. With the exception of single-family wood-frame and steel-frame dwellings that are not part of a larger development (i.e., four units or more), local agencies are required to regulate development within the mapped zones. In general, construction within 50 feet of an active fault zone is prohibited.

Seismic Hazards Mapping Act

The Seismic Hazards Mapping Act (PRC §§ 2690–2699.6), which was passed in 1990, addresses earthquake hazards other than surface fault rupture. These hazards include strong ground shaking, earthquake-induced landslides, liquefaction, or other ground failures. Much like the Alquist-Priolo Earthquake Fault Zoning Act discussed above, these seismic hazard zones are mapped by the State Geologist to assist local government in the land use planning process. The Act states, “It is necessary to identify and map seismic hazard zones in order for cities and counties to adequately prepare the safety element of their general plans and to encourage land use management policies and regulations to reduce and mitigate those hazards to protect public health and safety.” The Act also states, “Cities and counties shall require, prior to the approval of a project located in a seismic hazard zone, a geotechnical report defining and delineating any seismic hazard.”

California Building Code

The State of California provides minimum standards for building design through the California Building Standards Code (California Code of Regulations, Title 24). Where no other building codes apply, Chapter 29 regulates excavation, foundations, and retaining walls. The California Building Standards Code (CBC) applies to building design and construction in the State and is based on the federal Uniform Building Code (UBC) used widely throughout the country (generally adopted on a state-by-state or district-by-district basis). The CBC has been modified for California conditions with more detailed and/or more stringent regulations.

The State earthquake protection law (California Health and Safety Code § 19100 *et seq.*) requires that structures be designed to resist stresses produced by lateral forces caused by wind and earthquakes. Specific minimum seismic safety and structural design requirements are set forth in Chapter 16 of the CBC. The CBC identifies seismic factors that must be considered in structural

design. Chapter 18 of the CBC regulates the excavation of foundations and retaining walls, and Appendix Chapter A33 regulates grading activities, including drainage and erosion control and construction on unstable soils, such as expansive soils and areas subject to liquefaction.

The CBC is updated every 3 years, and the current 2022 CBC took effect January 1, 2023. The 2022 CBC has been adopted by the County of Riverside.

Local Regulations

County of Riverside General Plan

Code Conformance and Development Regulation

The Riverside County Department of Building and Safety provides technical expertise in reviewing and enforcing the County Building and Fire Codes. These codes establish site-specific investigation requirements, construction standards, and inspection procedures to ensure that development does not pose a threat to the health, safety, and welfare of the public. Every 3 years, the County's Building and Fire Codes are adapted from the Uniform Building and Fire Codes. They contain baseline minimum standards to guard against unsafe development. As discussed in the General Plan's Technical Background Report, project variables may modify the implementation of a particular standard.³

At a minimum, it is imperative to enforce the most recently adopted regulatory codes for new development and significant redevelopment, including the County's Land Use Ordinance and Land Division Ordinance, which support the Building and Fire Codes. The California Environmental Quality Act (CEQA) adds another level of safety review, requiring that environmental constraints be considered prior to approval of significant projects. Additional guidelines and standards are introduced through the Safety Element.⁴

Special development regulations can reinforce and augment existing code standards by raising the level of hazard-conscious project design and mitigation engineering. Examples include additional geologic/geotechnical investigation and additional reinforcement of foundations in areas of potential ground failure. While foundation investigations are required by the Riverside County's Building Code, it is important to emphasize expected levels of investigation and protection. Furthermore, some requirements that may only apply to critical facilities, such as detailed seismic analyses, could be expanded to include other structures and lifelines. Where engineering methods cannot mitigate the hazards, avoidance of the hazard is appropriate, such as where ground rupture along active or potentially active fault traces are identified during project investigation. Special minimum setbacks away from active faults, which are already required for critical facilities, can also be defined for other structures and lifelines.⁵

Below are the relevant policies regarding seismic hazards and hazard reduction from the Safety Element of the General Plan.

³ County of Riverside. 2019. Riverside County General Plan, Chapter 6: Safety Element. Website: https://planning.rctlma.org/Portals/14/genplan/2019/elements/Ch06_Safety_080619.pdf. Accessed August 24, 2021.

⁴ Ibid.

⁵ Ibid.

- Policy S 1.1** Mitigate hazard impacts through adoption and strict enforcement of current building codes, which will be amended as necessary when local deficiencies are identified.
- Policy S 1.3** Continue to enforce penalties against grading without permits, and ensure the restoration of land thus damaged. Continue to educate the public about the benefits of grading with permits and the penalties for grading without them. If the penalties are later determined to not be effective, explore whether the levying of greater penalties would be more effective in deterring illegal grading and ensuring the proper restoration of damaged lands.
- Policy S 1.4** Implement the County of Riverside Multi-Jurisdictional Local Hazard Mitigation Plan (as approved by FEMA, the latest approved version is available online at planning.rctlma.org/LHMP).

Seismic Hazard Reduction

Primary ground damage due to earthquake fault rupture typically results in a relatively small percentage of the total damage in an earthquake, but proximity to a rupturing fault can cause profound damage. It is difficult to reduce this hazard through structural design. The primary mitigative technique is to set back from, and avoid, active faults. The challenge comes in identifying all active faults. Faults throughout Southern California have formed over millions of years. Some of these faults are generally considered inactive under the present geologic conditions; that is, they are unlikely to generate further earthquakes. Other faults are known to be active. Such faults have either generated earthquakes in historical times (within the last 200 years) or show geologic and geomorphic indications of relatively recent movement. Faults that have moved in the relatively recent geological past are generally presumed to be the most likely candidates to generate damaging earthquakes in the lifetimes of residents, buildings, or communities.

The State Alquist-Priolo Earthquake Fault Zoning Act was passed in 1972 to mitigate the hazard of surface faulting. Surface rupture is the most easily avoided seismic hazard. The main purpose of the Alquist-Priolo Earthquake Fault Zoning Act is to prevent the construction of buildings used for human occupancy on the surface trace of active faults. The Alquist-Priolo Earthquake Fault Zoning Act addresses only the hazard of surface fault rupture and is not directed toward other earthquake hazards. Alquist-Priolo Earthquake Fault Zones have been designated by the California Division of Mines and Geology for the Elsinore, San Jacinto, and San Andreas Fault Zones in Riverside County.

Within the rapidly growing County, State Alquist-Priolo mapping has not kept pace with development. The County of Riverside has zoned fault systems and required similar special studies prior to development. These are referred to as County Fault Zones on Figure S-2 and in the Technical Background Report. They generally represent zones that have been identified from groundwater studies. Until solid field evidence is generated to prove or disprove their existence, they should continue to be considered a hazard.⁶

⁶ County of Riverside. 2019. Riverside County General Plan, Chapter 6: Safety Element. Website: https://planning.rctlma.org/Portals/14/genplan/2019/elements/Ch06_Safety_080619.pdf. Accessed August 24, 2021.

Within the Alquist-Priolo Earthquake Fault Zone and County Fault Zones, proposed tracts of four or more dwelling units must investigate the potential for and setback from ground rupture hazards. This is typically accomplished by excavating a trench across the site, determining the location of faulting, and establishing building setbacks.

As there are many active faults in Riverside County, with new fault strands being continually discovered, all proposed structures designed for human occupancy should be required to investigate the potential for and setback from ground rupture. Also of concern are structures not for human occupancy that can cause harm if damaged by an earthquake, such as utility, communications, and transportation lifelines.

The County regulates most development projects within earthquake fault zones. Projects include all land divisions and most structures for human occupancy. Exempted projects include single-family wood-frame and steel-frame dwellings that are one or two stories, are not part of a development of four units or more, and are not located within 50 feet of a fault.

Comprehensive hazard mitigation programs that include the identification and mapping of hazards, prudent planning and enforcement of building codes, and expedient retrofitting and rehabilitation of weak structures can significantly reduce the scope of an earthquake disaster.⁷ Before a project can be permitted within an Alquist-Priolo Earthquake Fault Zone, County Fault Zone, or within 150 feet of any other potentially active or active fault mapped in published USGS or California Division of Mining and Geology reports, a geologic investigation must demonstrate that proposed buildings will not be constructed across active faults. A site-specific evaluation and written report must be prepared by a licensed geologist. If an active fault is found, a structure for human occupancy must be set back 50 feet from the fault, unless adequate evidence, as determined and accepted by the County Engineering Geologist, is presented to support a different setback.⁸

Policy S 2.1 Minimize fault rupture hazards through enforcement of Alquist-Priolo Earthquake Fault Zoning Act provisions and the following policies:

- a. Require geologic studies or analyses for critical structures, and lifeline, high-occupancy, schools, and high-risk structures, within 0.5 miles of all Quaternary to historic faults shown on the Earthquake Fault Studies Zones map.
- b. Require geologic trenching studies within all designated Earthquake Fault Studies Zones, unless adequate evidence, as determined and accepted by the Riverside County Engineering Geologist, is presented. The County of Riverside may require geologic trenching of non-zoned faults for especially critical or vulnerable structures or lifelines.
- c. Require that lifelines be designed to resist, without failure, their crossing of a fault, should fault rupture occur.
- d. Support efforts by the California Department of Conservation, California Geological Survey to develop geologic and engineering solutions in areas of ground deformation due to faulting and seismic activity, in those areas where a through-going fault cannot be reliably located.

⁷ County of Riverside. 2019. Riverside County General Plan, Chapter 6: Safety Element. Website: https://planning.rctlma.org/Portals/14/genplan/2019/elements/Ch06_Safety_080619.pdf. Accessed August 24, 2021.

⁸ Ibid.

- e. Encourage and support efforts by the geologic research community to define better the locations and risks of Riverside County faults. Such efforts could include data sharing and database development with regional entities, other local governments, private organizations, utility agencies or companies, and local universities.

Hillside Development and Slope

Natural slopes are one of Riverside County's primary aesthetic resources. Foothill and mountain areas, which are visible throughout the County, create a dramatic backdrop for local communities and help define the character of the County.

Hillside areas also provide an important location for habitat as well as for certain lifestyle choices. In addition, there are public safety issues, such as slope failures, landslides, and mudslides, which occur naturally or as a result of development, grading, and landscaping.

The severity of these slopes, the ability to provide infrastructure and services (such as transportation, water, sewer, etc.), and safety considerations can drastically alter the use and development potential of individual properties. Development on hillsides within the County, where land use designations permit, will require careful siting, grading, and design in order to minimize exposure to hazards and to maintain and enhance the scenic quality of the County.⁹

Below is a policy regarding hillside development and slopes from the Land Use Element of the General Plan:

Policy LU 12.1 Apply the following policies to areas where development is allowed and that contain natural slopes, canyons, or other significant elevation changes, regardless of land use designation:

- a. Require that hillside development minimize alteration of the natural landforms and natural vegetation.
- b. Allow development clustering to retain slopes in natural open space whenever possible.
- c. Require that areas with slope be developed in a manner to minimize the hazards from erosion and slope failures.
- d. Restrict development on visually significant ridgelines, canyon edges and hilltops through sensitive siting and appropriate landscaping to ensure development is visually unobtrusive.
- e. Require hillside adaptive construction techniques, such as post and beam construction, and special foundations for development when the need is identified in a soils and geology report, which has been accepted by the County of Riverside.

⁹ County of Riverside. 2019. Riverside County General Plan, Chapter 6; Safety Element. Website: https://planning.rctlma.org/Portals/14/genplan/2019/elements/Ch06_Safety_080619.pdf. Accessed August 24, 2021.

- f. In areas at risk of flooding, limit grading, cut, and fill to the amount necessary to provide stable areas for structural foundations, street rights-of-way, parking facilities, and other intended uses.

County of Riverside Code of Ordinances

Chapter 15.60—Earthquake Fault Area Construction Regulations, in the County of Riverside Code of Ordinances states, “All applications for a permit, for a project that lies within an earthquake fault zone shown on the maps prepared by the State Geologist pursuant to the Alquist-Priolo Earthquake Fault Zoning Act, shall be accompanied by a geologic report or request for waiver thereof.”

Ordinance No. 457—Riverside County Building and Fire Codes: Every 3 years, Riverside County’s Building and Fire Codes are adapted from the CBC (California Code of Regulations [CCR] Title 24), which includes both Building and Fire Codes. These codes establish site-specific investigation requirements, construction standards, and inspection procedures to ensure that development authorized by the County of Riverside does not pose a threat to the health, safety, or welfare of the public. The CBC contains minimum baseline standards to guard against unsafe development. This ordinance also adopts, in some cases with modification to a stricter standard, a number of California State’s Title 24 codes (fire, building, plumbing, electrical, etc.). The Riverside County Department of Building and Safety provides technical expertise in reviewing and enforcing these codes.

Ordinance No. 547—Implementation of the Alquist-Priolo Earthquake Fault Zoning Act: This ordinance establishes the policies and procedures used by the County of Riverside to implement the A-P Act. Among other things, it requires all projects proposed within an “earthquake fault zone,” as shown on the maps prepared by the State Geologist, to comply with the provisions of the A-P Act. It establishes regulations for construction, including for grading, slopes and compaction, erosion control, retaining wall design, and earthquake fault zone setbacks.

Ordinance No. 484—Control of Blowing Dust: This ordinance establishes requirements for the control of blowing sand within County-designated “Agricultural Dust Control Areas.” It defines activities that may contribute to wind erosion, identifies restrictions on activities within these areas, establishes penalties for violation of the ordinance and identifies procedures necessary to obtain a valid permit.

Elsinore Area Plan

The following policies in the Elsinore Area Plan (ELAP) are relevant to geology and soils:

- ELAP 5.11** Encourage the connection of municipal water and wastewater services to community residents and facilities to reduce reliance on septic systems in order to limit groundwater contamination.
- ELAP 20.1** Protect life and property from seismic-related incidents through adherence to the Seismic Hazards section of the General Plan Safety Element.
- ELAP 21.3** Protect life and property and maintain the character of the Elsinore area through adherence to the Slope and Soil Instability section of the General Plan Safety Element, the Hillside Development and Slope section of the General Plan Land Use Element, and the Rural Mountainous land use designation.

Mead Valley Area Plan

The Mead Valley Area Plan (MVAP) contains the following policies relevant to geology and soils:

- MVAP 3.11** Encourage the connection of municipal water and wastewater services to community residents and facilities to reduce reliance on septic systems in order to limit groundwater contamination.
- MVAP 20.1** Protect life and property from seismic-related incidents through adherence to the Seismic Hazards section of the General Plan Safety Element.
- MVAP 21.2** Protect life and property through adherence to the Hillside Development and Slope policies of the General Plan Land Use Element, and the Slope and Instability section of the General Plan Safety Element and policies within the Rural Mountainous and Open Space Land Use Designations of the Land Use Element.

Highway 74 Community Plan

The Highway 74 Community Plan sets forth the following goal and policy related to geology and soils:

- 11.** Encourage the connection of municipal water and wastewater services to community residents and facilities to reduce reliance on septic systems in order to limit groundwater contamination.

3.7.4 - Methodology

Evaluation of potential geologic and soil-related impacts were based on the General Plan. The proposed project's geotechnical investigation included review of pertinent background data, including geotechnical reports, topographic maps, geologic data, fault maps, and aerial photographs.

3.7.5 - Thresholds of Significance

Section VII of Appendix G to the CEQA Guidelines addresses typical adverse effects due to geological conditions and includes the following threshold questions to evaluate a project's impacts resulting from geologic or soil conditions. Would the project:

- a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury or death involving:
 - i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.
 - ii. Strong seismic ground shaking?
 - iii. Seismic-related ground failure, including liquefaction?
 - iv. Landslides?
- b) Result in substantial soil erosion or the loss of topsoil?

- c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?
- d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?
- e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?
- f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Significance thresholds are set forth in Riverside County's Environmental Assessment Checklist, as modified based on the 2018 updates to Section VII of Appendix G to the CEQA Guidelines (listed above), and indicate significant impacts would occur if the project or any project-related component would:

11. Alquist-Priolo Earthquake Fault Zone or County Fault Hazard Zones

- a) Be subject to 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?

12. Liquefaction Potential Zone

- a) Be subject to seismic-related ground failure, including liquefaction?

13. Ground Shaking Zone

- a) Be subject to strong seismic ground shaking?

14. Landslide Risk

- a) 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, collapse, or rockfall hazards?

15. Ground Subsidence

- a) 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 ground subsidence?

16. Other Geologic Hazards

- a) Be subject to geologic hazards, such as seiche, mudflow, or volcanic hazard?

17. Slopes

- a) Change topography or ground surface relief features?
- b) Create cut or fill slopes greater than 2:1 or higher than 10 feet?
- c) Result in grading that affects or negates subsurface sewage disposal systems?

18. Soils

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

- b) Be located on expansive soil, as defined in Section 1803.5.3 of the California Building Standard Code (2022), creating substantial direct or indirect risks to life or property?
- c) Have soils incapable of adequately supporting use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?

19. Wind Erosion and Blowsand from project either on or off-site.

- a) Be impacted by or result in an increase in wind erosion and blowsand, either on- or off-site?

3.7.6 - Project Impacts and Mitigation Measures

This section discusses potential impacts associated with the proposed project and provides mitigation measures where necessary.

Alquist-Priolo Earthquake Fault Zone or County Fault Hazard Zones

Impact GEO-11(a): The proposed project would not be subject to 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.

Impact Analysis

As shown in Exhibit 3.7-1, there are no active fault zones within the planning area boundaries. The nearest fault zone is the Elsinore Fault, located 1.5 miles southwest of the project boundary. This fault is not part of the Alquist-Priolo Earthquake Fault Zone. The nearest Alquist-Priolo Earthquake Fault Zone is the San Jacinto Fault Zone, located 10.5 miles northeast of the project boundary. Because the planning area is located 10.5 miles outside of the nearest Alquist-Priolo Earthquake Fault Zone, the proposed project would not be subject to earthquake rupture as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map. In addition to the Alquist-Priolo Earthquake Fault Zones, the General Plan has mapped Riverside County Fault Zones. The nearest Riverside County fault zone is located in the City of Lake Elsinore, along the northeast shore of Lake Elsinore, which is located 1.75 miles southwest of the project boundary.¹⁰ Therefore, future development within the planning area would not be subject to earthquake rupture from a known fault.

The planning area is located in Southern California, which is a seismically active region. Future development within the planning area would be required to comply with Policy S 1.1 of the General Plan, which requires the adoption and enforcement of current building codes, and with Policy S 2.1, which requires development to minimize fault rupture hazards. The proposed project would not include grading or the development or redevelopment of any structures. However, future development that occurs within the planning area would be required to construct buildings in accordance with the current CBC and to minimize fault rupture hazards, in accordance with the General Plan and the Community Plan. Therefore, impacts would be less than significant.

¹⁰ County of Riverside. 2019. Riverside County General Plan, Chapter 6: Safety Element, Figure S-2, Earthquake Fault Study Zones. Website: https://planning.rctlma.org/Portals/14/genplan/2019/elements/Ch06_Safety_080619.pdf. Accessed August 24, 2021.

Level of Significance

Less than significant impact.

Mitigation Measures

No mitigation required.

Liquefaction Potential Zone

Impact GEO-12(a): The proposed project may be subject to seismic-related ground failure, including liquefaction.

Impact Analysis

The planning area is not located within a liquefaction zone as mapped by the California Geological Survey and Riverside County.¹¹ However, as shown in Exhibit 3.7-1, portions of the planning area are mapped as having a very low to moderate susceptibility to liquefaction. Areas of moderate liquefaction susceptibility are located between Ellis Avenue and Margarth Street, as well as the area surrounding Conrad Avenue. Areas of very low to moderate liquefaction susceptibility are scattered throughout the planning area. Additionally, as shown in Exhibit 3.7-1, an area mapped as having very high liquefaction susceptibility is located adjacent to Highway 74 within the planning area south of Conrad Avenue near the City of Lake Elsinore.¹² The proposed project would not include the development or redevelopment of any properties. However, future development that occurs within the Community Plan area may be subject to liquefaction and other adverse effects related to seismic ground failure. Existing programs and policies would serve to reduce risk associated with seismic hazards and liquefaction. However, to address all significant impacts related to seismic hazards and liquefaction within the plan area, site-specific geotechnical reports should be prepared for all development under the Highway 74 Community Plan, pursuant to Mitigation Measure (MM) GEO-12a. Implementation of MM GEO-12a would reduce this impact to a level of less than significant.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

MM GEO-12a Prior to issuance of the first building permit for each development within the Community Plan area, the project applicant shall submit a design-level geotechnical report to the County of Riverside Building and Safety Department for review and approval. The design-level investigation shall be prepared in accordance with California Building Standards Code (CBC) and County of Riverside Code of Ordinances Standards and address the potential for seismic, soils, or other geological hazards to occur on-site and identify abatement measures to reduce the potential for such an event to acceptable levels. The recommendations of the approved design-level geotechnical report shall be incorporated into the project plans.

¹¹ County of Riverside. 2019. Riverside County General Plan, Chapter 6: Safety Element, Figure S-3, Generalized Liquefaction. Website: https://planning.rctlma.org/Portals/14/genplan/2019/elements/Ch06_Safety_080619.pdf. Accessed August 24, 2021.

¹² Ibid.

Level of Significance After Mitigation

Less than significant impact.

Ground Shaking Zone

Impact GEO-13(a): The proposed project would be subject to strong seismic ground shaking.

Impact Analysis

Major regional faults located within the planning area are capable of producing violent ground shaking, and a major seismic event is likely during the operational lifetime of development and redevelopment projects undertaken under the Community Plan. Strong to violent seismic shaking could cause serious structural damage to buildings not engineered and constructed to comply with the current CBC and could cause extensive nonstructural damage to buildings in the plan area.

Existing federal and State programs, including the NEHRP, the Alquist-Priolo Earthquake Fault Zoning Act, the Seismic Hazards Mapping Act, and the CBC are designed to provide current information detailing seismic hazards, impose regulatory requirements regarding geotechnical and soils investigations, provide limitations on the locations of structures for human habitation, impose requirements for hazard notices to potential users, and establish structural standards for requirements for buildings and grading projects.

Existing programs and policies would serve to reduce risk associated with seismic hazards. However, to address all significant impacts related to seismic hazards within the planning area, site-specific geotechnical reports should be prepared for all development under the Highway 74 Community Plan. Implementation of MM GEO-12a would reduce this impact to a level of less than significant.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

Implement **MM GEO-12a**.

Level of Significance After Mitigation

Less than significant impact.

Landslide Risk

Impact GEO-14(a): The proposed project could 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, collapse, or rockfall hazards.

Impact Analysis

The planning area currently includes urban development as well as large undeveloped properties. Portions of the planning area have been developed over a relatively long history, some of the existing development predating current geotechnical engineering requirements. In addition, the large, previously undeveloped parcels in the planning area are underlain by non-engineered soils, and these parcels may potentially contain unstable geologic units or soils. New development within

the Community Plan area may be subject to differential settlements and other adverse effects related to unstable soils.

Landslide, Collapse, and Rockfall Hazards

According to the General Plan, the planning area does not contain areas with existing landslides. Exhibits 3.7-2a and 3.7-2b depict location of steep slope that could be susceptible to landslides. As shown, most of the planning area is not prone to slope instability. There are a few isolated areas along the Highway 74 corridor that are mapped as having high susceptibility to seismically induced landslides and rockfalls. There are additional areas within the Highway 74 corridor that are mapped as having low to locally moderate susceptibility to seismically induced landslides and rockfalls. Areas with high susceptibility to seismically induced landslides and rockfalls are located primarily near Meadowbrook, in the undeveloped hillside areas north of Mountain Avenue and extending to Gardenias Street in Moreno Valley, as well as a small area south of the Meadowbrook RV Park.¹³

The proposed project would comply with Policy LU 12.1, which contains certain requirements for development in areas with natural slopes, canyons, or significant elevation changes. The proposed project would not include the development or redevelopment of any structures. However, future development that occurs within the Community Plan area would be required to comply with the requirements and restrictions for development within areas with natural slopes, canyons, or significant elevation changes, in accordance with the General Plan and the Community Plan policies.

Existing programs and policies would serve to reduce risk associated with unstable geologic units. However, to address all significant impacts related to geological hazards within the plan area, site-specific geotechnical reports should be prepared for all development under the Highway 74 Community Plan. Furthermore, implementation of MM GEO-12a would reduce the risks of on- or off-site landslide, lateral spreading, collapse, or rockfall hazards to a level of less than significant. Therefore, the proposed project, with implementation of MM GEO-12a, would not result in significant hazards related to landslides, lateral spreading, collapse, or rockfall. Impacts would be less than significant with mitigation incorporated.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

Implement **MM GEO-12a**.

Level of Significance After Mitigation

Less than significant impact.

¹³ County of Riverside. 2019. Riverside County General Plan, Chapter 6: Safety Element, Figure S-4, Earthquake-Induced Slope Instability Map. Website: https://planning.rctlma.org/Portals/14/genplan/2019/elements/Ch06_Safety_080619.pdf. Accessed August 24, 2021.

Ground Subsidence

Impact GEO-15(a): The proposed project may 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 ground subsidence.

Impact Analysis

The planning area contains areas that are susceptible to subsidence. Areas of moderate liquefaction susceptibility are located primarily along the northern segments of the planning area, near the City of Perris, as well as the southern portion of the planning area, as shown in Exhibit 3.7-1. Additionally, there are areas of low and very low liquefaction susceptibility located throughout the planning area. However, there are no areas with documented subsistence within or near the planning area. The nearest area with documented subsidence is southwest of the City of Moreno Valley, more than 10 miles northeast of the planning area.¹⁴

The planning area currently includes urban development as well as large undeveloped properties. Previously undeveloped parcels in the planning area are underlain by non-engineered soils, and these parcels may potentially contain unstable geologic units or soils. The proposed project would not include the development or redevelopment of any properties. However, future development that occurs within the planning area may be subject to differential settlements and other adverse effects related to unstable soils. Implementation of MM GEO-12a would reduce this impact to a level of less than significant.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

Implement MM GEO-12a.

Level of Significance After Mitigation

Less than significant impact.

Other Geologic Hazards

Impact GEO-16(a): The proposed project would not be subject to geologic hazards, such as seiche, mudflow, or volcanic hazard.

Impact Analysis

A seiche is a wave that reverberates on the surface of water in an enclosed or semi-enclosed basin, such as a reservoir, lake, bay, or harbor, in response to ground shaking during an earthquake. The nearest large body of surface water is Lake Elsinore, which is approximately 1.75 miles southwest of the southwestern portion of the project boundary. Because of the project site's distance from Lake Elsinore, the proposed project would not be subject to impacts associated with a seiche. Likewise, the proposed project's distance from the Pacific Ocean (48 miles) would preclude any impacts

¹⁴ County of Riverside. 2019. Riverside County General Plan, Chapter 6: Safety Element, Figure S-7, Documented Subsistence Areas. Website: https://planning.rctlma.org/Portals/14/genplan/2019/elements/Ch06_Safety_080619.pdf. Accessed August 24, 2021.

associated with tsunamis. Furthermore, there are no volcanic hazards in western Riverside County. Future development within the Community Plan area would not be subject to seiches or tsunamis or volcanic hazards.

The planning area contains hilly terrain and undeveloped hillsides, as shown in Exhibit 3.7-2a and Exhibit 3.7-2b. According to the General Plan, the planning area contains areas that may be susceptible to slope instability, as shown in Exhibit 3.7-3 and Exhibit 3.7-4. Areas with high susceptibility to seismically induced landslides and rockfalls are located in the ELAP area, primarily north of Meadowbrook, in the undeveloped hillside areas north of Mountain Avenue and extending to Gardenias Street in Moreno Valley, as well as a small area south of the Meadowbrook RV Park (Exhibit 3.7-4). There are no areas within the MVAP that are highly susceptible to seismically induced landslides and rockfalls (Exhibit 3.7-3). Future development within the planning area would conform with General Plan Policy LU 12.1, which would restrict development on hillside areas and reduce potential impacts.

The proposed project does not include the development or redevelopment of any structures. However, future development that occurs within the planning area would be required to comply with the requirements and restrictions for development within areas with natural slopes, canyons, or significant elevation changes, in accordance with the General Plan Policy LU 12.1. Therefore, the proposed project would not result in mudflow hazards. Impacts would be less than significant.

Level of Significance

Less than significant impact.

Mitigation Measures

No mitigation required.

Slopes

Impact GEO-17(a): The proposed project may change topography or ground surface relief features.

Impact Analysis

The Highway 74 Community Plan does not include the development or redevelopment of any properties and would not change topography or ground surface relief features. However, future development that occurs within the planning area may propose changing topography or ground surface relief features. Pursuant to MM GEO-12a and the County of Riverside standards, future development that occurs within the planning area will be designed in conformance with recommendations made in the design-level geotechnical report. The design-level geotechnical report would include design and construction measures to ensure that topography or ground surface relief features do not create a hazard. Additionally, compliance with the Grading Development Standards of the County of Riverside would be assured through County review of a grading plans. The project would be required to conform to County design standards for grading and site design, which would result in a safe design of stable slopes and topography for future development that occurs within the Community Plan area. Furthermore, implementation of MM GEO-12a would reduce this impact to a level of less than significant.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

Implement MM GEO-12a.

Level of Significance After Mitigation

Less than significant impact.

Impact GEO-17(b): The proposed project may create cut or fill slopes greater than 2:1 or higher than 10 feet.

Impact Analysis

The Highway 74 Community Plan would not include the development or redevelopment of any properties and would not create cut or fill slopes. However, future development that occurs within the planning area may propose creating cut or fill slopes. Pursuant to MM GEO-12a and the County of Riverside standards, future development that occurs within the planning area would be designed in conformance with recommendations made in the design-level geotechnical report. The design-level geotechnical report would include design and construction measures to stabilize on-site soils. Additionally, compliance with the Grading Development Standards of the County of Riverside would be assured through County review of a grading plans. The project would be required to conform to County design standards for grading and site design, which would result in a safe design of stable slopes for future development that occurs within the Community Plan area. Furthermore, implementation of MM GEO-12a would reduce this impact to a level of less than significant.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

Implement MM GEO-12a.

Level of Significance After Mitigation

Less than significant impact.

Impact GEO-17(c): The proposed project may result in grading that affects or negates subsurface sewage disposal systems.

Impact Analysis

Impacts associated with subsurface sewage disposal systems may occur if the grading were not considered in the design and construction of development in the planning area. Implementation of MM GEO-1 would reduce this potential impact related to subsurface sewage disposal systems to a less than significant level by requiring geotechnical investigations to identify potential hazards for new development and by requiring that the recommendations from a licensed professional be implemented to reduce the identified hazard. For new development, future problems with grading that affects subsurface sewage disposal systems would be prevented through proper site

investigation, soils testing, foundation design, and quality assurance during grading operations as required by the Riverside County Building Code, the County of Riverside General Plan, and MM GEO-12a. Implementation of MM GEO-12a would reduce this impact to a level of less than significant.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

Implement MM GEO-12a.

Level of Significance After Mitigation

Less than significant impact.

Soils

Impact GEO-18(a): The proposed project would not result in substantial soil erosion or the loss of topsoil.

Impact Analysis

Future development or redevelopment that occurs within the planning area would include construction activities that would expose soils and could potentially result in substantial erosion. Soil erosion could result in effects to stormwater quality and affect the quality of receiving waters. Following development, soils would be covered with buildings, paved areas, and landscaping, so no exposure of soils or erosion would be anticipated.

As discussed in Section 3.10, Hydrology and Water Quality, the California State Water Resources Control Board (State Water Board) adopted a National Pollutant Discharge Elimination System (NPDES) General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities, Order No. 2009-0009-DWQ, NPDES No. CAS000002, as amended in 2011 (Construction General Permit). To obtain coverage under the Construction General Permit, a project applicant must submit various documents, including a Notice of Intent and a Storm Water Pollution Prevention Plan (SWPPP). Activities subject to the Construction General Permit include clearing, grading, and disturbances to the ground, such as grading or excavation.

The purpose of the SWPPP is to identify the sources of sediment and other pollutants that could affect the quality of stormwater discharges and to describe and ensure the implementation of Best Management Practices (BMPs) to reduce or eliminate sediment and other pollutants in stormwater as well as non-stormwater discharges resulting from construction activity. With implementation of the SWPPP and BMPs, impacts would be less than significant.

Level of Significance

Less than significant impact.

Mitigation Measures

No mitigation required.

Impact GEO-18(b): The proposed project may be located on expansive soil, as defined in Section 1803.5.3 of the California Building Standards Code (2022), creating substantial direct or indirect risks to life or property.

Impact Analysis

The planning area includes areas with potentially expansive soils.¹⁵ According to the General Plan, expansive soils can be found in hillside areas as well as low-lying alluvial basins. Structural damage of buildings or rupture of utilities may occur if the potentially expansive and corrosive soils were not considered in the design and construction of future development that occurs in the planning area. Expansion testing and mitigation are required by current grading and building codes. Special engineering designs are used effectively to alleviate problems caused by expansive soils. These designs include the use of reinforcing steel in foundations, drainage control devices, over-excavation, and backfilling with non-expansive soil. For new development, future problems with expansive soils can be largely prevented through proper site investigation, soils testing, foundation design, and quality assurance during grading operations as required by the Riverside County Building Code and the latest California Building Code. Active enforcement, peer review, and homeowner involvement are required to maintain these standards. Homeowners are important because moisture control and modified drainage can minimize the effects of expansive soils. Homeowners should be educated about the importance of maintaining a constant level of moisture below their foundation. Excessive swelling and shrinkage cycles can result in distress to improvements and structures.

Although expansive soils are now routinely alleviated through the Riverside County Building Code, problems related to past inadequate codes may appear. Mitigation for expansive soils can be achieved through reinforcement of the existing foundation or, alternatively, through the excavation and removal of expansive soils in an affected area.¹⁶

Implementation of MM GEO-12a would reduce the potential impacts related to expansive soils to a less than significant level by requiring geotechnical investigations to identify geological hazards, including those related to expansive soils, for new development and by requiring that the recommendations from a licensed professional be implemented to reduce the identified geological hazard. For new development and redevelopment that occurs in the planning area, future problems with expansive soils would be prevented through proper site investigation, soils testing, foundation design, and quality assurance during grading operations as required by the Riverside County Building Code, the County of Riverside General Plan, and MM GEO-12a. Implementation of MM GEO-12a would reduce this impact to a level of less than significant.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

Implement **MM GEO-12a**.

¹⁵ County of Riverside. 2019. Riverside County General Plan, Chapter 6: Safety Element, Figure S-7, Documented Subsistence Areas. Website: https://planning.rctlma.org/Portals/14/genplan/2019/elements/Ch06_Safety_080619.pdf. Accessed August 24, 2021.

¹⁶ County of Riverside. 2019. Riverside County General Plan, Chapter 6: Safety Element. Website: https://planning.rctlma.org/Portals/14/genplan/2019/elements/Ch06_Safety_080619.pdf. Accessed August 25, 2021.

Level of Significance After Mitigation

Less than significant impact.

Impact GEO-18(c): The proposed project may have soils incapable of adequately supporting use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater.

Impact Analysis

Impacts associated with septic tanks or alternative wastewater may occur if the ability of the soils to support alternative wastewater disposal systems were not considered in the design and construction of development in the planning area. Implementation of MM GEO-12a would reduce this potential impact related to alternative wastewater systems to a less than significant level by requiring geotechnical investigations to identify potential hazards for new development and by requiring that the recommendations from a licensed professional be implemented to reduce the identified hazard. For new development, future problems with alternative wastewater systems and soils would be prevented through proper site investigation, soils testing, foundation design, and quality assurance during grading operations as required by the Riverside County Building Code, the County of Riverside General Plan, and MM GEO-12a. Additionally, new development would comply with Policy ELAP 5.11, Policy MVAP 3.11, and Policy 11 of the Highway 74 Community Plan, which encourages the connection of municipal water and wastewater services to community residents and facilities to reduce reliance on septic systems in order to limit groundwater contamination. Compliance with the applicable Riverside County Building Code, the General Plan, MVAP, ELAP, and the Highway 74 Community Plan, as well as implementation of MM GEO-12a, would reduce impacts to a level of less than significant.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

Implement MM GEO-12a.

Level of Significance After Mitigation

Less than significant impact.

Wind Erosion and Blowsand From Proposed Project Either On- or Off-site

Impact GEO-19(a): The proposed project would be impacted by or result in an increase in wind erosion and blowsand, either on- or off-site.

Impact Analysis

Wind and windblown sand are an environmentally limiting factor throughout much of Riverside County. Approximately 20 percent of the land area of Riverside County is vulnerable to high and very high wind erosion susceptibility. The planning area has a moderate wind erodibility rating but does

not contain any areas that are vulnerable to high or very high wind erosion susceptibility.¹⁷ The proposed project would not include the development or redevelopment of any properties. However, future development that occurs within the planning area would be located within an area with moderate wind erosion susceptibility and may require grading operations including excavation and fill in order to provide adequate support for the development. Removal of existing vegetation or topsoil could indirectly result in an increase in wind erosion or blowsand.

Future development with the potential to be impacted by or result in an increase in wind erosion or blowsand would be required to comply with Ordinance No. 484, which requires protective actions from landowners disturbing sandy or sandy loam soils to prevent substantial quantities of soil from being deposited on public roads and private property. Ordinance No. 484 identifies certain restrictions on land disturbance activities within these areas and identifies procedures necessary to obtain a valid permit for such activities. As needed, an erosion control plan would be prepared and submitted to the County with future discretionary applications to identify methods by which potential soil runoff during rain events and erosion hazards would be minimized to ensure that no adverse effects on water quality occur to downstream properties or water bodies.

Whenever a division of land is proposed in an area that is subject to wind erosion, the soil erosion control requirements identified in Ordinance No. 460 would apply. Following compliance with Ordinance No. 484 and Ordinance No. 460, potential impacts related to wind erosion or blowsand would be less than significant.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

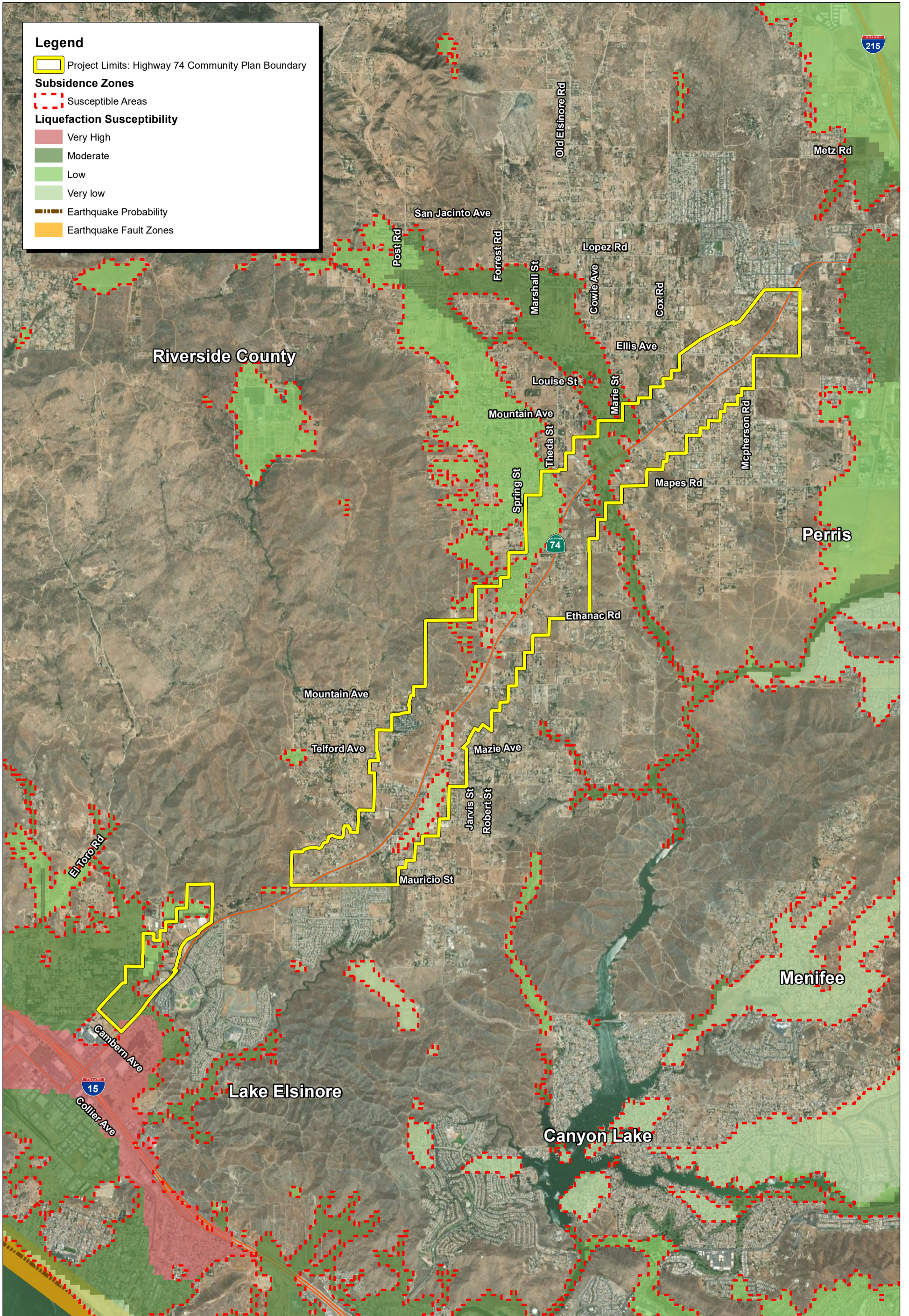
Implement **MM GEO-12a**.

Level of Significance After Mitigation

Less than significant impact.

¹⁷ County of Riverside. 2019. Riverside County General Plan, Chapter 6: Safety Element, County of Riverside General Plan, Figure S-8, Wind Erosion Susceptibility Areas. Website: https://planning.rctlma.org/Portals/14/genplan/2019/elements/Ch06_Safety_080619.pdf. Accessed August 25, 2021.

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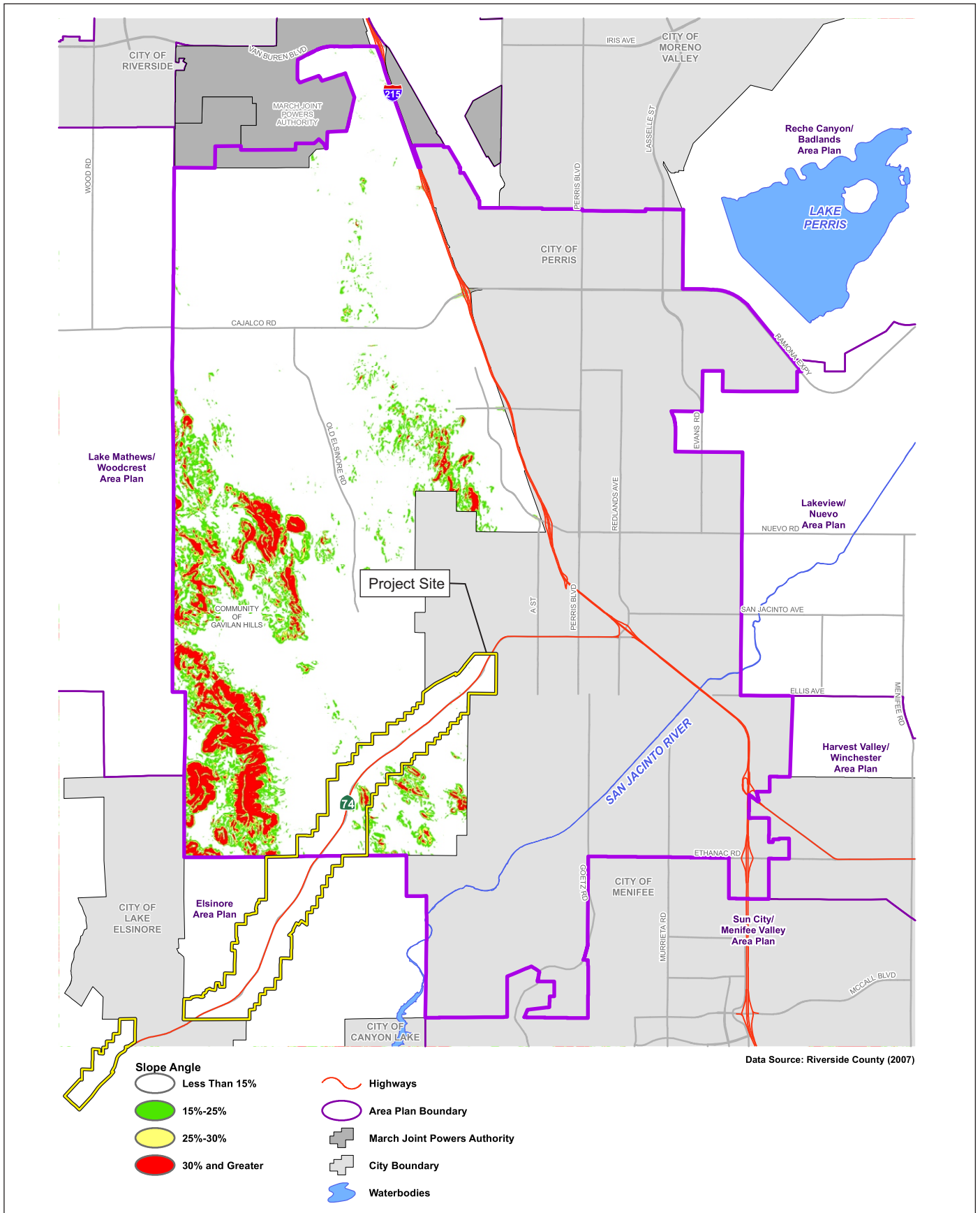


Source: ESRI Aerial Imagery, Riverside County GIS Data.



Exhibit 3.7-1
Geologic Hazard Zones

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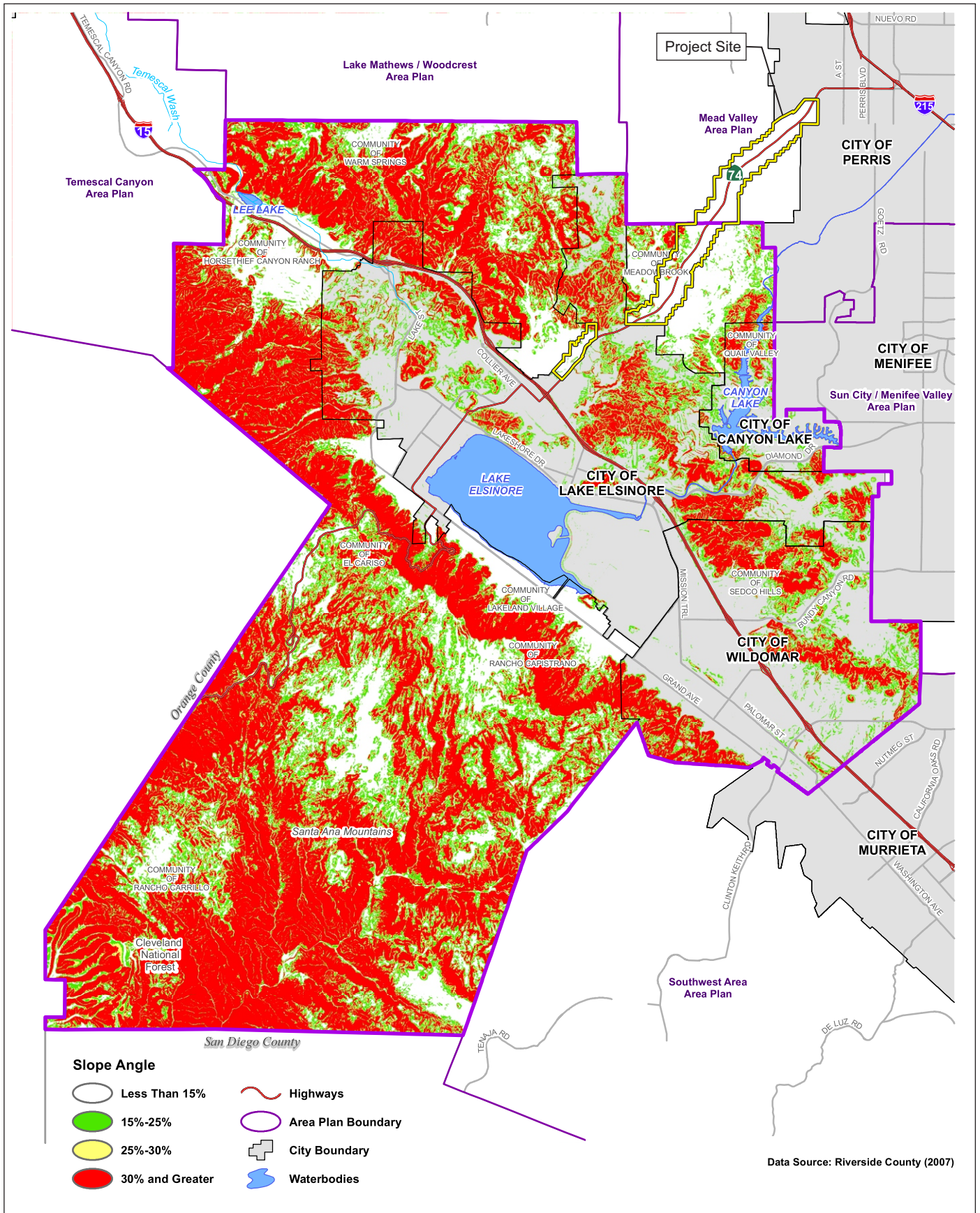


Source: County of Riverside Planning Department.



Exhibit 3.7-2a Steep Slope - Mead Valley Area Plan

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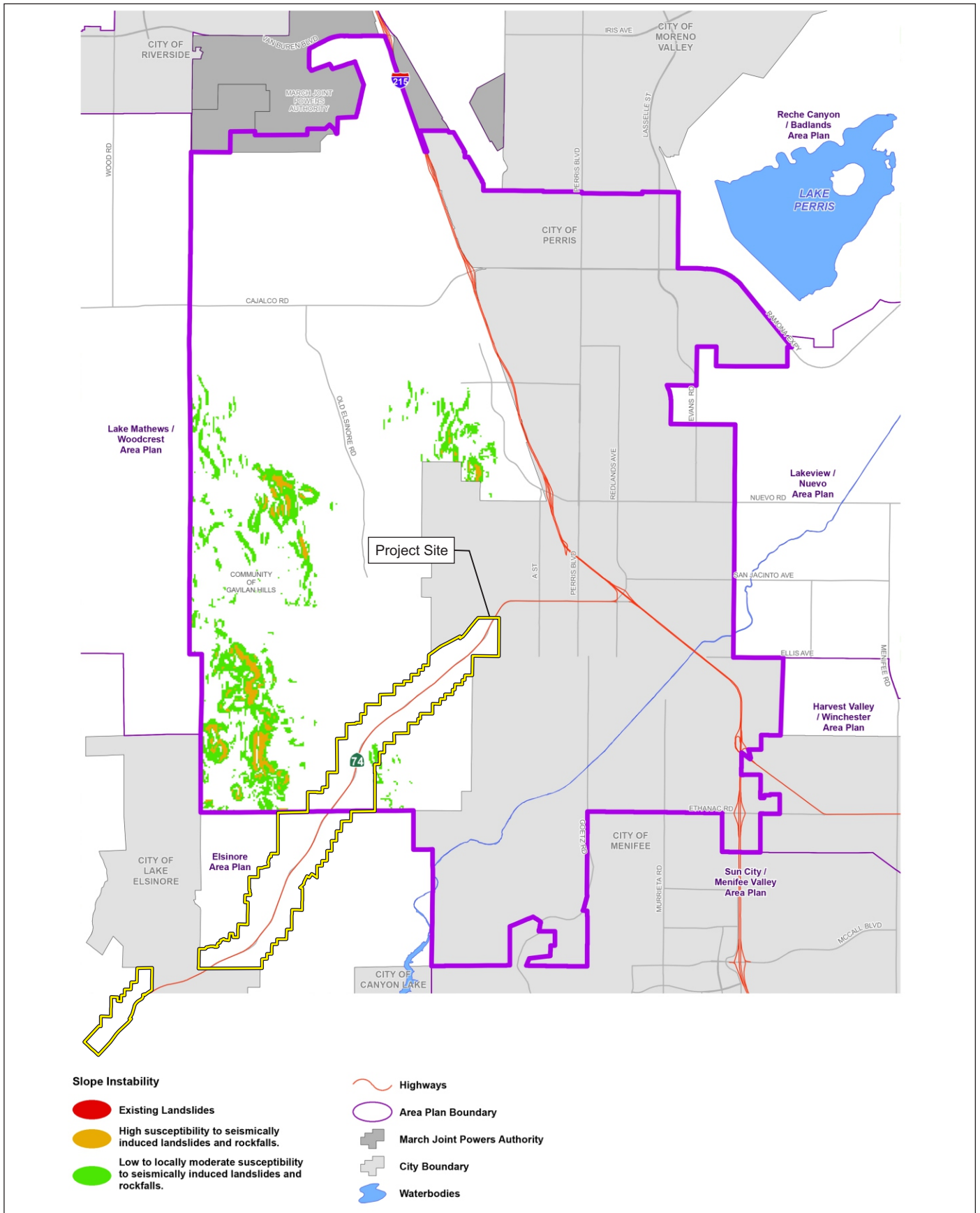


Source: County of Riverside Planning Department.



Exhibit 3.7-2b Steep Slope - Elsinore Area Plan

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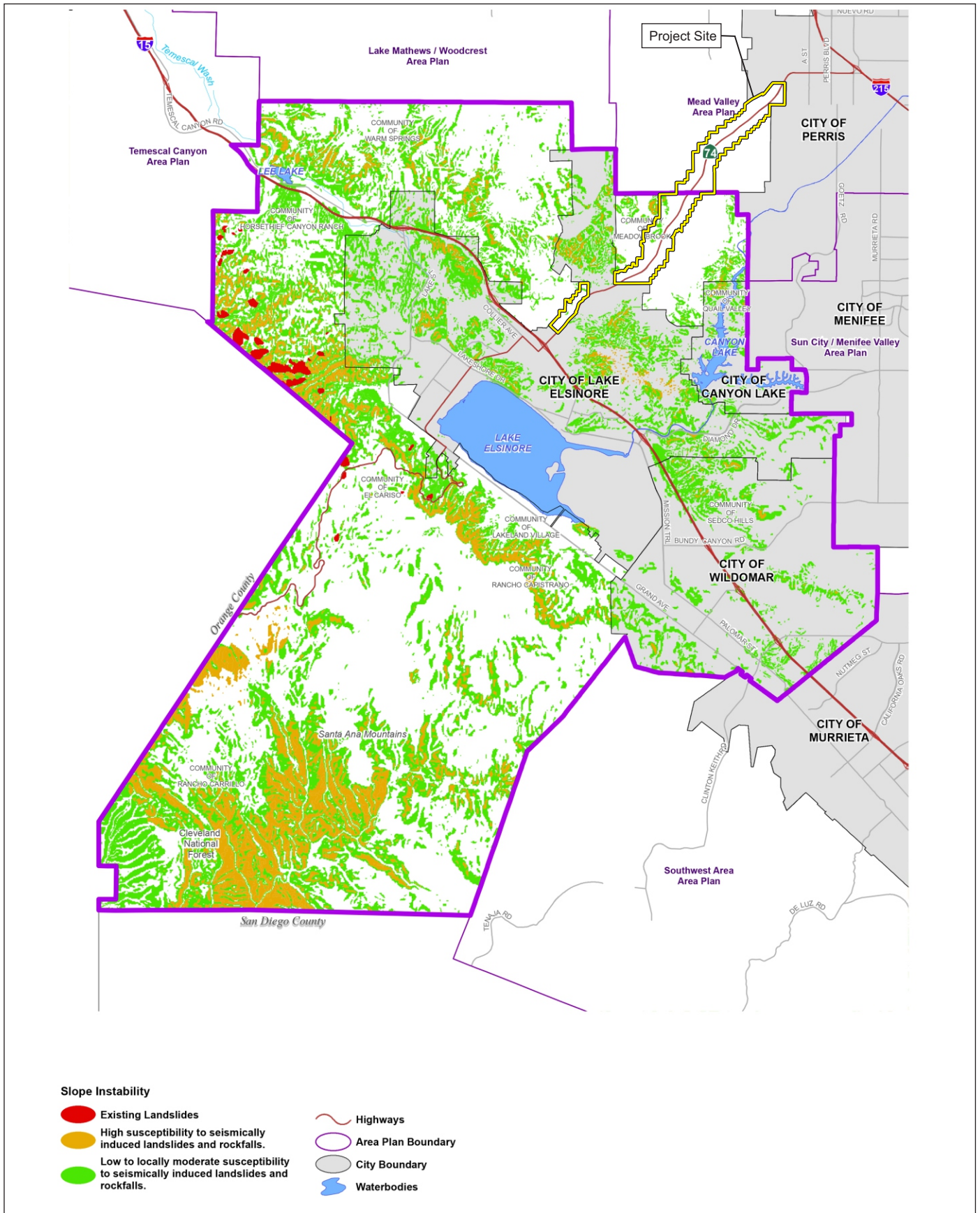


Source: County of Riverside Planning Department. California Geological Survey; 2008.



Exhibit 3.7-3 Slope Instability - Mead Valley Area Plan

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Source: County of Riverside Planning Department. California Geological Survey; 2008.



Exhibit 3.7-4 Slope Instability - Elsinore Area Plan

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3.8 - Greenhouse Gas Emissions

3.8.1 - Introduction

This section describes the existing greenhouse gas (GHG) emissions setting and potential effects from project implementation on the planning area. The Greenhouse Gas Analysis is included in this Draft Program Environmental Impact Report (Draft Program EIR) as Appendix C.

3.8.2 - Environmental Setting

Climate Change

Climate change is a change in the average weather of the Earth that is measured by alterations in wind patterns, storms, precipitation, and temperature. These changes are assessed using historical records of temperature changes occurring in the past, such as during previous ice ages. Many of the concerns regarding climate change use this data to extrapolate a level of statistical significance specifically focusing on temperature records from the last 150 years (the Industrial Age) that differ from previous climate changes in rate and magnitude.

The United Nations Intergovernmental Panel on Climate Change (IPCC) constructed several emission trajectories of GHGs needed to stabilize global temperatures and climate change impacts. In its Sixth Assessment Report, the IPCC predicted that the global mean temperature change from 2015 to 2100, given five scenarios, could range from 1.4°C (degrees Celsius) to 4.4°C. Regardless of analytical methodology, global average temperatures and sea levels are expected to rise under all scenarios.¹ The report also concluded that “[i]t is unequivocal that human influence has warmed the atmosphere, ocean and land. Widespread and rapid changes in the atmosphere, ocean, cryosphere and biosphere have occurred.” Warming of the climate system is now considered unequivocal,² with the likely range of total human-caused global surface temperature increases from approximately 0.8°C to 1.3°C since 1850.³

An individual project cannot generate enough GHG emissions to effect a discernible change in global climate. However, the proposed project participates in the potential for global climate change by its incremental contribution of GHGs combined with the cumulative increase of all other sources of GHGs, which when taken together constitute potential influences on global climate change.

Greenhouse Gases

The GHGs defined by Assembly Bill (AB) 32 include carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. A seventh GHG, nitrogen trifluoride (NF₃), was added to Health and Safety Code Section 38505(g)(7) as a GHG of concern.

For the purposes of this analysis, emissions of CO₂, CH₄, and N₂O were evaluated because these gases are the primary contributors to global climate change from development projects. Although

¹ Intergovernmental Panel on Climate Change (IPCC). 2021. Climate Change 2021: The Physical Science Basis Summary for Policymakers. Website: https://www.ipcc.ch/report/ar6/wg1/downloads/report/IPCC_AR6_WGI_SPM_final.pdf. Accessed December 15, 2021.

² Ibid.

³ Ibid.

other substances such as fluorinated gases also contribute to global climate change, sources of fluorinated gases are not well-defined, and no accepted emissions factors or methodology exist to accurately calculate these gases.

As shown in Table 3.8-1, individual GHG compounds have varying global warming potential and atmospheric lifetimes. The global warming potential is the potential of a gas or aerosol to trap heat in the atmosphere. To describe how much global warming a given type and amount of GHG may cause, the CO₂ equivalent (CO₂e) is used. The calculation of the CO₂ equivalent is a consistent methodology for comparing GHG emissions since it normalizes various GHG emissions to a consistent reference gas, CO₂. For example, CH₄'s warming potential of 25 indicates that CH₄ has 25 times greater warming effect than CO₂ on a molecule-per-molecule basis. A CO₂ equivalent is the mass emissions of an individual GHG multiplied by its global warming potential.

Table 3.8-1: Global Warming Potentials and Atmospheric Lifetime of Select GHGs

Category	Atmospheric Lifetime (years)	Global Warming Potential (100-year time horizon)
carbon dioxide (CO ₂)	50 to 200	1
Methane (CH ₄)	12±3	25
nitrous oxide (N ₂ O)	120	298
HFC-23	264	11,700
HFC-134a	14.6	1,300
HFC-152a	1.5	140
PFC: tetrafluoromethane	50,000	6,500
PFC: hexafluoroethane (C ₂ F ₆)	10,000	9,200
sulfur hexafluoride (SF ₆)	3,200	23,900

Notes:
HFC = hydrofluorocarbon
PFC = perfluorocarbon
Sources:
Intergovernmental Panel on Climate Change (IPCC). Climate Change 2007: The Physical Science Basis. Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change (Solomon, S., D. Qin, M. Manning, Z. Chen, M. Marquis, K.B. Averyt, M. Tignor and H.L. Miller [eds.]). Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA, Website: <https://www.ipcc.ch/report/ar4/wg1/>. Accessed February 3, 2022.
Intergovernmental Panel on Climate Change (IPCC). 2014. Climate Change 2007: Synthesis Report. Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change (Core Writing Team, Pachauri, R.K. and Reisinger, A. [eds.]). IPCC, Geneva, Switzerland. Website: <https://www.ipcc.ch/report/ar4/syr/>. Accessed February 3, 2022.

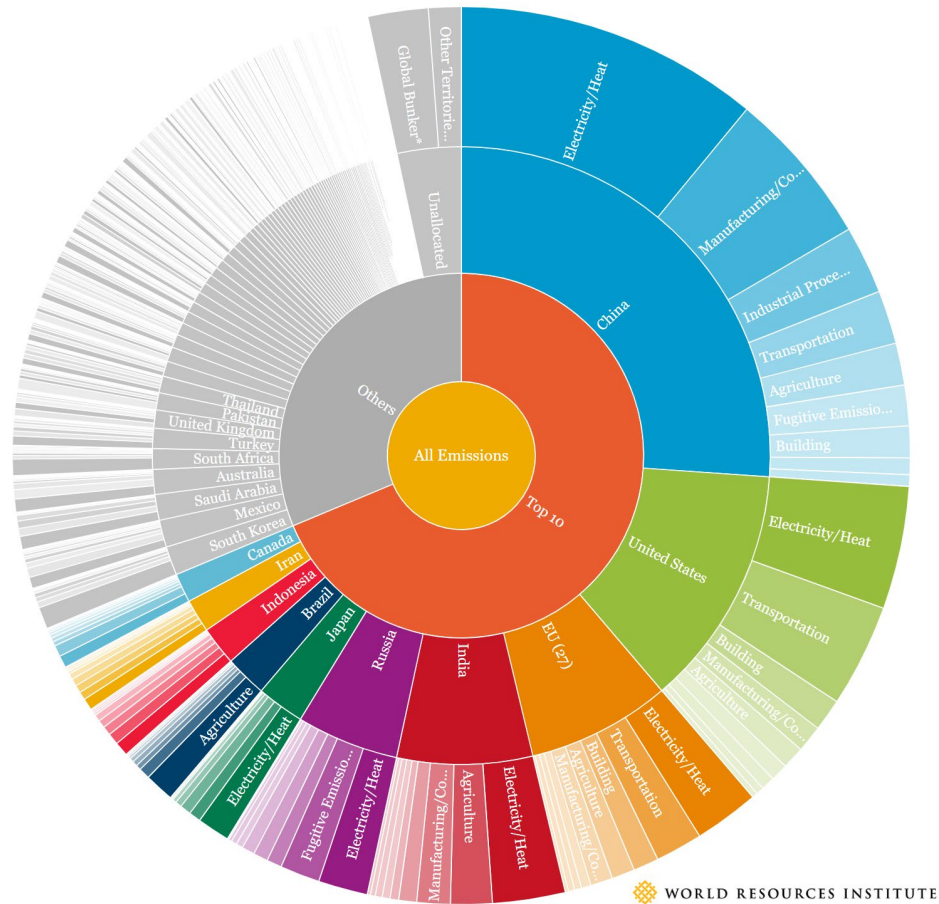
Emissions Inventories

An emissions inventory is a database that lists, by source, the amount of air pollutants discharged into the atmosphere of a geographic area during a given time period. Emissions worldwide were approximately 47,515 million metric tons (MMT) of carbon dioxide equivalents (CO₂e) in 2018. As

shown in Figure 3.8-1, China was the largest GHG emitter with 12.4 billion metric tons of CO₂e, and the United States was the second largest GHG emitter with over 6 billion metric tons of CO₂e.⁴

United States GHG Inventory

Since 1990, U.S. emissions have increased at an average annual rate of 0.3 percent. Transportation emissions also increased because of an increase in Vehicle Miles Traveled (VMT). Within the United States, fossil fuel combustion accounted for 92.4 percent of CO₂ emissions in 2019. Transportation was the largest emitter of CO₂ in 2019, accounting for 28.6 percent of emissions, followed by electric power generation, accounting for 25.1 percent.⁵



Source: World Resources Institute (WRI). 2020. World's Top 10 Emitters. Website: <https://www.wri.org/insights/interactive-chart-shows-changes-worlds-top-10-emitters#fn:1>. Accessed February 3, 2022.

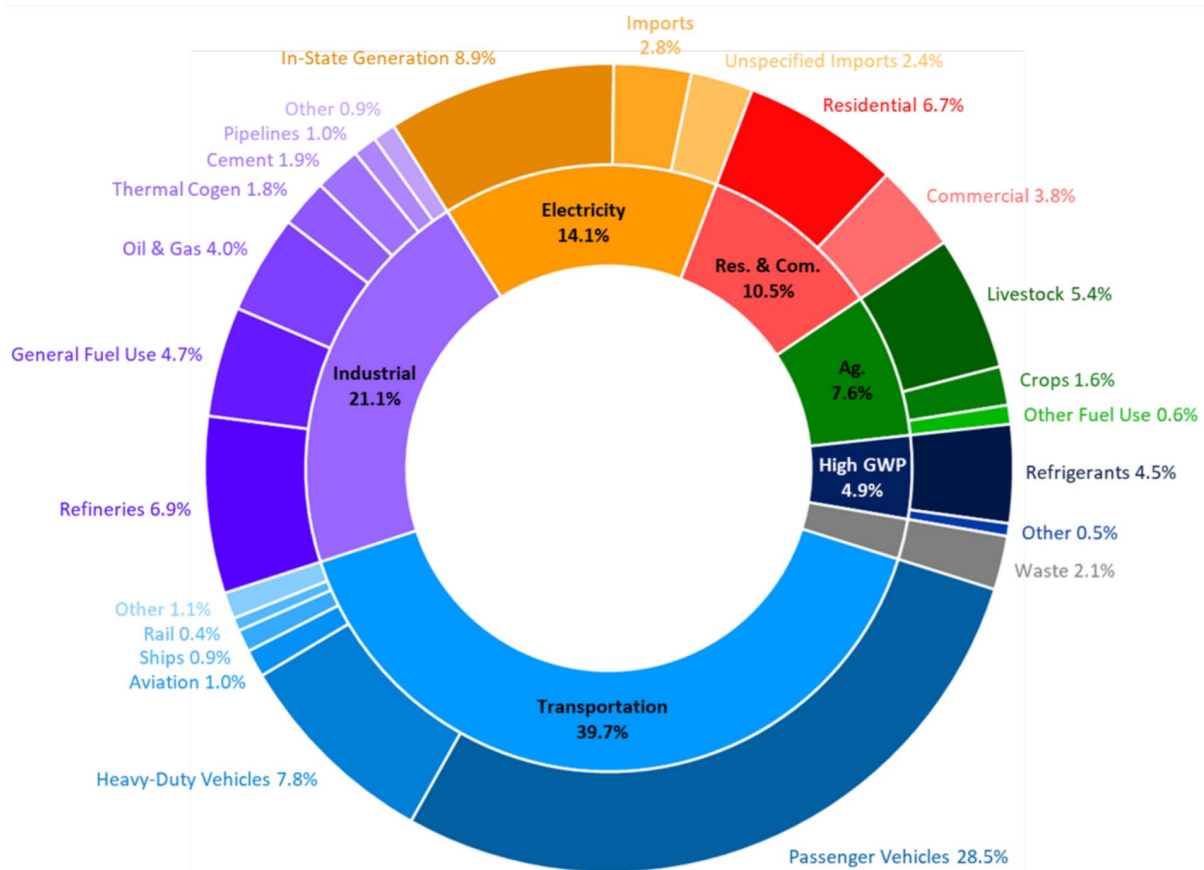
Figure 3.8-1: World's Top 10 Emitters

⁴ World Resources Institute (WRI). 2020. World's Top 10 Emitters. Website: <https://www.wri.org/insights/interactive-chart-shows-changes-worlds-top-10-emitters#fn:1>. Accessed February 3, 2022.

⁵ United States Environmental Protection Agency (EPA). 2021. Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2019. Website: https://www.epa.gov/sites/default/files/2021-04/documents/us-ghg-inventory-2021-main-text.pdf?VersionId=wEy8wQuGrWS8Ef_hSLXHy1kYwKs4.ZaU. Accessed February 3, 2022.

California GHG Inventory

As the second largest emitter of GHG emissions in the United States, California contributes a large quantity (418.1 MMT CO₂e in 2019) of GHG emissions to the atmosphere.⁶ Anthropogenic CO₂ are largely byproducts of fossil fuel combustion and are attributable to transportation, industry/manufacturing, electricity generation, natural gas consumption, and agriculture processes. As shown in Figure 3.8-2, in California, the transportation sector is the largest emitter at approximately 40 percent of GHG emissions, followed by industrial at approximately 21 percent of GHG emissions.⁷



Source: California Air Resources Board (ARB). 2021. California GHG Inventory. Website: https://ww3.arb.ca.gov/cc/inventory/pubs/reports/2000_2019/ghg_inventory_trends_00-19.pdf. Accessed February 3, 2022.

Figure 3.8-2: California Greenhouse Gas Emissions by Sector in 2019

Environmental Effects of Climate Change in California

The California Environmental Protection Agency (Cal/EPA) published a report titled “Scenarios of Climate Change in California: An Overview” (Climate Scenarios report) in February 2006, that while

⁶ California Air Resources Board (ARB). 2021. Current California GHG Emission Inventory Data. Website: <https://ww2.arb.ca.gov/ghg-inventory-data>. Accessed February 3, 2022.
⁷ California Air Resources Board (ARB). 2021. California GHG Inventory. Website: https://ww3.arb.ca.gov/cc/inventory/pubs/reports/2000_2019/ghg_inventory_trends_00-19.pdf. Accessed February 3, 2022.

not adequate for a California Environmental Quality Act (CEQA) project-specific or cumulative analysis, is generally instructive about the Statewide impacts of global warming.

The Climate Scenarios report uses a range of emissions scenarios developed by the IPCC to project a series of potential warming ranges (i.e., temperature increases) that may occur in California during the 21st century: lower warming range (3.0–5.5°F [degrees Fahrenheit]); medium warming range (5.5–8.0°F); and higher warming range (8.0–10.5°F). The Climate Scenarios report then presents an analysis of future climate in California under each warming range, that while uncertain, present a picture of the impacts of global climate change trends in California.

In addition, most recently on August 5, 2009, the State’s Natural Resources Agency released a public review draft of its “California Climate Adaptation Strategy” report that details many vulnerabilities arising from climate change with respect to matters such as temperature extremes, sea level rise, wildfires, floods and droughts and precipitation changes. This report responds to the Governor’s Executive Order S-13-2008 that called on State agencies to develop California’s strategy to identify and prepare for expected climate impacts.

According to the reports, substantial temperature increases arising from increased GHG emissions potentially could result in a variety of impacts to the people, economy, and environment of California associated with a projected increase in extreme conditions, with the severity of the impacts depending upon actual future emissions of GHGs and associated warming.

In California, climate change may result in consequences such as the following:^{8,9}

- **A reduction in the quality and supply of water from the Sierra snowpack.** If heat-trapping emissions continue unabated, more precipitation will fall as rain instead of snow, and the snow that does fall will melt earlier, reducing the Sierra Nevada spring snowpack by as much as 70 to 90 percent. This can lead to challenges in securing adequate water supplies. It can also lead to a potential reduction in hydropower.
- **Increased risk of large wildfires.** If rain increases as temperatures rise, wildfires in the grasslands and chaparral ecosystems of Southern California are estimated to increase by approximately 30 percent toward the end of the 21st century because more winter rain will stimulate the growth of more plant “fuel” available to burn in the fall. In contrast, a hotter, drier climate could promote up to 90 percent more Northern California fires by the end of the century by drying out and increasing the flammability of forest vegetation.
- **Reductions in the quality and quantity of certain agricultural products.** The crops and products likely to be adversely affected include wine grapes, fruit, nuts, and milk.
- **Exacerbation of air quality problems.** If temperatures rise to the medium warming range, there could be 75 to 85 percent more days with weather conducive to ozone formation in Los

⁸ California Climate Change Center. 2006. Scenarios of Climate Change in California: An Overview. Website: https://www.sustainable-design.ie/arch/California2006_Climate-Change-Scenarios.pdf. Accessed February 5, 2022.

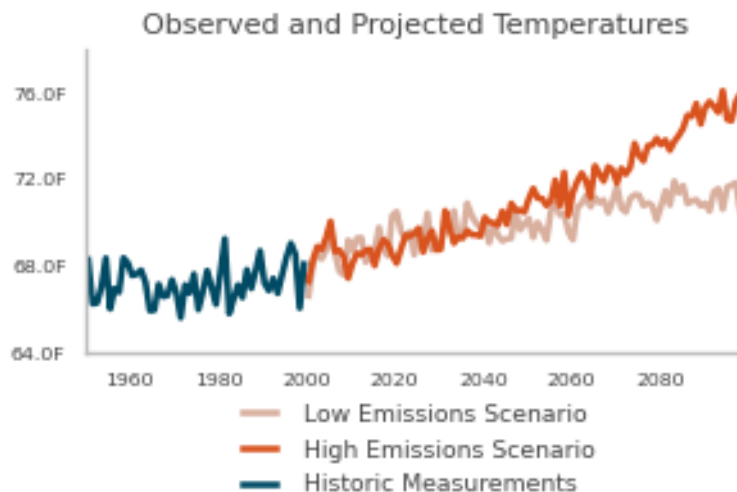
⁹ Moser, Susie, Guido Franco, Sarah Pittiglio, Wendy Chou, Dan Cayan. 2009. The Future Is Now: An Update on Climate Change Science Impacts and Response Options for California. California Energy Commission, PIER Energy-Related Environmental Research Program. CEC-500-2008-071. Website: <https://lynceans.org/wp-content/uploads/2020/01/Moser-2009-Climate-change-impacts-across-CA-.pdf>. Accessed February 11, 2022.

Angeles and the San Joaquin Valley, relative to today's conditions. This is more than twice the increase expected if rising temperatures remain in the lower warming range. This increase in air quality problems could result in an increase in asthma and other health-related problems.

- **A rise in sea levels resulting in the displacement of coastal businesses and residences.** During the past century, sea levels along California's coast have risen about 7 inches. If emissions continue unabated and temperatures rise into the higher anticipated warming range, sea level is expected to rise an additional 22 to 35 inches by the end of the century. Elevations of this magnitude would inundate coastal areas with salt water, accelerate coastal erosion, threaten vital levees and inland water systems, and disrupt wetlands and natural habitats.
- **An increase temperature and extreme weather events.** Climate change is expected to lead to increases in the frequency, intensity, and duration of extreme heat events and heat waves in California. More heat waves can exacerbate chronic disease or heat-related illness.
- **A decrease in the health and productivity of California's forests.** Climate change can cause an increase in wildfires, an enhanced insect population, and establishment of non-native species.

Consequences of Climate Change in Project Area

Figure 3.8-3 displays a chart of measured historical and projected annual average temperatures in the County of Riverside. As shown in the figure, temperatures are expected to rise in the low and high GHG emissions scenarios. The results indicate that temperatures are predicted to increase by 4.1°F under the low emission scenario and 7.2°F under the high emissions scenario.¹⁰



Source: Cal-adapt. Climate Tools. Website: <https://cal-adapt.org/tools/>. Accessed February 3, 2022. (Average of all the hottest daily temperatures in a year)

Figure 3.8-3: Annual Average Maximum Temperatures in County of Riverside

¹⁰ Cal-adapt. Climate Tools. Website: <https://cal-adapt.org/tools/>. Accessed February 3, 2022.

Human Health Effects of GHG Emissions

GHG emissions from development projects would not result in concentrations that would directly impact public health. However, the cumulative effects of GHG emissions on climate change have the potential to cause adverse effects to human health.¹¹

The United States Global Change Research Program, in its report, “Global Climate Change Impacts in the U.S.” has analyzed the degree to which impacts of climate change on human health are expected to affect the United States.¹²

Potential effects of climate change on public health include:

- **Direct Temperature Effects:** Climate change may directly affect human health through increases in average temperatures, which are predicted to increase the incidence of heat waves and hot extremes.
- **Extreme Events:** Climate change may affect the frequency and severity of extreme weather events, such as hurricanes and extreme heat and floods, which can be destructive to human health and well-being.
- **Climate-Sensitive Diseases:** Climate change may increase the risk of some infectious diseases, particularly those diseases that appear in warm areas and are spread by mosquitoes and other insects, such as malaria, dengue fever, yellow fever, and encephalitis.
- **Air Quality:** Respiratory disorders may be exacerbated by warming-induced increases in the frequency of smog (ground level ozone) events and particulate air pollution.¹³

Although there could be health effects resulting from changes in the climate and the consequences that can occur, inhalation of GHGs at levels currently in the atmosphere would not result in adverse health effects, with the exception of ozone and aerosols (particulate matter). The potential health effects of ozone and particulate matter are discussed in criteria pollutant analyses. At very high indoor concentrations (not at levels existing outside), CO₂, CH₄, sulfur hexafluoride, and some chlorofluorocarbons can cause suffocation as the gases can displace oxygen.

3.8.3 - Regulatory Framework

International Regulations

International organizations such as the ones discussed below have made substantial efforts to reduce GHGs. Preventing human-induced climate change will require the participation of all nations in solutions to address the issue.

¹¹ Center for Disease Control and Prevention (CDC). CDC's Climate and Health Program—an Investment in our Future. Website: <https://www.cdc.gov/climateandhealth/factsheet.htm>. Accessed February 3, 2022.

¹² United States Global Change Research Program. 2009. Global Climate Change Impacts in the United States. Website: <https://www.nrc.gov/docs/ML1006/ML100601201.pdf>. Accessed February 3, 2022.

¹³ Ibid.

Kyoto Protocol

In 1988, the United Nations established the IPCC to evaluate the impacts of global warming and to develop strategies that nations could implement to curtail global climate change. In 1992, the United States joined other countries around the world in signing the United Nations Framework Convention on Climate Change (UNFCCC) agreement with the goal of controlling GHG emissions. As a result, the Climate Change Action Plan was developed to address the reduction of GHGs in the United States. The Plan currently consists of more than 50 voluntary programs for member nations to adopt.

The Kyoto Protocol is a treaty made under the UNFCCC and was the first international agreement to regulate GHG emissions. Some have estimated that if the commitments outlined in the Kyoto Protocol are met, global GHG emissions could be reduced an estimated 5 percent from 1990 levels during the first commitment period of 2008-2012. Notably, while the United States is a signatory to the Kyoto Protocol, Congress has not ratified the Protocol and the United States is not bound by the Protocol's commitments. In December 2009, international leaders from 192 nations met in Copenhagen to address the future of international climate change commitments post-Kyoto.

Paris Climate Change Agreement

Parties to the UNFCCC reached a landmark agreement on December 12 in Paris, charting a fundamentally new course in the two-decade-old global climate effort. Culminating a 4-year negotiating round, the new treaty ends the strict differentiation between developed and developing countries that characterized earlier efforts, replacing it with a common framework that commits all countries to put forward their best efforts and to strengthen them in the years ahead. This includes, for the first time, requirements that all parties report regularly on their emissions and implementation efforts and undergo international review.

The agreement and a companion decision by parties were the key outcomes of the conference, known as the 21st session of the UNFCCC Conference of the Parties, or "COP 21." Together, the Paris Agreement and the accompanying COP decision:

- Reaffirm the goal of limiting global temperature increase well below 2 degrees Celsius, while urging efforts to limit the increase to 1.5 degrees.
- Establish binding commitments by all parties to make "nationally determined contributions" (NDCs), and to pursue domestic measures aimed at achieving them.
- Commit all countries to report regularly on their emissions and "progress made in implementing and achieving" their NDCs, and to undergo international review.
- Commit all countries to submit new NDCs every 5 years, with the clear expectation that they will "represent a progression" beyond previous ones.
- Reaffirm the binding obligations of developed countries under the UNFCCC to support the efforts of developing countries, while for the first time encouraging voluntary contributions by developing countries too.
- Extend the current goal of mobilizing \$100 billion a year in support by 2020 through 2025, with a new, higher goal to be set for the period after 2025.

- Extend a mechanism to address “loss and damage” resulting from climate change, which explicitly will not “involve or provide a basis for any liability or compensation.”
- Require parties engaging in international emissions trading to avoid “double counting.”
- Call for a new mechanism, similar to the Clean Development Mechanism under the Kyoto Protocol, enabling emission reductions in one country to be counted toward another country’s NDC.¹⁴

On June 1, 2017, President Trump announced the decision for the United States to withdraw from the Paris Agreement.¹⁵ However, on January 20, 2021, President Biden signed the instrument to bring the United States back into the Paris Agreement that same day.¹⁶ Nonetheless, California remains committed to combating climate change through programs aimed to reduce GHGs.¹⁷

Federal Regulations

Prior to the last decade, there were no concrete federal regulations of GHGs or major planning for climate change adaptation. Since then, federal activity has increased. The following are actions regarding the federal government, GHGs, and fuel efficiency.

Clean Air Act

Massachusetts et al. v. EPA (Supreme Court Case 05-1120) was argued before the United States Supreme Court on November 29, 2006, in which it was petitioned that the United States Environmental Protection Agency (EPA) regulate four GHGs, including CO₂, under Section 202(a)(1) of the Clean Air Act (CAA). A decision was made on April 2, 2007, in which the Supreme Court found that GHGs are air pollutants covered by the CAA. The Court held that the Administrator must determine whether emissions of GHGs from new motor vehicles cause or contribute to air pollution, which may reasonably be anticipated to endanger public health or welfare, or whether the science is too uncertain to make a reasoned decision. On December 7, 2009, the EPA Administrator signed two distinct findings regarding GHGs under Section 202(a) of the CAA:

- **Endangerment Finding:** The Administrator finds that the current and projected concentrations of the six key well-mixed GHGs—CO₂, CH₄, N₂O, HFCs, PFCs, and SF₆—in the atmosphere threaten the public health and welfare of current and future generations; and
- **Cause or Contribute Finding:** The Administrator finds that the combined emissions of these well-mixed GHG emissions from new motor vehicles and new motor vehicle engines contribute to the GHG pollution, which threatens public health and welfare.

¹⁴ Center for Climate and Energy Solutions (C²ES). 2015. Outcomes of the U.N. Climate Change Conference. Website: <http://www.c2es.org/international/negotiations/cop21-paris/summary>. Accessed February 3, 2022.

¹⁵ The White House. Statement by President Trump on the Paris Climate Accord. Website: <https://it.usembassy.gov/statement-president-trump-paris-climate-accord/>. Accessed February 3, 2022.

¹⁶ The White House. 2021. Statement by President Biden: Paris Climate Agreement. Website: <https://www.whitehouse.gov/briefing-room/statements-releases/2021/01/20/paris-climate-agreement/>. Accessed February 11, 2022.

¹⁷ California Air Resources Board (ARB). 2017. New Release: California and China Team Up to Push for Millions More Zero-emission Vehicles. Website: <https://ww2.arb.ca.gov/news/california-and-china-team-push-millions-more-zero-emission-vehicles>. Accessed February 3, 2022.

These findings do not impose requirements on industry or other entities. However, this was a prerequisite for implementing GHG emissions standards for vehicles, as discussed under “Clean Vehicles” below. After a lengthy legal challenge, the U.S. Supreme Court declined to review an Appeals Court ruling which upheld the EPA Administrator findings.

United States Consolidated Appropriations Act (Mandatory GHG Reporting)

The Consolidated Appropriations Act of 2008, passed in December 2007, requires the establishment of mandatory GHG reporting requirements. On September 22, 2009, the EPA issued the Final Mandatory Reporting of Greenhouse Gases Rule, which became effective January 1, 2010. The rule requires reporting of GHG emissions from large sources and suppliers in the United States and is intended to collect accurate and timely emissions data to inform future policy decisions. Under the rule, suppliers of fossil fuels or industrial GHGs, manufacturers of vehicles and engines, and facilities that emit 25,000 metric tons (MT) or more per year of GHG emissions are required to submit annual reports to the EPA. The first annual reports for the largest emitting facilities, covering calendar year 2010, were submitted to EPA in 2011.

U.S. Clean Air Act Permitting Programs (New GHG Source Review)

The EPA issued a final rule on May 13, 2010, which establishes thresholds for GHGs that define when permits under the New Source Review Prevention of Significant Deterioration and Title V Operating Permit programs are required for new and existing industrial facilities. This final rule “tailors” the requirements of these CAA permitting programs to limit which facilities will be required to obtain Prevention of Significant Deterioration and Title V permits. In the preamble to the revisions to the Code of Federal Regulations, the EPA states:

This rulemaking is necessary because without it the Prevention of Significant Deterioration and Title V requirements would apply, as of January 2, 2011, at the 100 or 250 tons per year levels provided under the Clean Air Act, greatly increasing the number of required permits, imposing undue costs on small sources, overwhelming the resources of permitting authorities, and severely impairing the functioning of the programs. EPA is relieving these resource burdens by phasing in the applicability of these programs to greenhouse gas sources, starting with the largest greenhouse gas emitters. This rule establishes two initial steps of the phase-in. The rule also commits the agency to take certain actions on future steps addressing smaller sources but excludes certain smaller sources from Prevention of Significant Deterioration and Title V permitting for greenhouse gas emissions until at least April 30, 2016.

The EPA estimates that facilities responsible for nearly 70 percent of the national GHG emissions from stationary sources will be subject to permitting requirements under this rule. This includes the nation’s largest GHG emitters—power plants, refineries, and cement production facilities.

Energy Independence and Security Act

The Energy Policy Act of 2005 created the Renewable Fuel Standard program. The Energy Independence and Security Act of 2007 expanded this program by:

- Expanding the Renewable Fuel Standard program to include diesel in addition to gasoline.

- Increasing the volume of renewable fuel required to be blended into transportation fuel from 9 billion gallons in 2008 to 36 billion gallons by 2022.
- Establishing new categories of renewable fuel, and setting separate volume requirements for each one.
- Requiring EPA to apply lifecycle GHG performance threshold standards to ensure that each category of renewable fuel emits fewer GHGs than the petroleum fuel it replaces.

This expanded Renewable Fuel Standard program lays the foundation for achieving substantial reductions of GHG emissions from the use of renewable fuels, reducing the use of imported petroleum, and encouraging the development and expansion of the nation’s renewable fuels sector.

Signed on December 19, 2007, by President George W. Bush, the Energy Independence and Security Act of 2007 (EISA) aims to:

- Move the United States toward greater energy independence and security.
- Increase the production of clean renewable fuels.
- Protect consumers.
- Increase the efficiency of products, buildings, and vehicles.
- Promote research on and deploy GHG emission capture and storage options.
- Improve the energy performance of the federal government.
- Increase U.S. energy security, develop renewable fuel production, and improve vehicle fuel economy.

EISA reinforces the energy reduction goals for federal agencies put forth in Executive Order 13423, as well as introduces more aggressive requirements. The three key provisions enacted are the Corporate Average Fuel Economy Standards, the Renewable Fuel Standard, and the appliance/lighting efficiency standards.

The EPA is committed to developing, implementing, and revising both regulations and voluntary programs under the following subtitles in EISA, among others:

- Increased Corporate Average Fuel Economy Standards
- Federal Vehicle Fleets
- Renewable Fuel Standard
- Biofuels Infrastructure
- Carbon Capture and Sequestration¹⁸

EPA and National Highway Traffic Safety Administration Light-Duty Vehicle Greenhouse Gas Emission Standards and Corporate Average Fuel Economy Standards Final Rule

Congress first passed the Corporate Average Fuel Economy law in 1975 to increase the fuel economy of cars and light-duty trucks. The law has become more stringent over time. On May 19, 2009, the President put in motion a new national policy to increase fuel economy for all new cars and trucks

¹⁸ United States Environment Protection Agency (EPA). Summary of the Energy Independence and Security Act. Website: <https://www.epa.gov/laws-regulations/summary-energy-independence-and-security-act>. Accessed February 3, 2022.

sold in the United States. On April 1, 2010, the EPA and the Department of Transportation's National Highway Traffic Safety Administration (NHTSA) announced a joint final rule establishing a national program that would reduce GHG emissions and improve fuel economy for new cars and trucks sold in the United States.

The first phase of the national program would apply to passenger cars, light-duty trucks, and medium-duty passenger vehicles, covering model years 2012 through 2016. They require these vehicles to meet an estimated combined average emissions level of 250 grams of CO₂ per mile, equivalent to 35.5 miles per gallon if the automobile industry were to meet this CO₂ level solely through fuel economy improvements. Together, these standards would cut CO₂ emissions by an estimated 960 MMT and 1.8 billion barrels of oil over the lifetime of the vehicles sold under the program (model years 2012-2016).

The EPA and the NHTSA issued final rules on a second phase joint rulemaking, establishing national standards for light-duty vehicles for model years 2017 through 2025 in August 2012.¹⁹ The new standards for model years 2017 through 2025 apply to passenger cars, light-duty trucks, and medium-duty passenger vehicles. The final standards are projected to result in an average industry fleet wide level of 163 grams/mile of CO₂ in model year 2025, which is equivalent to 54.5 miles per gallon if achieved exclusively through fuel economy improvements.

The EPA and NHTSA issued final rules for the first national standards to reduce GHG emissions and improve fuel efficiency of heavy-duty trucks and buses on September 15, 2011, which became effective November 14, 2011. For combination tractors, the agencies are proposing engine and vehicle standards that began in the 2014 model year and achieve up to a 20 percent reduction in CO₂ emissions and fuel consumption by the 2018 model year. For heavy-duty pickup trucks and vans, the agencies are proposing separate gasoline and diesel truck standards, which phase in starting in the 2014 model year and achieve up to a 10 percent reduction for gasoline vehicles, and a 15 percent reduction for diesel vehicles by 2018 model year (12 and 17 percent respectively if accounting for air conditioning leakage). Lastly, for vocational vehicles, the engine and vehicle standards would achieve up to a 10 percent reduction in fuel consumption and CO₂ emissions from the 2014 to 2018 model years.

The State of California has received a waiver from the EPA to have separate, stricter Corporate Average Fuel Economy Standards. Although global climate change did not become an international concern until the 1980s, efforts to reduce energy consumption began in California in response to the oil crisis in the 1970s, resulting in the incidental reduction of GHG emissions. In order to manage the State's energy needs and promote energy efficiency, AB 1575 created the California Energy Commission (CEC) in 1975.

¹⁹ United States Environmental Protection Agency (EPA). 2012. EPA and NHTSA Set Standards to Reduce Greenhouse Gases and Improve Fuel Economy for Model Years 2017-2025 Cars and Light Trucks. Website: <https://www.nhtsa.gov/document/fact-sheet-epa-and-nhtsa-propose-standards-reduce-greenhouse-gas-emissions-and-improve>. Accessed February 3, 2022.

State Regulations

California Assembly Bill 32: Global Warming Solutions Act and Scoping Plan

The California State Legislature enacted AB 32, the California Global Warming Solutions Act of 2006. AB 32 requires that GHGs emitted in California be reduced to 1990 levels by the year 2020.

“Greenhouse gases” as defined under AB 32 include CO₂, CH₄, N₂O, HFCs, PFCs, and SF₆. Since AB 32 was enacted, a seventh chemical, nitrogen trifluoride, has also been added to the list of GHGs. The ARB is the State agency charged with monitoring and regulating sources of GHGs. AB 32 states the following:

Global warming poses a serious threat to the economic well-being, public health, natural resources, and the environment of California. The potential adverse impacts of global warming include the exacerbation of air quality problems, a reduction in the quality and supply of water to the State from the Sierra snowpack, a rise in sea levels resulting in the displacement of thousands of coastal businesses and residences, damage to marine ecosystems and the natural environment, and an increase in the incidences of infectious diseases, asthma, and other human health-related problems.

The ARB approved the 1990 GHG emissions level of 427 MMT CO₂e on December 6, 2007.²⁰ Therefore, to meet the State’s target, emissions generated in California in 2020 were required to be equal to or less than 427 MMT CO₂e. Emissions in 2020 in a business-as-usual (BAU) scenario were estimated to be 596 MMT CO₂e, which do not account for reductions from AB 32 regulations.²¹ At that rate, a 28 percent reduction was required to achieve the 427 MMT CO₂e 1990 inventory. In October 2010, the ARB prepared an updated 2020 forecast to account for the effects of the 2008 recession and slower forecasted growth. The 2020 inventory without the benefits of adopted regulation is now estimated at 545 MMT CO₂e. Therefore, under the updated forecast, a 21.7 percent reduction from a BAU scenario is required to achieve 1990 levels.²²

The State has made steady progress in implementing AB 32. The progress is shown in updated emission inventories prepared by ARB for 2000 through 2012 to show progress achieved to date.²³ The State also achieved its target for 2010 of reducing GHG emissions to 2000 levels. As shown below, the 2010 emission inventory achieved this target. Also shown are the average reductions needed from all Statewide sources (including all existing sources) to reduce GHG emissions back to 1990 levels.

1990: 427 MMT CO₂e (AB 32 2020 Target)
2000: 463 MMT CO₂e (an average 8 percent reduction needed to achieve 1990 base)
2010: 450 MMT CO₂e (an average 5 percent reduction needed to achieve 1990 base)
2020: 545 MMT CO₂e BAU (an average 21.7 percent reduction from BAU needed to achieve 1990 base)

²⁰ California Air Resources Board (ARB). 2007. Staff Report. California 1990 Greenhouse Gas Level and 2020 Emissions Limit. November 16, 2007. Website: www.arb.ca.gov/cc/inventory/pubs/reports/staff_report_1990_level.pdf. Accessed February 19, 2022.

²¹ California Air Resources Board (ARB). 2008. Climate Change Scoping Plan, a framework for change. Website: http://www.arb.ca.gov/cc/scopingplan/document/adopted_scoping_plan.pdf. Accessed February 19, 2022.

²² California Air Resources Board (ARB). 2014. GHG 2020 Business-as-Usual Emissions Projection. Website: <https://ww2.arb.ca.gov/ghg-bau>. Accessed February 19, 2022.

²³ California Air Resources Board (ARB). 2014. California Greenhouse Gas Emissions for 2000 to 2012—Trends of Emissions and Other Indicators. Website: http://www.arb.ca.gov/cc/inventory/pubs/reports/ghg_inventory_00-12_report.pdf. Accessed February 19, 2022.

The ARB’s initial Climate Change Scoping Plan (Scoping Plan) contained measures designed to reduce the State’s emissions to 1990 levels by the year 2020 to comply with AB 32.²⁴ The Scoping Plan identified recommended measures for multiple GHG emission sectors and the associated emission reductions needed to achieve the year 2020 emissions target—each sector had a different emission reduction target. Most of the measures target the transportation and electricity sectors. As stated in the Scoping Plan, the key elements of the strategy for achieving the 2020 GHG target include:

- Expanding and strengthening existing energy efficiency programs as well as building and appliance standards.
- Achieving a Statewide renewables energy mix of 33 percent.
- Developing a California Cap-and-Trade Program that links with other Western Climate Initiative partner programs to create a regional market system.
- Establishing targets for transportation-related GHG emissions for regions throughout California and pursuing policies and incentives to achieve those targets.
- Adopting and implementing measures pursuant to existing State laws and policies, including California’s clean car standards, goods movement measures, and the low carbon fuel standard (LCFS).
- Creating targeted fees, including a public goods charge on water use, fees on high global warming potential (GWP) gases, and a fee to fund the administrative costs of the State’s long-term commitment to AB 32 implementation.

In addition, the Scoping Plan differentiates between “capped” and “uncapped” strategies. Capped strategies are subject to the ARB’s Cap-and-Trade Program. The Scoping Plan states that the inclusion of these emissions within the Cap-and-Trade Program would help ensure that the year 2020 emission targets were met despite some degree of uncertainty in the emission reduction estimates for any individual measure. Implementation of the capped strategies is calculated to achieve sufficient reductions by 2020 to achieve the emission target contained in AB 32. Uncapped strategies that will not be subject to the cap-and-trade emissions limits and requirements were provided as a margin of safety by accounting for additional GHG emission reductions.²⁵

The Cap-and-Trade Program remains a key element of the Scoping Plan. It sets a Statewide limit on sources responsible for 85 percent of California’s GHG emissions and establishes a price signal needed to drive long-term investment in cleaner fuels and more efficient use of energy. The program is designed to provide covered entities the flexibility to seek out and implement the lowest cost options to reduce emissions. The program conducted its first auction in November 2012. Compliance obligations began for power plants and large industrial sources in January 2013. Other significant milestones include linkage to Québec’s cap-and-trade system in January 2014 and starting the

²⁴ California Air Resources Board (ARB). 2008. Climate Change Scoping Plan, a framework for change. Website: http://www.arb.ca.gov/cc/scopingplan/document/adopted_scoping_plan.pdf. Accessed February 19, 2022.

²⁵ California Air Resources Board (ARB). 2008. Climate Change Scoping Plan, a framework for change. Website: http://www.arb.ca.gov/cc/scopingplan/document/adopted_scoping_plan.pdf. Accessed February 19, 2022.

compliance obligation for distributors of transportation fuels, natural gas, and other fuels in January 2015.²⁶

The Cap-and-Trade Program provides a firm cap, ensuring that the 2020 Statewide emission limit would not be exceeded. An inherent feature of the Cap-and-Trade Program is that it does not guarantee GHG emissions reductions in any discrete location or by any particular source. Rather, GHG emissions reductions are only guaranteed on an accumulative basis. As summarized by the ARB in the First Update:

The Cap-and-Trade Regulation gives companies the flexibility to trade allowances with others or take steps to cost-effectively reduce emissions at their own facilities. Companies that emit more have to turn in more allowances or other compliance instruments. Companies that can cut their GHG emissions have to turn in fewer allowances. But as the cap declines, aggregate emissions must be reduced. In other words, a covered entity theoretically could increase its GHG emissions every year and still comply with the Cap-and-Trade Program if there is a reduction in GHG emissions from other covered entities. Such a focus on aggregate GHG emissions is considered appropriate because climate change is a global phenomenon, and the effects of GHG emissions are considered cumulative.²⁷

The Cap-and-Trade Program works with other direct regulatory measures and provides an economic incentive to reduce emissions. If California’s direct regulatory measures reduce GHG emissions more than expected, then the Cap-and-Trade Program will be responsible for relatively fewer emissions reductions. If California’s direct regulatory measures reduce GHG emissions less than expected, then the Cap-and-Trade Program will be responsible for relatively more emissions reductions. Thus, the Cap-and-Trade Program assures that California will meet its 2020 GHG emissions reduction mandate:

The Cap-and-Trade Program establishes an overall limit on GHG emissions from most of the California economy—the “capped sectors.” Within the capped sectors, some of the reductions are being accomplished through direct regulations, such as improved building and appliance efficiency standards, the LCFS [Low Carbon Fuel Standard], and the 33 percent [Renewables Portfolio Standard] RPS. Whatever additional reductions are needed to bring emissions within the cap is accomplished through price incentives posed by emissions allowance prices. Together, direct regulation and price incentives assure that emissions are brought down cost-effectively to the level of the overall cap. The Cap-and-Trade Regulation provides assurance that California’s 2020 limit will be met because the regulation sets a firm limit on 85 percent of California’s GHG emissions. In sum, the Cap-and-Trade Program will achieve aggregate, rather than site specific or project-level, GHG emissions reductions.

²⁶ California Air Resources Board (ARB). 2015. ARB Emissions Trading Program. Website: https://ww2.arb.ca.gov/sites/default/files/classic/cc/capandtrade/guidance/cap_trade_overview.pdf. Accessed February 19, 2022.

²⁷ California Air Resources Board (ARB). 2014. First Update to the Climate Change Scoping Plan. Website: https://ww2.arb.ca.gov/sites/default/files/classic/cc/scopingplan/2013_update/first_update_climate_change_scoping_plan.pdf. Accessed February 19, 2022.

Also, due to the regulatory architecture adopted by ARB in AB 32, the reductions attributed to the Cap-and-Trade Program can change over time depending on the State's emissions forecasts and the effectiveness of direct regulatory measures.²⁸

California Senate Bill 32

The Governor signed SB 32 in September of 2016, giving the ARB the statutory responsibility to include the 2030 target previously contained in Executive Order B-30-15 in the 2017 Scoping Plan Update. SB 32 states, "In adopting rules and regulations to achieve the maximum technologically feasible and cost-effective greenhouse gas emissions reductions authorized by this division, the state [air resources] board shall ensure that Statewide greenhouse gas emissions are reduced to at least 40 percent below the statewide greenhouse gas emissions limit no later than December 31, 2030." As such, SB 32 lays the foundation for the legislative reduction targets for 2030.

2017 Scoping Plan

The most recent version of the ARB's Scoping Plan, the 2017 Climate Change Scoping Plan Update, addresses the SB 32 targets and was adopted on December 14, 2017. The major elements of the framework proposed to achieve the 2030 target are as follows:

1. SB 350
 - Achieve 50 percent Renewables Portfolio Standard by 2030.
 - Doubling of energy efficiency savings by 2030.
2. Low Carbon Fuel Standard
 - Increased stringency (reducing carbon intensity 18 percent by 2030, up from 10 percent in 2020).
3. Mobile Source Strategy (Cleaner Technology and Fuels Scenario)
 - Maintaining existing GHG standards for light- and heavy-duty vehicles.
 - Put 4.2 million Zero-Emission Vehicles (ZEVs) on the roads.
 - Increase ZEV buses, delivery and other trucks.
4. Sustainable Freight Action Plan
 - Improve freight system efficiency.
 - Maximize use of near-ZEVs and equipment powered by renewable energy.
 - Deploy over 100,000 zero-emission trucks and equipment by 2030.
5. Short-Lived Climate Pollutant Reduction Strategy
 - Reduce emissions of methane and hydrofluorocarbons 40 percent below 2013 levels by 2030.
 - Reduce emissions of black carbon 50 percent below 2013 levels by 2030.
6. SB 375 Sustainable Communities Strategies
 - Increased stringency of 2035 targets.

²⁸ California Air Resources Board (ARB). 2014. First Update to the Climate Change Scoping Plan. Website: https://ww2.arb.ca.gov/sites/default/files/classic/cc/scopingplan/2013_update/first_update_climate_change_scoping_plan.pdf. Accessed February 19, 2022.

7. Post-2020 Cap-and-Trade Program
 - Declining caps, continued linkage with Québec, and linkage to Ontario, Canada.
 - The ARB will look for opportunities to strengthen the program to support more air quality co-benefits, including specific program design elements. In Fall 2016, the ARB staff described potential future amendments including reducing the offset usage limit, redesigning the allocation strategy to reduce free allocation to support increased technology and energy investment at covered entities and reducing allocation if the covered entity increases criteria or toxics emissions over some baseline.
8. 20 percent reduction in GHG emissions from the refinery sector.
9. By 2018, develop Integrated Natural and Working Lands Action Plan to secure California's land base as a net carbon sink.

California Senate Bill 350: Clean Energy and Pollution Reduction Act

In 2015, the State Legislature approved, and the Governor signed, SB 350, which reaffirmed California's commitment to reducing its GHG emissions and addressing climate change. Key provisions include an increase in the RPS, higher energy efficiency requirements for buildings, initial strategies toward a regional electricity grid, and improved infrastructure for electric vehicle (EV) charging stations. Provisions for a 50 percent reduction in the use of petroleum Statewide were removed from the Bill due to opposition and concern that it would prevent the Bill's passage. Specifically, SB 350 requires the following to reduce Statewide GHG emissions:

- Increase the amount of electricity procured from renewable energy sources from 33 percent to 50 percent by 2030, with interim targets of 40 percent by 2024, and 25 percent by 2027.
- Double the energy efficiency in existing buildings by 2030. This target will be achieved through the California Public Utility Commission, the CEC, and local publicly owned utilities.
- Reorganize the Independent System Operator (ISO) to develop more regional electrified transmission markets and to improve accessibility in these markets, which will facilitate the growth of renewable energy markets in the western United States.²⁹

California Senate Bill 100: Renewable Portfolio Standard Program

On September 10, 2018, Governor Newsom signed SB 100, requiring California electricity utility providers to supply all in-state end users with electricity sourced from renewable or carbon-free sources by 2045. Specifically, SB 100 accelerates previously established RPS goals and requires that the program achieve 50 percent of electricity sourced from renewables by December 31, 2026, 60 percent by December 31, 2030, and 100 percent of electricity sourced from carbon-free sources by December 31, 2045. For clarification, renewable sources, as described herein, includes all renewable sources (e.g., solar, small hydro, wind) but notably omits large-scale hydroelectric and nuclear electricity generation; carbon-free sources include all renewable sources as well as large-scale hydroelectric and nuclear electricity generation.

²⁹ California Legislative Information (California Leginfo). 2015. Senate Bill 350 Clean Energy and Pollution Reduction Act of 2015. Website: https://leginfo.ca.gov/faces/billNavClient.xhtml?bill_id=201520160SB350. Accessed February 3, 2022.

California Assembly Bill 1493: Pavley Regulations and Fuel Efficiency Standards

California AB 1493, enacted on July 22, 2002, required the ARB to develop and adopt regulations that reduce GHGs emitted by passenger vehicles and light-duty trucks. Implementation of the regulation was delayed by lawsuits filed by automakers and by the EPA's denial of an implementation waiver. The EPA subsequently granted the requested waiver in 2009, which was upheld by the U.S. District Court for the District of Columbia in 2011.³⁰

The standards were to be phased in during the 2009 through 2016 model years. When fully phased in, the near-term (2009–2012) standards were to result in an approximately 22 percent reduction compared with the 2002 fleet, and the mid-term (2013–2016) standards were to result in about a 30 percent reduction. Several technologies stand out as providing significant reductions in emissions at favorable costs. These include discrete variable valve lift or camless valve actuation to optimize valve operation rather than relying on fixed valve timing and lift as has historically been done; turbocharging to boost power and allow for engine downsizing; improved multi-speed transmissions; and improved air conditioning systems that operate optimally, leak less, and/or use an alternative refrigerant.³¹

The second phase of the implementation for the Pavley Bill was incorporated into Amendments to the Low Emission Vehicle (LEV) Program referred to as LEV III or the Advanced Clean Cars program. The Advanced Clean Car program combines the control of smog-causing pollutants and GHG emissions into a single coordinated package of requirements for model years 2017 through 2025. The regulation will reduce GHGs from new cars by 34 percent from 2016 levels by 2025. The new rules will reduce pollutants from gasoline and diesel-powered cars, and deliver increasing numbers of zero-emission technologies, such as full battery electric cars, newly emerging plug-in hybrid EVs and hydrogen fuel cell cars. The regulations will also ensure adequate fueling infrastructure is available for the increasing numbers of hydrogen fuel cell vehicles planned for deployment in California.³²

California Senate Bill 375: Sustainable Communities and Climate Protection Act

SB 375 was signed into law on September 30, 2008. According to SB 375, the transportation sector is the largest contributor of GHG emissions, which emits over 40 percent of the total GHG emissions in California. SB 375 states, "Without improved land use and transportation policy, California will not be able to achieve the goals of AB 32." The statute directed ARB to develop GHG reduction targets for Metropolitan Planning Organizations (MPOs) across the State. SB 375 does the following: (1) requires MPOs to include sustainable community strategies in their regional transportation plans for reducing GHG emissions, (2) aligns planning for transportation and housing, and (3) creates specified incentives for the implementation of the strategies. The Southern California Association of Governments (SCAG) is the MPO for the Southern California region, which includes the counties of Los Angeles, Orange, San Bernardino, Riverside, Ventura, and Imperial. ARB established a GHG

³⁰ California Air Resources Board (ARB). 2013. Clean Car Standards—Pavley, Assembly Bill 1493. Website: https://www.gsweventcenter.com/GSW_RTC_References/2015_0915_CleanAirStandards_Pavley.pdf. Accessed February 3, 2022.

³¹ California Air Resources Board (ARB). 2011. Facts About the Advanced Clean Cars Program. Website: ww2.arb.ca.gov/our-work/programs/advanced-clean-cars-program. Accessed February 3, 2022.

³² California Air Resources Board (ARB). 2011. Status of Scoping Plan Recommended Measures.

reduction target for the SCAG region of reducing GHG emissions from automobiles and light-duty trucks by 8 percent per capita by 2020, and by 19 percent by 2035, when compared to 2005 levels.

Southern California Association of Governments 2020–2045 Regional Transportation Plan/Sustainable Communities Strategy

Per SB 375 requirements, Connect SoCal is the 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) adopted by SCAG on September 3, 2020, as an update to the 2016 RTP/SCS. In general, the SCS outlines a development pattern for the region, which, when integrated with the transportation network and other transportation measures and policies, would reduce VMT from automobiles and light-duty trucks and thereby reduce GHG emissions from these sources. It is projected that VMT per capita in the region for year 2045 would be reduced by 5 percent with implementation of the 2020–2045 RTP/SCS compared to a no-plan year 2045 scenario, as well achieving per capita GHG emission reductions relative to 2005 levels of 8 percent in 2020, and 19 percent in 2035, thereby meeting the GHG reduction targets established by ARB for the SCAG region. Overall, the SCS is meant to provide growth strategies that will achieve the regional GHG emissions reduction targets. Land use strategies to achieve the region’s targets include planning for new growth around high quality transit areas and livable corridors and creating neighborhood mobility areas to integrate land use and transportation and plan for more active lifestyles. However, the SCS does not require that local general plans, specific plans, or zoning be consistent with the SCS; instead, it provides incentives to governments and developers for consistency.³³

California Senate Bill 1368: Emission Performance Standards

In 2006, the State Legislature adopted SB 1368, which the Governor subsequently signed into law. SB 1368 directs the California Public Utilities Commission to adopt a performance standard for GHG emissions for the future power purchases of California utilities. SB 1368 seeks to limit carbon emissions associated with electrical energy consumed in California by forbidding procurement arrangements for energy longer than 5 years from resources that exceed the emissions of a relatively clean, combined cycle natural gas power plant. Because of the carbon content of its fuel source, a coal-fired plant cannot meet this standard because such plants emit roughly twice as much carbon as natural gas, combined cycle plants. Accordingly, the new law effectively prevents California’s utilities from investing in, otherwise financially supporting, or purchasing power from new coal plants located in or out of the State. The California Public Utilities Commission adopted the regulations required by SB 1368 on August 29, 2007. The regulations implementing SB 1368 establish a standard for baseload generation owned by, or under long-term contract to, publicly owned utilities of 1,100 lb. CO₂ per megawatt-hour (MWh).

California Senate Bill X7-7: Water Conservation Act

This 2009 legislation directed urban retail water suppliers to set individual 2020 per capita water use targets and begin implementing conservation measures to achieve those goals. Meeting this Statewide goal of 20 percent decrease in demand would have resulted in a reduction of almost 2 million acre-feet in urban water use in 2020.

³³ Southern California Association of Governments (SCAG). 2021. Connect SoCal: The 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy of the Southern California Association of Governments. Website: <https://scag.ca.gov/read-plan-adopted-final-plan>. Accessed February 17, 2022.

California Air Resources Board's Truck and Bus Regulation

The latest amendments to the Truck and Bus regulation became effective on December 31, 2014. The amended regulation requires diesel trucks and buses that operate in California to be upgraded to reduce emissions. Newer heavier trucks and buses must meet particulate matter (PM) filter requirements beginning January 1, 2012. Lighter and older heavier trucks must be replaced starting January 1, 2015. By January 1, 2023, nearly all trucks and buses will need to have 2010 model year engines or equivalent.

The regulation applies to nearly all privately and federally owned diesel-fueled trucks and buses and to privately and publicly owned school buses with a gross vehicle weight rating greater than 14,000 pounds. The regulation provides a variety of flexibility options tailored to fleets operating low use vehicles, fleets operating in selected vocations like agricultural and construction, and small fleets of three or fewer trucks.³⁴

California Code of Regulations Title 20: Appliance Efficiency Regulations

California Code of Regulations, Title 20: Division 2, Chapter 4, Article 4, Sections 1601-1608: Appliance Efficiency Regulations regulates the sale of appliances in California. The Appliance Efficiency Regulations include standards for both federally regulated appliances and non-federally regulated appliances. Twenty-three categories of appliances are included in the scope of these regulations. The standards within these regulations apply to appliances that are sold or offered for sale in California, except those sold wholesale in California for final retail sale outside the State and those designed and sold exclusively for use in recreational vehicles or other mobile equipment.

California Code of Regulations Title 24: Energy Efficiency Standards*Part 6 (Energy Efficiency Standards for Residential and Nonresidential Buildings)*

California Code of Regulations Title 24 Part 6 (California's Energy Efficiency Standards for Residential and Nonresidential Buildings) was first adopted in 1978 in response to a legislative mandate to reduce California's energy consumption. The standards are updated periodically to allow consideration and possible incorporation of new energy-efficient technologies and methods. Energy-efficient buildings require less electricity; therefore, increased energy efficiency reduces fossil fuel consumption and decreases GHG emissions. The 2019 Building Energy Efficiency Standards went into effect on January 1, 2020.

California Code of Regulations Title 24: California Green Building Standards Code

California Code of Regulations Title 24, Part 11, is a comprehensive and uniform regulatory code for all residential, commercial, and school buildings that went into effect on January 1, 2011. The Code is updated on a regular basis, with the most recent update consisting of the 2022 California Green Building Standards Code (CALGreen) that became effective January 1, 2023. Local jurisdictions are permitted to adopt more stringent requirements, as State law provides methods for local enhancements. The Code recognizes that many jurisdictions have developed existing construction ordinances and defers to them as the ruling guidance, provided that they provide a minimum 50 percent diversion requirement. The Code also provides exemptions for areas not served by

³⁴ California Air Resources Board (ARB). 2015. On-Road Heavy-Duty Diesel Vehicles (In-Use) Regulation. Website: <http://www.arb.ca.gov/msprog/onrdiesel/onrdiesel.htm>. Accessed September 22, 2017.

construction and demolition recycling infrastructure. The State Building Code provides the minimum standard that buildings need to meet in order to be certified for occupancy, which is generally enforced by the local building official.

CALGreen (California Code of Regulations [CCR] Title 24, Part 11) requires:

- **Short-term bicycle parking.** If a commercial project is anticipated to generate visitor traffic, provide permanently anchored bicycle racks within 200 feet of the visitors' entrance, readily visible to passers-by, for 5 percent of visitor motorized vehicle parking capacity, with a minimum of one two-bike capacity rack (§ 5.106.4.1.1).
- **Long-term bicycle parking.** For buildings with over 10 tenant-occupants, provide secure bicycle parking for 5 percent of tenant-occupied motorized vehicle parking capacity, with a minimum of one space (§ 5.106.4.1.2).
- **Designated parking.** Provide designated parking in commercial projects for any combination of low-emitting, fuel-efficient and carpool/van pool vehicles as shown in Table 5.106.5.2 (§ 5.106.5.2).
- **Recycling by Occupants.** Provide readily accessible areas that serve the entire building and are identified for the depositing, storage and collection of nonhazardous materials for recycling (§ 5.410.1).
- **Construction waste.** A minimum 65 percent diversion of construction and demolition waste from landfills. (5.408.1, A5.408.3.1 [nonresidential], A5.408.3.1 [residential]). All (100 percent) of trees, stumps, rocks and associated vegetation and soils resulting from land clearing shall be reused or recycled (§ 5.408.3).
- **Wastewater reduction.** Each building shall reduce the generation of wastewater by one of the following methods:
 1. The installation of water-conserving fixtures or
 2. Using nonpotable water systems (§ 5.303.4).
- **Water use savings.** 20 percent mandatory reduction in indoor water use with voluntary goal standards for 30, 35, and 40 percent reductions (§ 5.303.2, A5303.2.3 [nonresidential]).
- **Water meters.** Separate water meters for buildings in excess of 50,000 square feet or buildings projected to consume more than 1,000 gallons per day (§ 5.303.1).
- **Irrigation efficiency.** Moisture-sensing irrigation systems for larger landscaped areas (§ 5.304.3).
- **Materials pollution control.** Low-pollutant emitting interior finish materials such as paints, carpet, vinyl flooring and particleboard (§ 5.404).
- **Building commissioning.** Mandatory inspections of energy systems (i.e., heat furnace, air conditioner, mechanical equipment) for nonresidential buildings over 10,000 square feet to ensure that all are working at their maximum capacity according to their design efficiencies (§ 5.410.2).

California Model Water Efficient Landscape Ordinance

The Model Water Efficient Landscape Ordinance (Ordinance) was required by the AB 1881 Water Conservation Act. The Ordinance required local agencies to adopt a local Landscape Ordinance at least as effective in conserving water as the Model Ordinance by January 1, 2010. Reductions in water use of 20 percent consistent with the SB X7-7 2020 mandate were required. Governor Brown’s Drought Executive Order of April 1, 2015 (Executive Order B-29-15) directed the California Department of Water Resources (DWR) to update the Ordinance through expedited regulation. The California Water Commission approved the revised Ordinance on July 15, 2015, which became effective on December 15, 2015. New development projects that include landscaped areas of 500 square feet or more are subject to the Ordinance. The update requires:

- More efficient irrigation systems
- Incentives for graywater usage
- Improvements in on-site stormwater capture
- Limiting the portion of landscapes that can be planted with high water use plants
- Reporting requirements for local agencies.

California Public Utilities Code

The California Public Utilities Commission (CPUC) regulates privately owned telecommunication, electric, natural gas, water, railroad, rail transit, and passenger transportation companies. It is the responsibility of the CPUC to (1) assure California utility customers receive safe, reliable utility service at reasonable rates; (2) protect utility customers from fraud; and (3) promote a healthy California economy. The Public Utilities Code, adopted by the legislature, defines the jurisdiction of the CPUC.

California Executive Order B-55-18 (GHG Emissions Reduction Targets)

On September 10, 2018, former California Governor Jerry Brown issued Executive Order B-55-18, which established the following greenhouse gas (GHG) emissions reduction target:

By 2045, California shall achieve carbon net neutrality.

Executive Order B-55-18 identifies that new Statewide goal is to achieve carbon neutrality as soon as possible, and no later than 2045, and achieve and maintain net neutrality emissions thereafter. This emissions goal is in addition to the existing targets established by Executive Orders S-3-05 and B-30-15 and SB 32, as described in greater detail below. This Executive Order also directs the ARB to work with other State agencies to identify and recommend measures to achieve this goal.

California Executive Order S-01-07: Low Carbon Fuel Standard

The Governor signed Executive Order S 01-07 on January 18, 2007. The order mandated that a Statewide goal be established to reduce the carbon intensity of California’s transportation fuels by at least 10 percent by 2020. In particular, the Executive Order established an LCFS and directed the Secretary for Environmental Protection to coordinate the actions of the CEC, the ARB, the University of California, and other agencies to develop and propose protocols for measuring the “lifecycle carbon intensity” of transportation fuels.

California Executive Order N-79-20

On September 23, 2020, Governor Gavin Newsom issued Executive Order N-79-20 establishing a goal that 100 percent of new passenger cars and trucks sold in California shall be zero-emission by 2035. The Executive Order also sets a goal that, where feasible, all operations include zero-emission medium- and heavy-duty trucks by 2045, and drayage trucks by 2035. Off-road vehicles have a goal to transition to 100 percent ZEVs by 2035, where feasible. While in-state sales of EVs will increase through 2045, the State does not currently have legislation which will restrict or preclude the use of fossil-fueled vehicles by or after 2045.

California Executive Order S-13-08

Executive Order S-13-08 states that “climate change in California during the next century is expected to shift precipitation patterns, accelerate sea level rise and increase temperatures, thereby posing a serious threat to California’s economy, to the health and welfare of its population and to its natural resources.” Pursuant to the requirements in the order, the 2009 California Climate Adaptation Strategy was adopted, which is the “. . . first Statewide, multi-sector, region-specific, and information-based climate change adaptation strategy in the United States.” Objectives include analyzing risks of climate change in California, identifying and exploring strategies to adapt to climate change, and specifying a direction for future research.

California Executive Order B-30-15

On April 29, 2015, the Governor issued an Executive Order to establish a California GHG emissions reduction target of 40 percent below 1990 levels by 2030. The Governor’s Executive Order aligns California’s GHG reduction targets with those of leading international governments ahead of the United Nations Climate Change Conference in Paris late 2015. The Executive Order sets a new interim Statewide GHG emission reduction target to reduce GHG emissions to 40 percent below 1990 levels by 2030 in order to ensure California meets its target of reducing GHG emissions to 80 percent below 1990 levels by 2050 and directs the ARB to update the Climate Change Scoping Plan to express the 2030 target in terms of MMT CO₂e. The Executive Order also requires the State’s climate adaptation plan to be updated every three years and for the State to continue its climate change research program, among other provisions. As with Executive Order S-3-05, this Executive Order is not legally enforceable against local governments and the private sector. Legislation that would update AB 32 to make post 2020 targets and requirements a mandate is in process in the State Legislature.

California Senate Bill 97 and the California Environmental Quality Act Guidelines Update

Passed in August 2007, SB 97 added Section 21083.05 to the Public Resources Code. SB 97 states “(a) On or before July 1, 2009, the Office of Planning and Research shall prepare, develop, and transmit to the Resources Agency guidelines for the mitigation of GHG emissions or the effects of GHG emissions as required by this division, including, but not limited to, effects associated with transportation or energy consumption; (b) On or before January 1, 2010, the Resources Agency shall certify and adopt guidelines prepared and developed by the Office of Planning and Research pursuant to subdivision (a).”

The 2010 CEQA Amendments first guided public agencies regarding the analysis and mitigation of the effects of GHG emissions in CEQA documents. The 2010 CEQA Amendments fit within the

existing CEQA framework by amending existing CEQA Guidelines to reference climate change. The 2010 CEQA Amendments also revised Appendix F of the State CEQA Guidelines, which focuses on Energy Conservation, and the sample environmental checklist in Appendix G was amended to include GHG questions.

The most recent 2018 CEQA Amendments expanded upon the previous guidance by specifying that:

The lead agency should focus its analysis on the reasonably foreseeable incremental contribution of the project's emissions to the effects of climate change. A project's incremental contribution may be cumulatively considerable even if it appears relatively small compared to Statewide, national, or global emissions. The agency's analysis should consider a timeframe that is appropriate for the project. The agency's analysis also must reasonably reflect evolving scientific knowledge and State regulatory schemes.

In determining the significance of impacts, the lead agency may consider a project's consistency with the State's long-term climate goals or strategies, provided that substantial evidence supports the agency's analysis of how those goals or strategies address the project's incremental contribution to climate change and its conclusion that the project's incremental contribution is not cumulatively considerable.

A lead agency may use a model or methodology to estimate GHG emissions resulting from a project. The lead agency has discretion to select the model or methodology it considers most appropriate to enable decision-makers to intelligently take into account the project's incremental contribution to climate change. The lead agency must support its selection of a model or methodology with substantial evidence. The lead agency should explain the limitations of the particular model or methodology selected for use.

The 2010 changes to CEQA Guidelines Sections 15126.4 and 15130, which address mitigation measures and cumulative impacts, respectively, remained unchanged by the 2018 CEQA Amendment. The cumulative impact discussion requirement (CEQA Guidelines § 15130) simply directs agencies to analyze GHG emissions in an EIR when a project's incremental contribution of emissions may be cumulatively considerable; however, it does not answer the question of when emissions are cumulatively considerable.

Under State CEQA Guidelines Section 15064.4(b), a lead agency should consider the following factors, among others, when determining the significance of impacts from GHG emissions on the environment:

- (1) The extent to which the project may increase or reduce greenhouse gas emissions as compared to the existing environmental setting;
- (2) Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project.
- (3) The extent to which the project complies with regulations or requirements adopted to implement a Statewide, regional, or local plan for the reduction or mitigation of greenhouse gas emissions.

State CEQA Guidelines Section 15183.5 continues to permit programmatic GHG analysis and later project-specific tiering, as well as the preparation of Greenhouse Gas Reduction Plans. Compliance with such plans can support a determination that a project's cumulative effect is not cumulatively considerable, according to Section 15183.5(b).

CEQA emphasizes that the effects of GHG emissions are cumulative and should be analyzed in the context of CEQA's requirements for cumulative impacts analysis (see State CEQA Guidelines § 15130(f)).

Center for Biological Diversity v. California Department of Fish and Wildlife (California Supreme Court GHG Ruling)

In a November 30, 2015 ruling, the California Supreme Court in *Center for Biological Diversity v. California Department of Fish and Wildlife* on the Newhall Ranch project concluded that assessing whether the project was consistent with meeting Statewide emission reduction goals is a legally permissible approach for assessing significance, but the significance finding for the project was not supported by a reasoned explanation based on substantial evidence. The Court offered potential solutions on pages 25–27 of the ruling to address this issue, as summarized below:

Specifically, the Court advised that:

- **Substantiation of Project Reductions from BAU.** A lead agency may use a BAU comparison based on the Scoping Plan's methodology if it also substantiates the reduction a particular project must achieve to comply with Statewide goals. The Court suggested a lead agency could examine the "data behind the Scoping Plan's business-as-usual model" to determine the necessary project-level reductions from new land use development at the proposed location (p. 25).
- **Compliance with Regulatory Programs or Performance Based Standards.** A lead agency "might assess consistency with AB 32's goal in whole or part by looking to compliance with regulatory programs designed to reduce greenhouse gas emissions from particular activities. (See Final Statement of Reasons, supra, at p. 64 [greenhouse gas emissions 'may be best analyzed and mitigated at a programmatic level.'])" To the extent a project's design features comply with or exceed the regulations outlined in the Scoping Plan and adopted by the Air Resources Board or other state agencies, a lead agency could appropriately rely on their use as showing compliance with 'performance based standards' adopted to fulfill 'a statewide . . . plan for the reduction or mitigation of greenhouse gas emissions' (State CEQA Guidelines § 15064.4(a)(2), (b)(3); see also id., § 15064(h)(3) [determination that impact is not cumulatively considerable may rest on compliance with previously adopted plans or regulations, including 'plans or regulations for the reduction of greenhouse gas emissions']) (p. 26).
- **Compliance with GHG Reduction Plans or Climate Action Plans.** A lead agency may utilize "geographically specific GHG emission reduction plans" such as Climate Action Plans or greenhouse gas emission reduction plans to provide a basis for the tiering or streamlining of project-level CEQA analysis (p. 26).

- **Compliance with Local Air District Thresholds.** A lead agency may rely on “existing numerical thresholds of significance for greenhouse gas emissions” adopted by, for example, local air districts (p. 27).

Regional Regulations

The proposed project is within the South Coast Air Basin (SoCAB), which is under the jurisdiction of the South Coast Air Quality Management District (SCAQMD).

SCAQMD Regulation XXVII, Climate Change, Currently Includes Three Rules:

- **Rule 2700:** The purpose of Rule 2700 is to define terms and post global warming potentials.
- **Rule 2701:** The purpose of Rule 2701, Southern California Climate Solutions Exchange, is to establish a voluntary program to encourage, quantify, and certify voluntary, high quality certified GHG emission reductions in the SCAQMD.
- **Rule 2702:** The Greenhouse Gas Reduction Program was adopted on February 6, 2009. The purpose of this rule is to create a GHG Reduction Program for 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.

Local Regulations

County of Riverside General Plan

The County of Riverside adopted its General Plan in December of 2015, and the most recent General Plan Amendments were adopted in 2021.³⁵ The General Plan provides direction to Riverside County decision-makers on how future development should occur. The plan includes policies and programs within various elements and technical appendices that reduce GHG emissions in Riverside County.

The current General Plan reduces GHG emissions through planning measures, such as limiting water consumption, reducing waste, managing growth in a manner that accommodates growing populations without allowing urban sprawl, and through measures to reduce VMT and subsequently, emissions from motorized vehicles. The County’s applicable GHG goals and policies from the Air Quality Element are listed below.

Transportation-Related GHG Emission Reduction Policies

- AQ-20.1** Reduce VMT by requiring expanded multimodal facilities and services that provide transportation alternatives, such as transit, bicycle and pedestrian modes. Improve connectivity of the multimodal facilities by providing linkages between various uses in the developments.
- AQ-20.2** Reduce VMT by facilitating an increase in transit options. In particular, coordinate with adjacent municipalities, transit providers and regional transportation planning agencies to develop mutual policies and funding mechanisms to increase the use of alternative transportation.

³⁵ Riverside County Planning Department. Riverside County General Plan. Website: <https://planning.rctlma.org/General-Plan-Zoning/General-Plan>. Accessed February 3, 2022.

- AQ-20.3** Reduce VMT and GHG emissions by improving circulation network efficiency.
- AQ-20.4** Reduce VMT and traffic through programs that increase carpooling and public transit use, decrease trips and commute times, and increase use of alternative-fuel vehicles.
- AQ-20.5** Reduce emissions from standard gasoline vehicles, through VMT, by requiring all new residential units to install circuits and provide capacity for electric vehicle charging stations.
- AQ-20.6** Reduce emissions from commercial vehicles, through VMT, by requiring all new commercial buildings, in excess of 162,000 square feet, to install circuits and provide capacity for electric vehicle charging stations.

Land Use-Related GHG Emission Reduction Policies

- AQ-20.7** Reduce VMT through increased density in urban centers and encouraging emphasis on mixed use to provide residential, commercial and employment opportunities in closer proximity to each other. Such measures will also support achieving the appropriate jobs-housing balance within the communities.
- AQ-20.8** Reduce VMT by increasing options for non-vehicular access through urban design principles that promote higher residential densities with easily accessible parks and recreation opportunities nearby.
- AQ-20.9** Reduce urban sprawl in order to minimize energy costs associated with infrastructure construction and transmission to distant locations, and to maximize protection of open space.
- AQ-20.20** Reduce the amount of solid waste generation by increasing solid waste recycling, maximizing waste diversion, and composting for residential and commercial generators. Reduction in decomposable organic solid waste will reduce the methane emissions at County landfills.

Energy Efficiency and Energy Conservation Policies

- AQ-20.10** Reduce energy consumption of the new developments (residential, commercial and industrial) through efficient site design that takes into consideration solar orientation and shading, as well as passive solar design.
- AQ-20.11** Increase energy efficiency of the new developments through efficient use of utilities (water, electricity, natural gas) and infrastructure design. Also, increase energy efficiency through use of energy-efficient mechanical systems and equipment.
- AQ-20.12** Reduce the amount of water used for landscaping irrigation through implementation of County Ordinance 859 and increase use of nonpotable water.

Further General Plan policies to reduce GHG emissions focus on promoting water conservation, biota conservation for carbon sequestration, promoting alternative energy sources, controlling GHG emissions from municipal operations, and regional waste reduction objectives. Additionally, the Air Quality Element of the General Plan includes education, coordination, and outreach policies to reduce GHG emissions through voluntary efforts by the public and through programs developed in coordination with other agencies. The General Plan also includes the County of Riverside Climate Action Plan (CAP), which contains further guidance on Riverside County’s GHG inventory reduction goals, thresholds, policies, guidelines, and implementation programs, and is further discussed in the following section.

As part of the General Plan development, CEQA analysis was provided to analyze the potential impacts of the construction and operation of the General Plan. Per County of Riverside EIR No. 521 for General Plan Amendment No. 960, several additional mitigation measures are required for projects in the General Plan area, beyond the land use and air quality policies included in the General Plan document. Mitigation Measures required to reduce the potential GHG impacts of the General Plan include requiring future development projects to be consistent with the goals of the CAP, as adopted at the time of the EIR development (2015).

County of Riverside Climate Action Plan

The County of Riverside originally adopted the *County of Riverside Climate Action Plan* in December 2015, and released a revised version of the CAP in November 2019.³⁶ The CAP qualifies as a plan for the reduction of GHGs under State CEQA Guidelines Section 15183.5, as further discussed later in this section. Consistent with the ARB Scoping Plan, the 2015 CAP utilized a GHG emissions reduction target of a 15 percent decrease from 2008 levels by the year 2020, to meet the GHG reduction goals in AB 32 and SB 375.

The 2019 CAP update includes additional commitments to solar, EV chargers, LED traffic signals, and periodic plan updates. Additionally, the 2019 CAP update includes updated GHG reduction targets and reduction strategies to support emission reduction targets of 40 percent below 1990 levels by 2030, and an ultimate goal of reducing emissions 80 percent below 1990 levels by 2050. These updated goals and supporting measures were developed by the County to ensure consistency with the ARB 2017 Climate Change Scoping Plan, EO B-30-15, and SB 32.

Elsinore Area Plan

The ELAP includes the communities of Warm Springs and Meadowbrook, which are within the planning area, as well as the City of Lake Elsinore. The ELAP sets forth the following policies related to GHG:³⁷

Policy ELAP 5.1 Encourage consolidation of parcels to promote better land use development and project design.

³⁶ Riverside County Planning Department. 2019. Riverside County Climate Action Plan. Website: <https://planning.rctlma.org/CAP>. Accessed February 3, 2022.

³⁷ County of Riverside. 2021. Elsinore Area Plan. Website: https://planning.rctlma.org/Portals/14/genplan/2021/ELAP_6.29.21.pdf. Accessed October 12, 2021.

- Policy ELAP 5.2** Where feasible the development of frontage/service roads should be encouraged to increase and facilitate access from Highway 74 to residential, commercial, and industrial sites.
- Policy ELAP 5.3** The Mixed-Use Area (MUA) Land Use Designation may be found consistent with any nonresidential zoning classification that implements the intent of the land use designation or provides for a community serving use(s).
- Policy ELAP 5.4** Development should be coordinated with Riverside Transit Agency (RTA) to ensure bus routes are identified and bus stops are provided to adequately serve community residents.
- Policy ELAP 5.5** Development may include live-work spaces within the MUAs where appropriate.
- Policy ELAP 5.6** Development should promote a reduction of vehicle miles traveled (VMT) and livable and resilient neighborhoods that provide housing, goods and services, open space, and multi-modal transportation options within proximity to each other.
- Policy ELAP 5.9** Developments should be encouraged to design and locate convenient pedestrian and bicycle connections, bus, or shuttle connections, that increase connections to adjacent and nearby communities and cities, businesses, parks and open space areas, and new transit access opportunities.
- Policy ELAP 5.10** Work on reducing illegal dumping, including hazardous waste, and increase access to affordable composting and recycling facilities; encourage the appropriate permitting of waste sites and reclamation of cleanup sites.

Additionally, the following policy applies to Neighborhood 2 of the Specific Plan area:

- Policy ELAP 5.13** Encourage complete streets, which include sidewalks, greenbelts, and trails to facilitate use by pedestrians and bicyclists where such facilities are well separated from parallel or cross through traffic to ensure pedestrian and cyclist safety.

Mead Valley Area Plan

According to the MVAP, scenic resources include Highway 74 where it connects with I-215 in the southern portion of the MVAP, and the Motte-Rimrock Reserve and Steele Peak. The MVAP sets forth the following policies related to energy:³⁸

- Policy MVAP 3.1** Encourage consolidation of parcels to promote better land use development and project design.

³⁸ County of Riverside. 2019. Mead Valley Area Plan. Website: https://planning.rctlma.org/Portals/14/genplan/2019/ap/MVAP_062618.pdf. Accessed October 12, 2021.

- Policy MVAP 3.2** Where feasible the development of frontage/service roads should be encouraged to increase and facilitate access from Highway 74 to residential, commercial, and industrial sites.
- Policy MVAP 3.3** The Mixed-Use Area (MUA) Land Use Designation may be found consistent with any nonresidential zoning classification that implements the intent of the land use designation or provides for a community serving use(s).
- Policy MVAP 3.4** Development should be coordinated with Riverside Transit Agency (RTA) to ensure bus routes are identified and bus stops are provided to adequately serve community residents.
- Policy MVAP 3.5** Development may include live-work spaces within the MUAs where appropriate.
- Policy MVAP 3.6** Development should promote vehicle miles traveled (VMT) and livable and resilient neighborhoods that provide housing, goods and services, open space, and multi-modal transportation options within proximity to each other.
- Policy MVAP 3.9** Developments should be encouraged to design and locate convenient pedestrian and bicycle connections, bus or shuttle connections, that increase connections to adjacent and nearby communities and cities, businesses, parks and open space areas, and new transit access opportunities.
- Policy MVAP 3.10** Encourage the siting of hazardous waste and hazardous materials facilities, including solid waste and recycling facilities pursuant to policy HC 15.5 to reduce illegal dumping, reduce waste, and increase access to affordable composting and recycling facilities.

Additionally, the following MVAP policy applies to Neighborhood 1 of the Highway 74 planning area:

- Policy MVAP 3.13** Encourage “complete streets” which include street configurations that include sidewalks, greenbelts, and trails to facilitate use by pedestrians and bicyclists where such facilities are well separated from parallel or cross through traffic to ensure pedestrian and cyclist safety.

Highway 74 Community Plan

Currently, the Highway 74 Community Plan sets forth the following general policies related to GHG emissions:³⁹

1. Encourage consolidation of parcels to promote better land use development and project design.
2. Where feasible the development of frontage/service roads should be encouraged to increase and facilitate access from Highway 74 to residential, commercial, and industrial sites.

³⁹ Riverside County Planning Department. 2022. Highway 74 Community Plan. Website: <https://planning.rctlma.org/Advanced-Planning/Highway-74-Community-Plan>. Accessed February 12, 2022.

3. The Mixed-Use Area (MUA) Land Use Designation may be found consistent with any nonresidential zoning classification that implements the intent of the land use designation or provides for a community serving use(s).
4. Development should be coordinated with Riverside Transit Agency (RTA) to ensure bus routes are identified and bus stops are provided to adequately serve community residents.
5. Development may include live-work spaces within the MUAs where appropriate.
6. Development should promote a reduction of VMT and livable and resilient neighborhoods that provide housing, goods and services, open space, and multi-modal transportation options within proximity to each other.
7. Developments should be encouraged to design and locate convenient pedestrian and bicycle connections, bus, or shuttle connections, that increase connections to adjacent and nearby communities and cities, businesses, parks and open space areas, and new transit access opportunities.
8. Work on reducing illegal dumping, including hazardous waste, and increase access to affordable composting and recycling facilities; encourage the appropriate permitting of waste sites and reclamation of cleanup sites.

In addition to the policies discussed above, each neighborhood also has neighborhood-specific policies.

Neighborhood 1

This neighborhood presents opportunity to serve as an entry point from the City of Perris to the Highway 74 planning area, that provides a sense of uniqueness, and contains commercial and clean industry establishments, that support residential components that facilitate a “live, work, and play” environment.

Neighborhood 1 Policies

- N 1.2** Encourage complete streets, which include sidewalks, greenbelts, and trails to facilitate use by pedestrians and bicyclists where such facilities are well separated from parallel or cross through traffic to ensure pedestrian and cyclist safety.
- N 1.3** The County should work with RTA to address any deficiencies or disconnection of transit routes through the neighborhood.

Neighborhood 2

This neighborhood presents opportunity to serve as an entry point from the City of Elsinore to the Highway 74 planning area, that provides a sense of uniqueness, and contains commercial and clean industry establishments, that support residential components that facilitate a “live, work, and play” environment.

Neighborhood 2 Policies

- N 2.2** Encourage complete streets, which include sidewalks, greenbelts, and trails to facilitate use by pedestrians and bicyclists where such facilities are well separated from parallel or cross through traffic to ensure pedestrian and cyclist safety.

Neighborhood 3

This neighborhood presents the opportunity to provide local employment to residents.

Neighborhood 3 Policy

- N 3.1** Encourage effective and comprehensive coordination efforts with the City of Lake Elsinore regarding planning, including circulation policies that affect commercial and industrial development/entitlement activity.

3.8.4 - Thresholds of Significance

Appendix G to the State CEQA Guidelines is a sample Initial Study Checklist that includes questions for determining whether impacts related to GHG emissions and energy consumption are significant. These questions reflect the input of planning and environmental professionals at the Governor's Office of Planning and Research and the California Natural Resources Agency, based on input from stakeholder groups and experts in various other governmental agencies, nonprofits, and leading environmental consulting firms. They also reflect the requirements of laws other than CEQA, such as AB 32 and SB 32. As a result, many lead agencies derive their significance criteria from the questions posed in Appendix G. The County has chosen to do for this project. Thus, the proposed project would have significant effects if the project would:

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

Section 15064.4(b) of the State CEQA Guidelines' 2018 amendments for GHG emissions states that a lead agency may take into account the following three considerations in assessing the significance of impacts from GHG emissions.

- **Consideration No. 1:** The extent to which the project may increase or reduce greenhouse gas emissions as compared to the existing environmental setting.
- **Consideration No. 2:** Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project.
- **Consideration No. 3:** The extent to which the project complies with regulations or requirements adopted to implement a Statewide, regional, or local plan for the reduction or mitigation of greenhouse gas emissions. Such regulations or requirements must be adopted by the relevant public agency through a public review process and must include specific requirements that reduce or mitigate the project's incremental contribution of greenhouse gas emissions. If there is substantial evidence that the possible effects of a particular project are still cumulatively considerable notwithstanding compliance with the adopted regulations

or requirements, an EIR must be prepared for the project. In determining the significance of impacts, the lead agency may consider a project's consistency with the State's long-term climate goals or strategies, provided that substantial evidence supports the agency's analysis of how those goals or strategies address the project's incremental contribution to climate change and its conclusion that the project's incremental contribution is not cumulatively considerable.

The SCAQMD formed a working group to identify GHG emissions thresholds for land use projects that could be used by local lead agencies in the air basin in 2008. The working group developed several different options that are contained in the SCAQMD Draft Guidance Document—Interim CEQA Greenhouse Gas Significance Threshold (Interim GHG Thresholds) that could be applied by lead agencies.⁴⁰ The working group has not provided additional guidance since release of the interim guidance in 2008. 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:

- Tier 1 consists of evaluating whether or not the project qualifies for any applicable exemption under CEQA Guidelines.
- Tier 2 consists of determining whether the project is consistent with a GHG reduction plan. If a project is consistent with a qualifying local GHG reduction plan, it does not have significant GHG emissions.
- Tier 3 consists of screening values, which the lead agency can choose, but must be consistent with all projects within its jurisdiction. A project's construction emissions are averaged over 30 years and are added to the project's operational emissions. If a project's emissions are below one of the following screening thresholds, then the project is less than significant:
 - All land use types: 3,000 MT CO₂e per year.
 - Based on land use type: residential: 3,500 MT CO₂e per year; commercial: 1,400 MT CO₂e per year; or mixed use: 3,000 MT CO₂e per year.
- Tier 4 has the following options:
 - Option 1: Reduce BAU emissions by a certain percentage; this percentage is currently undefined.
 - Option 2: Early implementation of applicable AB 32 Scoping Plan measures.
 - Option 3: 2020 target for service population (SP), which includes residents and employees: 4.8 MT CO₂e/SP/year for projects and 6.6 MT CO₂e/SP/year for plans.
 - Option 3: 2035 target: 3.0 MT CO₂e/SP/year for projects and 4.1 MT CO₂e/SP/year for plans.
- Tier 5 involves mitigation offsets to achieve target significance threshold.

⁴⁰ South Coast Air Quality Management District (SCAQMD). 2008. Draft Guidance Document – Interim CEQA Greenhouse Gas (GHG) Significance Threshold. October. Website: [http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-\(ghg\)-ceqa-significance-thresholds/ghgattachmente.pdf](http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/ghgattachmente.pdf). Accessed February 3, 2022.

The SCAQMD provided substantial evidence in support of its threshold approach. The SCAQMD discusses the draft thresholds in the following excerpt:⁴¹

“The overarching policy objective with regard to establishing a GHG significance threshold for the purposes of analyzing GHG impacts pursuant to CEQA is to establish a performance standard or target GHG reduction objective that will ultimately contribute to reducing GHG emissions to stabilize climate change. Full implementation of the Governor’s Executive Order S-3-05 would reduce GHG emissions 80 percent below 1990 levels or 90 percent below current levels by 2050. It is anticipated that achieving the Executive Order’s objective would contribute to worldwide efforts to cap GHG concentrations at 450 ppm, thus, stabilizing global climate.”

The County of Riverside CAP is a qualified GHG reduction plan under the State CEQA Guidelines Section 15183.5 and meets criteria to allow for streamlined GHG analysis under Tier 2 of the SCAQMD Interim GHG Thresholds. The required components for a qualified GHG reduction plan include:

- Consistency with AB 32 reduction targets, including now SB 32 reduction targets.
- Include emission estimates agreed upon by the ARB or SCAQMD.
- Gone through CEQA review.
- Have an associated Final CEQA document.
- Include emission inventory tracking mechanisms.
- Include process to monitor progress toward reduction targets.
- Include a commitment to remedy excess GHG emissions (enforcement).

Per the SCAQMD Draft Guidance Document,

Tier 2—consists of determining whether or not the project is consistent with a GHG reduction plan that may be part of a local general plan, for example. The concept embodied in this tier is equivalent to the existing concept of consistency in CEQA Guidelines Sections 15064(h)(3), 15125(d), or 15152(a). The GHG reduction plan must, at minimum, comply with AB 32 GHG reduction goals; include emissions estimates agreed upon by either ARB or the AQMD, have been analyzed under CEQA, and have a certified Final CEQA document. Further, the GHG reduction plan must include a GHG emissions inventory tracking mechanism; process to monitor progress in achieving GHG emission reduction targets, and a commitment to remedy the excess emissions if GHG reduction goals are not met (enforcement).

If the proposed project is consistent with the qualifying local GHG reduction plan, it is not significant for GHG emissions. If the project is not consistent with a local GHG reduction plan, there is no approval plan, or the GHG reduction plan does not include all of the components described above, the project would move to [the next tier].

⁴¹ South Coast Air Quality Management District (SCAQMD). 2008. Draft Guidance Document—Interim CEQA Greenhouse (GHG) Significance Threshold Document. Website: <http://www.aqmd.gov/hb/attachments/2008/December/081231a.htm>.

Given that the County of Riverside CAP is a qualified local GHG reduction plan, the proposed project will be analyzed for consistency with the CAP to analyze the potential project's significance for GHG emissions. The proposed project would be determined to conflict with an applicable GHG emissions reduction plan if it would not adhere to applicable GHG reduction measures included in the County's General Plan, the CAP, and ARB's 2017 Scoping Plan.

3.8.5 - Methodology

Model Selection and Guidance

The emission estimates were developed using consistent assumptions (e.g., proposed land uses, construction schedule, trip generation) and models as discussed in Section 3.6, Air Quality.

Construction

Construction emissions can vary substantially from day to day, depending on the level of activity, the specific type of operation, and prevailing weather conditions. Construction-related GHG emissions result from on-site and off-site activities. On-site GHG emissions principally consist of exhaust emissions from heavy-duty construction equipment. Off-site GHG emissions would occur from motor vehicle exhaust from material delivery vehicles and construction worker traffic. The construction parameters used to estimate the proposed project's construction-related GHG emissions were based on applicant-provided data and California Emissions Estimator Model (CalEEMod) default-provided assumptions. Full assumptions are detailed in the CalEEMod modeling output contained in Appendix C.

Operation

Operational sources for land use development projects are typically distinguished as mobile, area, and energy emissions. The major sources and operational parameters used to estimate the proposed project's operation-related GHG emissions are summarized below. Full assumptions are detailed in the CalEEMod modeling output contained in Appendix C. The analysis considers emissions from the proposed project in the year 2025 and 2040 (cumulative buildout of the proposed project).

Motor Vehicles

Motor vehicle emissions refer to exhaust and road dust emissions from the automobiles that would travel to and from the planning area. The emissions were estimated using CalEEMod. The average trip generation rates for project operations were obtained from the project-specific traffic study.

Pass-by trips are made as intermediate stops on the way from an origin to a primary trip destination without a route diversion. Pass-by trips are attracted from traffic passing the plan area on an adjacent street or roadway that offers direct access to the generator. Pass-by trips are not diverted from another roadway. The CalEEMod defaults pass-by trips were used for this analysis.

Landscape Equipment

The use of landscaping equipment (leaf blowers, chain saws, mowers) would generate GHG emissions as a result of fuel combustion based on assumptions in the CalEEMod model.

Electricity

The County of Riverside is provided power by the utility, Southern California Edison (SCE). For the purpose of estimating GHG emissions for this analysis, emission factors from SCE were used. SCE provides estimates of its emission factor per MWh of electricity delivered to its customers. SCE emissions factors for 2025 and 2040 for CO₂ are provided below. The rates for methane and N₂O are based on compliance with the Renewable Portfolio Standard.

Year 2025

- **Carbon dioxide:** 529.11 lb/MWh
- **Methane:** 0.029 lb/MWh
- **Nitrous oxide:** 0.006 lb/MWh

Year 2040

- **Carbon dioxide:** 326.31 lb/MWh
- **Methane:** 0.029 lb/MWh
- **Nitrous oxide:** 0.006 lb/MWh

CalEEMod has three categories for electricity consumption: Title 24-electricity; non-Title 24-electricity; and lighting. CalEEMod default assumptions for the split of electricity use between these three categories were used based on the land use type.

Water and Wastewater

There would be emissions from the combustion of natural gas used for the proposed project (water heaters, heat, etc.). CalEEMod has two categories for natural gas consumption: Title 24 and non-Title 24. CalEEMod defaults were used.

Solid Waste

GHG emissions would be generated from the decomposition of solid waste generated by the proposed project. CalEEMod was used to estimate the GHG emissions from this source. The CalEEMod default for the mix of landfill types is as follows:

- Landfill no gas capture—6 percent;
- Landfill capture gas flare—94 percent;
- Landfill capture gas energy recovery—0 percent.

3.8.6 - Project Impacts and Mitigation Measures

This section discusses potential impacts associated with the project and provides mitigation measures where necessary.

Greenhouse Gas Emissions

Impact GHG-20a:	Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?
Impact GHG-20b:	Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases

Impact Analysis

The proposed project's GHG emissions impact determination is based on the extent to which the project complies with regulations or requirements adopted to implement a Statewide, regional, or local plan for the reduction or mitigation of GHG emissions. The proposed project is located in the County of Riverside. As discussed earlier, the County of Riverside has developed a CAP that meets the description of mitigation found in State CEQA Guidelines Section 15130(a)(3) and Section 15183.5 and allows for streamlined CEQA compliance for new development projects. Additionally, the CAP meets the SCAQMD Draft Guidance Document Interim GHG Threshold requirements for Tier 2 review under CEQA.⁴² The County of Riverside CAP was developed consistent with AB 32, SB 32, and EO S-3-05, and supports State and international efforts to stabilize climate change.⁴³ The project's estimated GHG emissions are provided for informational purposes only.

The County of Riverside CAP establishes a threshold for project screening based on emissions "capture" level at the 90th percentile of project emissions to support State GHG reduction goals by 2020, 2030 and 2050. Consistent with the SCAQMD Draft Guidance Document, a threshold of 3,000 MT CO₂e per year is established in the CAP to define small projects that are considered less than significant with the implementation of efficiency measures, to include: energy efficiency matching or exceeding the Title 24 requirements in effect as of January 2017, and water conservation measures that match the California Green Building Standards Code in effect as of January 2017.

Per the CAP, development projects that are determined to be above the 3,000 MT CO₂e annual emissions level are required to quantify and disclose the anticipated GHG emissions of the proposed development. Future development projects envisioned under the proposed project would be required to estimate their emissions and comply with the applicable requirements in the CAP, consistent with mitigation measure MM GHG-20a, discussed below. The CAP methodology for calculating GHG emissions states that total GHG emissions shall be evaluated as the sum of emissions from both direct and indirect sources, with direct GHG emissions from mobile and stationary sources being determined as the sum of the annual GHG emissions from construction equipment, motor vehicles, landscape equipment, and heating and cooling equipment. Indirect sources consist of the annual emissions from electrical and potable water use, and the generation of solid waste and wastewater.

For informational purposes, the estimated GHG emissions for the proposed project during construction, and at operation with full potential buildout, are outlined below.

Quantification of Greenhouse Gas Emissions for Informational Purposes

Construction Emissions

Although construction-related GHG emissions are temporary in nature, the total amount of emissions could have a substantial contribution to a project's total GHG emissions. SCAQMD recommends that construction-related GHG emissions be amortized over the life of the proposed

⁴² South Coast Air Quality Management District (SCAQMD). 2008. Draft Guidance Document – Interim CEQA Greenhouse Gas (GHG) Significance Threshold. October. Website: [http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-\(ghg\)-ceqa-significance-thresholds/ghgattachmente.pdf](http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/ghgattachmente.pdf). Accessed February 10, 2022.

⁴³ Riverside County Planning Department. 2019. Riverside County Climate Action Plan. Website: <https://planning.rctlma.org/CAP>. Accessed February 10, 2022.

project, which is defined as 30 years, and added to annual operational emissions. As described in the Methodology section of this document, construction-related GHG emissions were modeled using CalEEMod Version 2020.4.0. Construction-related GHG emissions would occur from fossil fuel combustion for heavy-duty construction equipment, material delivery and haul trucks, and construction worker vehicles.

Table 3.8-2 presents the proposed project’s construction-related GHG emissions by construction year and total amortized construction emissions.

Table 3.8-2: Estimated Construction Greenhouse Gas Emissions

Construction Year	Emissions (MT CO ₂ e)
2023	26,170
2024	22,457
2025	20,487
2026	19,967
2027	19,483
2028	19,098
2029	18,651
2030	18,452
2031	18,150
2032	17,920
2033	17,626
2034	17,408
2035	17,217
2036	17,264
2037	17,217
2038	17,217
2039	16,792
Total¹	321,576
Amortized over 30 years²	10,719
Notes: MT CO ₂ e = metric tons of carbon dioxide equivalent. ¹ Figures may not appear to add exactly due to rounding. ² Construction GHG emissions are amortized over the 30-year life of the project. Source: CalEEMod Output (see Appendix C)	

Operational Emissions

Following buildout of the proposed project, long-term operational emissions would be generated from area, energy, and mobile sources. As described in further in the Methodology section, indirect GHG emissions associated with water consumption and solid waste disposal would also be generated by the proposed development. Table 3.8-3 presents the proposed project’s annual operational emission during full operation in 2040, along with the amortized construction emissions.

Table 3.8-3: Estimated Operational Emissions in 2040

Emissions Source	2040 Emissions (MT CO ₂ e/year)
Area	2,989
Residential Energy–Electricity	7,248
Residential Energy–Gas	7,885
Nonresidential Energy–Electricity	13,862
Nonresidential Energy–Gas	1,134
Mobile	198,659
Waste	7,838
Water	7,927
Amortized Construction	10,719
Total Project Emissions¹	258,262
SCAQMD Tier 3 Threshold	3,000
Exceed Threshold?	Yes
Notes: MT CO ₂ e = metric tons of carbon dioxide equivalent; SP = service population. ¹ Totals may not appear to add exactly due to rounding. Source of emissions: CalEEMod Output (see Appendix C). Source of thresholds: South Coast Air Quality Management District (SCAQMD). 2008. Interim CEQA GHG Significance Threshold for Stationary Sources. Website: http://www.aqmd.gov/home/rules-compliance/ceqa/air-quality-analysis-handbook/ghg-significance-thresholds . Accessed February 3, 2022.	

As shown above, the proposed project’s annual operational plus amortized construction emissions would generate an estimated 258,262 MT CO₂e per year, which exceeds the applicable CAP significance threshold of 3,000 MT CO₂e per year. Thus, GHG emissions generated by the proposed project would be considered potentially significant. It should be noted that the analysis above includes estimated emissions resulting from full project buildout in 2040, and does not account for the land uses, or subtract the associated emissions, that were previously approved to be built in the planning area under already approved plans. Thus, the analysis included herein provides a conservative estimation of emissions that could occur due to the construction and operation of future implementing projects.

GHG Emissions Reductions Achieved through Compliance with the County of Riverside CAP

As further discussed in the County of Riverside CAP, projects that exceed the 3,000 MT CO₂e annual emissions threshold are required to mitigate emissions. The CAP includes a methodology for mitigation using a points system, whereby a proposed project that scores 100 points or higher for including mitigation measures in the CAP “Screening Tables” shall be considered to have a less than significant individual impact for GHG emissions and be consistent with the CAP. Alternatively, per the CAP, development projects not using the Screening Tables can use the latest version of CalEEMod to model project buildout year levels of efficiency and include project design features and/or mitigation measures to reduce GHG emissions.

The CAP Screening Tables provide a selection of mitigation measures that reduce a project’s GHG emissions to support the County and State GHG emissions reductions goals and targets. Table 1 of the CAP includes mitigation measures specific to residential developments, while Table 2 outlines mitigation measures for commercial developments and public facilities. There are mitigation measures included to improve the energy efficiency for the building envelope, indoor space efficiencies, measures to improve clean energy utilization, water conservation measures, waste to landfill reduction, and measures to promote the use of alternative transportation and sustainable development design, such as mixed-use development and increased residential density. The following discussion provides further description of the mitigation measures included in Tables 1 and 2 of the CAP.

Building Envelope

Mitigation measures included in the CAP to promote energy efficiency include methods to increase the efficiency of the building envelope beyond efficacy standards required by current building codes. Points are assigned for a range of efficiency measures utilizing established performance standards. Specific measures include enhancing the insulation of the unit (7-11 points assigned), enhancing the efficiency of windows (3-5 points), installing cool roofs to increase solar reflectance and to decrease thermal emittance (6-8 points), minimizing leaks in the building envelope (5-11 points), and implementing thermal storage design characteristics (1-2 points).

Indoor Space Efficiencies

To further enhance the efficiency of new buildings, there are also mitigation measures included in the CAP Screening Tables to improve indoor space efficiencies. These measures include enhancements to the heating/cooling distribution system, such as enhanced duct insulation or distribution loss reduction (4-7 points). The installation of high efficiency heating, ventilation, and air conditioning (HVAC) systems and water heaters also have points assigned, with a range in points depending on the efficiency of the system upgrade, from between 2-11 points. Increased daylighting, high efficiency lighting, and the installation of Energy Star rated appliances also have point values assigned.

Miscellaneous Residential/Commercial Building Efficiencies

Building placement such that the orientation of the building optimizes natural heating, cooling, and lighting (3 points), the use of shading by either vegetation or overhangs during summer (2 points), and EPA Energy Star for Homes (15 points) are all efficiency measures with assigned point values. Additionally, independent energy efficiency calculations may be conducted for a project with the

support of documentation, points may be further assigned for other innovative project design features that increase the energy efficiency of a project, and existing residential units or commercial may be retrofit to increase energy efficiency, with points assigned evaluated on a per-project basis.

Clean Energy

The CAP Screening Tables include measures that promote clean energy, including promoting renewable energy generation through the use of solar photovoltaic panels (8-34 points), wind turbines (8-34 points), and renewable energy projects or other renewable energy generation designs that can be assessed for assigned points on a case-by-case basis.

Irrigation and Landscaping

The CAP Screening Tables include measures to promote water conservation, including water efficient landscaping, water efficient irrigation systems, and stormwater reuse systems that go beyond existing water efficiency standards are measures included in the CAP Screening Tables to promote water conservation. Measures assigned points may include limiting conventional turf on a project (up to 4 points), utilizing only California native plants that require no/limited irrigation (5 points), utilizing low precipitation irrigation spray heads or drip irrigation (1-2 points), or implementing other innovative on-site stormwater reuse systems for assigned points to be evaluated on a project-specific basis.

Potable Water

The CAP Screening Tables list measures to reduce potable water consumption, including water efficient fixtures such as showerheads (2 points), toilets (2 points), faucets (2 points), dishwasher (1 point), washing machine (1 point) and EPA WaterSense Certification (7 points). For commercial developments, a project may also gain points through establishing a commercial water operations program to reduce water loss from pools and other water features.

Increase Reclaimed Water Use

The CAP Screening Table 1 states 5 points could be assigned if 5 percent of the total project's water use comes from recycled/reclaimed water. For commercial/industrial developments, up to 5 points may be assigned for installing a greywater irrigation system on-site.

Increase Residential Density

Designing the project with increased densities, where allowed by the General Plan and/or Zoning Ordinance, reduces GHG emissions associated with traffic in several ways. 1 point is allowed for each 10 percent increase in density beyond 7 units/acre, up to 500 percent (50 points).

Mixed-Use Development

Mixes of land uses that complement one another in a way that reduces the need for vehicle trips can greatly reduce GHG emissions. The point value of mixed-use projects will be determined based upon a Transportation Impact Analysis (TIA) demonstrating trip reductions and/or reductions in VMT. For example, diversity of land uses complementing each other could be assigned 2–28 points, and increased transit accessibility could be assigned 1–25 points.

Traffic Flow Management Improvements

Techniques for improving traffic flow include traffic signal coordination to reduce delay, incident management to increase response time to breakdowns and collisions, Intelligent Transportation Systems (ITS) to provide real-time information regarding road conditions and directions, and speed management to reduce high free-flow speeds. For example, signal synchronization could be assigned 1 point per signal, and traffic signals connected to existing ITS could be assigned 3 points per signal.

Increase Public Transit

The point value of a project's ability to increase public transit use will be determined based upon a TIA demonstrating decreased use of private vehicles and increased use of public transportation. Increased transit accessibility could be assigned 1–15 points.

Adopt and Implement a Bicycle Master Plan to Expand Bike Routes Around the County

The Bicycle Master Plan would improve sidewalk and bicycle facilities that promote active transportation as well as the public health and air quality benefits. The CAP Screening Tables include measures such as providing sidewalks on both sides of the street (1 point), providing pedestrian linkage between residential and commercial uses within 1 mile (3 points), and providing bicycle path linkages between residential and transit (5 points).

Electrify the Fleet

EVs have no exhaust emissions, and their energy efficiency is higher than that of gasoline or diesel vehicles with similar capacities. The CAP Screening Table 1 includes measures such as installing EV charging stations for each residential unit included in the project (8 points) and provide neighborhood EVs safe routes between the planning area and other land uses (5 points). For commercial developments, fleet electrification measures in Table 2 similarly include providing circuit and capacity in garages/parking areas, installing EV charging stations, and providing neighborhood EV routes within the planning area.

Reduce Waste to Landfills

Riverside County initiated recycling program waste diversion goals require coordination in neighborhoods and with commercial developments in order to be achieved. The CAP Table 1 includes providing green waste composting bins at each residential unit as a measure (4 points), and Table 2 includes measures for commercial developments such as providing separated recycling bins (2 points) and fulfilling on-site recycling goals of 80 percent diversion of solid waste (5 points).

Other GHG Reduction Feature Implementation

This measure allows innovation by the applicant to provide residential or commercial design features for the GHG emissions from construction and/or operation of the project not provided in the tables. Note that engineering data will be required documenting the GHG reduction amount and point values given based upon emission reductions calculations using approved models, methods, and protocols.

Ride Sharing and Bike-to-Work Programs Within Businesses

This measure encourages telecommuting and alternative work schedules reduces the number of commute trips and therefore VMT traveled by employees. Alternative work schedules could take the

form of staggered starting times, flexible schedules, or compressed work weeks. This measure also includes Car/Vanpools, employee bicycle/pedestrian programs, and shuttle/transit programs that receives a range of points based on the specific measures.

Preferential Parking

This measure encourages providing reserved preferential parking spaces for car-share, carpool, and ultra-low or zero-emission vehicles (1 point) and providing larger parking spaces that can accommodate vans used for ride sharing programs (1 point).

As described above, the measures that are included in the CAP Screening Tables are typical of sustainable project design elements and are generally technologically and economically feasible for implementation by project applicants. As further discussed in the CAP, these measures can significantly reduce the GHG emissions of a project. Additionally, the wide variety of mitigation measures included in the Screening Tables allows for project proponents to select measures appropriate for their specific development, offering flexibility for future projects.

The County of Riverside CAP qualifies as a plan for the reduction of GHGs under State CEQA Guidelines Section 15183.5 and meets criteria to allow for streamlined GHG analysis under Tier 2 of the SCAQMD Interim GHG Thresholds. The required components for a qualified GHG reduction plan include:

- Consistency with AB 32 reduction targets, including now SB 32 reduction targets.
- Include emission estimates agreed upon by the ARB or SCAQMD.
- Gone through CEQA review.
- Have an associated Final CEQA document.
- Include emission inventory tracking mechanisms.
- Include process to monitor progress toward reduction targets.
- Include a commitment to remedy excess GHG emissions (enforcement).

Consistent with the ARB Scoping Plan, the 2015 CAP utilized a GHG emissions reduction target of a 15 percent decrease from 2008 levels by the year 2020, to meet the GHG reduction goals in AB 32 and SB 375. The 2019 CAP update includes additional commitments to solar, EV chargers, LED traffic signals, and periodic plan updates. Additionally, the 2019 CAP update includes updated GHG reduction targets and reduction strategies to support emission reduction targets of 40 percent below 1990 levels by 2030, and an ultimate goal of reducing emissions 80 percent below 1990 levels by 2050. These updated goals and supporting measures were developed by the County to ensure consistency with the ARB 2017 Climate Change Scoping Plan, EO B-30-15, and SB 32.

In addition to the County of Riverside CAP, the County of Riverside General Plan, and the SCAG 2020-2045 RTP/SCS were developed, in part, to reduce GHG emissions and are important regional plans to take into consideration when assessing the potential GHG impacts of the proposed project. The consistency of the proposed project with these plans is further discussed below.

The Air Quality Element included in the General Plan includes GHG goals and policies which would be achieved through the implementation of the types of mitigation measures included in the CAP Screening Tables. Policies included in the General Plan include a focus on reducing the energy

consumption of new developments (residential, commercial and industrial) through efficient site design that takes into consideration solar orientation and shading; a focus on increasing the energy efficiency of new developments through efficient use of utilities (water, electricity, natural gas) and infrastructure design, and the use of energy-efficient mechanical systems and equipment; water conservation policies through reducing water used for landscaping irrigation and increasing the utilization of nonpotable water; and policies to promote the reduction of solid waste generated, through increasing recycling efforts, maximizing waste diversion, and increasing composting.⁴⁴ Projects implementing the wide-ranging mitigation measures included in the CAP Screening Tables, as described above, would also be consistent with the GHG goals and policies included in the General Plan.

The SCAG 2020-2045 RTP/SCS, Connect SoCal, was adopted September 3, 2020. The RTP/SCS identifies multimodal transportation investments, including bus rapid transit, light rail transit, heavy rail transit, commuter rail, high-speed rail, active transportation strategies (such as bike paths and pedestrian connections), transportation demand management strategies, transportation systems management, highway improvements (interchange improvements, high-occupancy vehicle lanes, high-occupancy toll lanes), arterial improvements, goods movement strategies, aviation and airport ground access improvements, and operations and maintenance to the existing multimodal transportation system. Connect SoCal identifies that land use strategies that focus on new housing and job growth in areas served by high quality transit and other opportunity areas would be consistent with a land use development pattern that supports and complements the proposed transportation network. The overall GHG emission reduction strategy included in the 2020-2045 RTP/SCS is to allow the region to grow in more compact communities in existing urban areas; provide neighborhoods with efficient and plentiful public transit and abundant and safe opportunities to walk, bike, and pursue other forms of active transportation; and to preserve more of the region's remaining natural lands. The projected regional development pattern in Connect SoCal would reduce per capita GHG emissions originating from VMTs and support the achievement the GHG emission reduction targets for the SCAG region, as established by ARB.

Implementation of the proposed project would increase the development intensities near Highway 74, a major transportation corridor. The guiding principles of the proposed project include encouraging consolidation of parcels to promote better land use development and project design, encouraging access to Highway 74 through frontage/service road development, coordinating development with the RTA to ensure bus routes are provided to community residents, including live-work spaces, promoting a reduction in VMT, promoting planned neighborhoods that provide housing, goods and services, open space, and multi-model transportation options within proximity to each other. The current Community Plan policies also state that developments should be encouraged to design and locate convenient pedestrian and bicycle connections, bus, or shuttle connections that increase connections to adjacent and nearby communities and cities, businesses, parks and open space areas, and new transit access opportunities. As described above, the guiding principles of the proposed project are generally consistent with the SCAG RTP/SCS and the GHG reduction policies included in the County General Plan.

⁴⁴ Riverside County Planning Department. Riverside County General Plan. Website: <https://planning.rctlma.org/General-Plan-Zoning/General-Plan>. Accessed February 10, 2022.

In jurisdictions where a qualified GHG emission reduction strategy has been reviewed under CEQA and adopted by decision-makers, compliance with the GHG emission reduction strategy would reduce a project's contribution to cumulative and project-level GHG emission impacts to a less than significant level.⁴⁵ The County of Riverside CAP was prepared in conformance with State CEQA Guidelines Section 15183.5 and is considered a qualified reduction strategy. To ensure consistency with the County of Riverside CAP and that the GHG emissions of future development projects envisioned under the proposed project are less than significant, MM GHG-20a is required for future development projects in the planning area. Future implementing projects would also be required to comply with the CAP's measure of Clean Energy (R2-CE1) that requires the incorporation of on-site renewable energy production (including but not limited to solar) for any tentative tract map, plot plan, or conditional use permit that proposes to add more than 75 new dwelling units of residential development or one or more new buildings totaling more than 100,000 gross square feet of commercial, office, industrial, or manufacturing development.

With implementation of MM GHG-20a, the proposed project would be consistent with County of Riverside CAP, and therefore the proposed project and future development projects in the planning area that comply with MM GHG-20a would have cumulative and project-level GHG emissions that are less than significant. With implementation of MM GHG-20a, the proposed project would also develop land uses consistent with the goals of the County of Riverside General Plan and CAP, and the SCAG 2020-2045 RTP/SCS. Through compliance with the CAP, the proposed project would not generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment, and would not conflict with any applicable plan, policy, or regulation of an agency, adopted for the purpose of reducing the emissions of GHGs. Thus, the proposed project's GHG impacts would be less than significant after mitigation.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

MM GHG-20a Prior to issuance of building permits, the project applicant/developers shall prepare and submit documentation to the County of Riverside that demonstrates that proposed development projects in the planning area that are determined to generate 3000 metric tons (MT) of carbon dioxide equivalent (CO₂e) or more per year, and which are not exempt from CEQA, will achieve a score of 100 points or greater through the implementation of measures included in the County of Riverside Climate Action Plan (CAP) Screening Tables, or shall otherwise mitigate significant GHG emissions per County of Riverside-approved methodologies included in the CAP. The project applicant shall prepare documentation consistent with the Screening Tables or other County of Riverside CAP requirements applicable at the time of submittal. This measure will be enforced as a condition of approval implemented by the County of Riverside.

⁴⁵ The required components of a "qualified" Greenhouse Gas Reduction Strategy or Plan are described in Section 15183.5 of the CEQA Guidelines and in the SCAQMD Draft Guidance Document – Interim CEQA Greenhouse Gas Significance Threshold (2008).

Level of Significance After Mitigation

Less than significant impact.

3.9 - Hazards and Hazardous Materials

3.9.1 - Introduction

This section describes the existing setting regarding hazards and hazardous materials and potential effects from project implementation on the site and its surrounding area. Descriptions and analyses in this section are based in part on information contained in the Government Records Report, prepared by Envirosite Corporation on September 16, 2021, contained in Appendix F of this Draft Program EIR.

3.9.2 - Environmental Setting

Hazardous Materials

Hazardous materials, as defined by the California Code of Regulations are substances with certain physical properties that could pose a substantial present or future hazard to human health or the environment when improperly handled, disposed, or otherwise managed. Hazardous materials are grouped into the following four categories, based on their properties:

- Toxic—causes human health effects
- Ignitable—has the ability to burn
- Corrosive—causes severe burns or damage to materials
- Reactive—causes explosions or generates toxic gases

Hazardous waste is any hazardous material that is discarded, abandoned, or slated to be recycled. If improperly handled, hazardous materials and hazardous waste can result in public health hazards if released into the soil or groundwater or through airborne releases in vapors, fumes, or dust. Soil and groundwater having concentrations of hazardous constituents higher than specific regulatory levels must be handled and disposed of as hazardous waste when excavated or pumped from an aquifer. California Code of Regulations, Title 22, Sections 66261.20–24 contains technical descriptions of characteristics of hazardous waste.

Planning Area

The planning area is currently occupied by land uses along the Highway 74 Corridor, which are primarily commercial and residential uses. The project area contains various levels of architectural styles and community design elements. The project area is primarily characterized by medium-sized homes on large lots (1–2 acres). The commercial land uses that exist are primarily based within the “manufacturing-service-industry.” There are three Disadvantaged Unincorporated Communities (DUC) within the project area: Warm Springs, Good Hope, and Meadowbrook.

Planning Area History

Envirosite Corporation conducted a Government Records Report for the planning area. The purpose of this report was to identify potential hazards that could affect new sensitive receptors in the planning area. The study used federal and State databases to identify the hazardous risk posed to sensitive receptors by the hazardous materials storage, use, generation, and transportation within the planning area. A summary of the resulting information is provided in Table 3.9-1, below.

After reviewing the Government Records Report for information on potential hazards of concern, Table 3.9-1 presents the most likely problematic existing hazards in the planning area, including active underground storage tank (UST) and Leaking Underground Storage Tanks (LUST) sites, solid waste and recycling facilities, Emergency Response Notification System (ERNS) database records. Additionally, Resource Conservation and Recovery Act (RCRA) database results are summarized in

Table 3.9-2 below. The Government Records Report includes sites within the planning area, as well as sites within an 0.25-mile radius of the Community Plan boundaries.

Table 3.9-1: Key Hazardous Materials Users/Facility Summary

User/Facility	Address	Hazardous Materials Description
Kayo Oil Co./Circle K No. 340 (lower elevation)	1071 Indian Hills Circle, Perris	An active UST and a closed LUST cleanup site located 0.07 mile northeast of Highway 74 in Perris. Total petroleum hydrocarbons-gasoline (TPHg), Benzene, and methyl tert-butyl ether (MTBE) were detected in the soil. The LUST case was closed on April 28, 2011.
Costco Wholesale No. 746 (lower elevation)	29223 Central Avenue, Lake Elsinore	Active UST located 0.147 mile southwest of Highway 74 in Lake Elsinore.
Circle K No. 2709427/Mobil No. 18 AAH (lower elevation)	29300 Central Avenue, Lake Elsinore	Gasoline service station with an active UST site and a closed LUST cleanup site. The UST was opened on July 10, 2013, and last inspected on August 2, 2021. The LUST cleanup site was opened on November 25, 2011, and completed and closed on January 13, 2011.
SAF INC./ARCO No. 5618 (lower elevation)	29355 Central Avenue, Lake Elsinore	Closed LUST cleanup site opened on November 22, 2002, due to the presence of MTBE in soil samples. The LUST case was closed on June 16, 2010.
Goodmeadow Fire Station No. 9 (lower elevation)	21565 Steel Peak Drive	A LUST cleanup site opened on January 27, 1992, due to diesel soil contamination. The LUST case was closed on January 26, 1995.
A. Lua Recycling, Inc. (lower elevation)	18938 Mermack Avenue	An operational, active solid waste and recycling site with an opening date of April 19, 2006.
City of Perris Closed Landfill	West end of West 11 th Street, Perris	A closed solid waste and recycling site.
Lowell W. Dexter	22425 Mapes Road, Good Hope	ERNS database record of an airplane that crashed into the backyard of a resident on April 30, 2007. No actions were taken for cleanup.
Source: EnviroSite Corporation. 2021. Government Records Report, September 16.		

Table 3.9-2: Sites in Regulatory Agency Files and Databases

Type of Site	Number of Sites	Description
Federal RCRA list of licensed non-generators	21	RCRA Non-generator sites are those sites no longer generating hazardous waste as defined by RCRA. Sites identified in the planning area include retail stores.
Federal RCRA list of small quantity generators	7	Small Quantity Generators (SQGs) generate more than 100 kilograms, but less than 1,000 kilograms of hazardous waste per month. Sites identified in the planning area include gas stations, construction contractors, etc.
State RCRA Generators List of hazardous waste generators	140	Sites identified in the planning area include businesses in the construction industry, auto body and automotive industry, retail stores, medical facilities, and landscaping industry (Appendix F).
California Environmental Protection Agency (Cal/EPA) Regulated Sites from the Certified Unified Program Agencies (CUPA)	36	This program protects Californians from hazardous waste and hazardous materials by ensuring local regulatory agencies consistently apply Statewide standards when they issue permits, conduct inspections, and engage in enforcement activities.
<p>Notes:</p> <ol style="list-style-type: none"> 1. Some sites appear on multiple databases. 2. A generator is any person who produces a hazardous waste as listed or characterized in part 261 of Title 40 of the Code of Federal Regulations. Recognizing that generators produce waste in different quantities, the United States Environmental Protection Act (EPA) established three categories of generators in the regulations: very small quantity generators, small quantity generators, and large quantity generators. <p>Source: Envirosearch Corporation. 2021. Government Records Report, September 16.</p>		

3.9.3 - Regulatory Framework

Federal, State, and local county regulations pertain to the use and storage of hazardous materials. This section discusses each of the agencies' roles in regulating hazardous materials.

Federal

Resource Conservation and Recovery Act

RCRA Subtitle C addresses hazardous waste generation, handling, transportation, storage, treatment, and disposal. RCRA establishes a system that uses hazardous waste manifests to track the movement of hazardous waste from generation to disposal (cradle-to-grave). The 1984 amendments to 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 wastes within their jurisdictions. Subtitle I requires monitoring and containment systems for USTs that hold hazardous materials. Owners of USTs must demonstrate financial assurance for the cleanup of a potential leaking tank. As of 2001, an estimated 85 percent of USTs complied with the required standard.

Comprehensive Environmental Response, Compensation, and Liability Act

The U.S. Congress passed the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA or Superfund) in 1980. The purpose of CERCLA is to identify and remediate 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.

Superfund Amendments and Reauthorization Act

The Superfund Amendments and Reauthorization Act (SARA) primarily pertain to emergency management of accidental releases. SARA requires the formation of State and local emergency planning committees, which are responsible for collecting material handling and transportation data for use as a basis for their planning. Chemical inventory data is made available to the public under the “right-to-know” provision of this Act. SARA also requires annual reporting of continuous emissions and accidental releases of specified compounds. These annual submissions are compiled into a nationwide Toxics Release Inventory.

Hazardous Material Transportation Act

The Hazardous Materials Transportation Act serves as the statutory basis for the body of regulations designed to ensure the safe transport of hazardous materials via water, rail, highways, air, or pipelines. This Act includes provisions for material classification, packaging, marking, labeling, placarding, and shipping documentation.

The United States Department of Transportation (USDOT), along with the Federal Highway Administration and the Federal Railroad Administration, regulate the transportation and handling of hazardous materials through the federal Hazardous Materials Transportation Act (HMTA) and through RCRA. Through these regulations, Congress directed the EPA to create regulations to manage hazardous materials from “the cradle to the grave.” Under this mandate, the EPA developed strict requirements for all aspects of hazardous materials management, including the treatment, storage, and disposal of hazardous substances. In addition to those federal requirements, states may develop more stringent requirements that are broader in scope than the federal regulations.

In California, the California Department of Transportation (Caltrans) implements, and the California Highway Patrol (CHP) enforces these regulations. Carriers that violate these regulatory requirements subject themselves to possible civil and criminal liability.

Asbestos and Lead-based Paint

The EPA declared asbestos a hazardous air pollutant under the Clean Air Act (CAA) and distributed National Emissions Standards for Hazardous Air Pollutants (NESHAP) that regulates the demolition and/or renovation of facilities containing asbestos. The NESHAP imposes procedures for the handling and disposal of asbestos-containing materials (ACM). In California, most of the State’s regional air districts are delegated by the EPA to implement the NESHAP requirements. The California Air Resources Board (ARB) enforces the NESHAP in air districts not delegated by the EPA.

The first federal regulatory effort regarding lead was the Lead-Based Paint Poisoning Prevention Act of 1971 (LBPPA), which defined lead as a serious health threat and called for the detection and

abatement of existing lead-based paint (LBP) hazards in residential structures. The LBPPA amendments in 1973 designated the United States Department of Housing and Urban Development (HUD) as the lead agency in eliminating LBP hazards in residential dwellings. The Housing and Community Development Act of 1987 (HCDA) changed the definition of LBP hazards to include all surfaces, including exterior ones. The latest source of HUD authority regarding lead is the Residential Lead-Based Paint Hazard Reduction Act of 1992 (Title X). Along with the Lead-Based Paint Exposure Reduction Act of 1992 (Title IV) of the Toxic Substances Control Act (TSCA), Title X outlines needed actions aimed at reducing lead exposure to children and the general public.

State

California Health and Safety Code

Cal/EPA has established rules governing the use of hazardous materials and the management of hazardous wastes. California Health and Safety Code Sections 25531, *et seq.*, incorporate the requirement of SARA and the CAA as they pertain to hazardous materials. Health and Safety Code Section 25534 directs facility owners storing or handling acutely hazardous materials in reportable quantities to develop a Risk Management Plan (RMP). The RMP must be submitted to the appropriate local authorities, the designated local administering agency, and the EPA for review and approval.

California Department of Forestry and Fire Protection

The California Department of Forestry and Fire Protection (CAL FIRE) is dedicated to the fire protection and stewardship of over 31 million acres of California's privately owned wildlands. In addition, CAL FIRE provides varied emergency services in 36 of California's 58 counties via contracts with local governments. CAL FIRE's firefighters, fire engines, and aircraft respond to an average of more than 5,600 wildland fires each year. Those fires burn nearly 172,000 acres annually.

According to CAL FIRE's Fire Hazard Severity Zones in the State Responsibility Area (SRA) Map, the project site is not located in a High Fire Hazard Severity Zone within an SRA.

California Strategic Fire Plan

The 2018 Strategic Fire Plan is a Statewide fire plan developed as a cooperative effort between the Board of Forestry and Fire Protection (Board) and CAL FIRE. The Fire Plan builds upon the concept first developed in the 1996 California Fire Plan, which led to collaborative efforts in fire prevention. The primary goals of the 2018 Strategic Fire Plan that are critical to reducing and preventing the impacts of fire revolve around both suppression and prevention efforts. The 2018 Fire Plan reflects CAL FIRE's focus on (1) fire prevention and suppression activities to protect lives, property, and ecosystem services, and (2) natural resource management to maintain the State's forests to meet California's climate change goals and to serve as important habitat for adaptation and mitigation. Major components include improved availability and use of information on hazard and risk assessment; land use planning, including general plans, new development, and existing developments; shared vision among communities and the multiple fire protection jurisdictions, including county-based plans and community-based plans such as Community Wildfire Protection Plans (CWPPs); establishing fire resistance in assets at risk, such as homes and neighborhoods and fire resilience of wildland environments; integrate fire and vegetative fuels management practices;

shared vision among multiple fire protection jurisdictions and agencies; levels of fire prevention, natural resource management, fire suppression, and related services; and post-fire recovery.

The California Hazardous Waste Control Law

The Hazardous Waste Control Law (HWCL) is the primary hazardous waste statute in the State of California. HWCL implements RCRA as a “cradle-to-grave” waste management system in the State. The HWCL states that generators have the primary duty to determine whether their wastes are hazardous and to ensure their proper management. HWCL also establishes criteria for the reuse and recycling of hazardous wastes. 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 a number of types of wastes and waste management activities that are not covered by RCRA.

California Code of Regulations

Most State and federal regulations and requirements that apply to generators of hazardous waste are spelled out in the California Code of Regulations, Title 22, Division 4.5. Title 22 contains detailed compliance requirements for hazardous waste generators and transporters, and treatment, storage, and disposal facilities. Because California is a fully authorized State according to RCRA, most RCRA regulations (those contained in 40 Code of Federal Regulations 260, *et seq.*) have been duplicated and integrated into Title 22. However, because the California Department of Toxic Substances Control (DTSC) regulates hazardous waste more stringently than the United States Environmental Protection Agency (EPA), Title 22 contains fewer exemptions and exclusions than 40 California Code of Regulations 260. As with the California Health and Safety Code, Title 22 also regulates a wider range of waste types and waste management activities than RCRA regulations in 40 Code of Federal Regulations 260. To make regulatory requirements more accessible and easier to follow, California compiled the hazardous materials, waste, and toxics-related regulations contained in California Code of Regulations, Titles 3, 8, 13, 17, 19, 22, 23, 24, and 27 into one consolidated California Code of Regulations Title 26 “Toxics.” However, California hazardous waste regulations are still commonly referred to as Title 22.

Local

Riverside County Fire Department

The Riverside County Fire Department (RCFD) is the Operational Area Coordinator for the California Fire and Rescue Mutual Aid System for all fire service jurisdictions in Riverside County. The RCFD also has several automatic aid agreements with other city jurisdictions as well as the adjacent National Forests. The County contracts with the State of California for fire protection. Public Resources Code Section 4142 affords legal authority for CAL FIRE to enter into agreements with local government entities to provide fire protection services with the approval of the Department of General Services. By virtue of this authority, CAL FIRE administers the RCFD.

Southern California Hazardous Waste Management Authority

The County is a member of the Southern California Hazardous Waste Management Authority (SCHWMA), and therefore, has agreed to work on a regional level to solve problems involving hazardous waste. SCHWMA was formed through a joint powers agreement between Santa Barbara,

Ventura, San Bernardino, Orange, San Diego, Imperial, and Riverside counties and the cities of Los Angeles and San Diego. Using a “fair share” approach, each SCHWMA county has agreed to take responsibility for the treatment and disposal of hazardous waste in an amount that is at least equal to the amount generated within that county. This responsibility can be met by siting hazardous waste management facilities (transfer, treatment and/or repository) capable of processing an amount of waste equal to or larger than the amount generated within the county, or by creating intergovernmental agreements between counties to provide compensation to a county for taking another county’s waste, or through a combination of both facility siting and intergovernmental agreements. Once an application to site a facility has been received, the County will review the requested facility and its location against a set of established siting criteria to ensure that the location is appropriate and may deny the application based on the findings of this review. Presently, the County does not have any of these facilities within its jurisdiction and therefore must rely on intergovernmental agreements to fulfill its fair share responsibility to SCHWMA.

The Riverside County Hazardous Waste Management Plan

As indicated in the 2016 Safety Element of the County of Riverside General Plan (General Plan), the Board of Supervisors adopted the Riverside County Hazardous Waste Management Plan (CHWMP) on September 12, 1989. With a framework of 24 existing and recommended programs, the CHWMP serves as the County’s primary planning document for the management of hazardous substances. The CHWMP is a comprehensive document containing all of the County programs for managing hazardous materials and waste.

Elsinore Area Plan

The Elsinore Area Plan (ELAP) contains a number of unique features and communities that are subjected to a high risk of fire hazards, including the Cleveland National Forest, Cleveland Ridge, Warm Springs, and Meadowbrook. Methods to address this hazard include techniques such as avoidance of building in high-risk areas, creating setbacks that buffer development from hazard areas, maintaining brush clearance to reduce potential fuel, establishing low fuel landscaping, and utilizing fire-resistant building techniques. In still other cases, safety-oriented organizations such as Fire Safe can provide assistance in educating the public and promoting practices that contribute to improved public safety. The ELAP contains the following policies regarding hazards:

- ELAP 5.10** Work on reducing illegal dumping, including hazardous waste, and increase access to affordable composting and recycling facilities; encourage the appropriate permitting of waste sites and reclamation of cleanup sites.
- ELAP 5.11** Encourage the connection of municipal water and wastewater services to community residents and facilities to reduce reliance on septic systems in order to limit groundwater contamination.
- ELAP 19.1** All proposed development located within High or Very High Fire Hazard Severity Zones shall protect life and property from wildfire hazards through adherence to policies identified in the Fire Hazards (Building Code and Performance Standards), Wind-Related Hazards and General and Long-Range Fire Safety Planning sections of the General Plan Safety Element.

The proposed project would be required to comply with all required County regulations regarding protection of life and property from wildfire hazards, as well as have adequate emergency/fire vehicle access. Future projects developed as part of the buildout of the plan area would be required to meet all fire flow requirements of the County.

Mead Valley Area Plan

Because of its rural and somewhat mountainous nature and to some of the flora, such as the oak woodlands and chaparral habitat, the western part of this planning area is subject to a risk of fire hazards. The highest danger of wildfires can be found in the most rugged terrain. Methods to address this hazard include such techniques as not building in high-risk areas, creating setbacks that buffer development from hazard areas, maintaining brush clearance to reduce potential fuel, establishing low fuel landscaping, and applying special building techniques. In still other cases, safety-oriented organizations such as the Fire Safe Council can provide assistance in educating the public and promoting practices that contribute to improved public safety. The Mead Valley Area Plan (MVAP) contains the following policies regarding hazards:

- MVAP 3.10** Encourage the siting of hazardous waste and hazardous materials facilities, including solid waste and recycling facilities pursuant to policy HC 15.5 to reduce illegal dumping, reduce waste, and increase access to affordable composting and recycling facilities.

- MVAP 3.11** Encourage the connection of municipal water and wastewater services to community residents and facilities to reduce reliance on septic systems in order to limit groundwater contamination.

- MVAP 19.1** All proposed development located within High or Very High Fire Hazard Severity Zones shall protect life and property from wildfire hazards through adherence to policies identified in the Fire Hazards (Building Code and Performance Standards), Wind-Related Hazards and General and Long-Range Fire Safety Planning sections of the General Plan Safety Element.

Riverside County Airport Land Use Compatibility Plan

Countywide Policies

Airport Land Use Commission (ALUC) Policy 1.5.2 outlines the types of land use actions that are subject to ALUC review. ALUC Policy 1.5.3 outlines the actions affecting any of the compatibility zones. To ensure compliance with the compatibility criteria, ALUC review of these actions may be warranted. These actions include:

- (1) Any proposed expansion of the sphere of influence of a city or special district.
- (2) Proposed pre-zoning associated with future annexation of land to a city.
- (3) Proposed development agreements or amendments to such agreements.
- (4) Proposed residential development, including land divisions, consisting of five or more dwelling units or lots.

- (5) Any discretionary development proposal for projects having a building floor area of 20,000 square feet or greater unless only ministerial approval (e.g., a building permit) is required.
- (6) Major capital improvements (e.g., water, sewer, or roads) which would promote urban uses in undeveloped or agricultural areas to the extent that such uses are not reflected in a previously reviewed general plan or specific plan.
- (7) Proposed land acquisition by a government entity for any facility accommodating a congregation of people (for example, a school or hospital).
- (8) Any off-airport, nonaviation use of land within Compatibility Zone A of any airport.
- (9) Proposals for new development (including buildings, antennas, and other structures) having a height of more than:
 - 35 feet within Compatibility Zone B1, B2, or a Height Review Overlay Zone;
 - 70 feet within Compatibility Zone C; or
 - 150 feet within Compatibility Zone D or E.
- (10) Any obstruction reviewed by the Federal Aviation Administration in accordance with Part 77 of the Federal Aviation Regulations that receives a finding of anything other than “not a hazard to air navigation.”
- (11) Any project having the potential to create electrical or visual hazards to aircraft in flight, including:
 - Electrical interference with radio communications or navigational signals;
 - Lighting which could be mistaken for airport lighting;
 - Glare in the eyes of pilots of aircraft using the airport; and
 - Impaired visibility near the airport.
- (12) Projects having the potential to cause attraction of birds or other wildlife that can be hazardous to aircraft operations to be increased within the vicinity of an airport.
 - (a) Proposed nonaviation development of airport property if such development has not previously been included in an airport master plan or community general plan reviewed by the Commission. (See Policy 1.2.5 for definition of aviation related use.)
 - (b) Regardless of location within Riverside County, any proposal for construction or alteration of a structure (including antennas) taller than 200 feet above the ground level at the site. (Such structures also require notification to the Federal Aviation Administration in accordance with Federal Aviation Regulations, Part 77, Paragraph 77.13(a)(1).)
 - (c) Any other proposed land use action, as determined by the local planning agency, involving a question of compatibility with airport activities.

March Air Reserve Base

Policies set forth in Chapter 2, Countywide Policies, shall be modified or supplemented for the March Air Reserve Base/Inland Port Airport (MARB/IPA) Land Use Compatibility Plan as follows.

2.1 Basic Land Use Compatibility Criteria:

- (a) Countywide Table 2A: The basic compatibility criteria listed in Table 2A do not apply to the environs of MARB/IPA. The compatibility criteria that shall be applicable to the MARB/IPA influence area are set forth in Table MA-2. For the purposes of land use compatibility matters involving the MARB/IPA influence area, any reference to Table 2A in the policies of Chapter 2 shall instead be taken as a reference to Table MA-2.
- (b) Countywide Policy 3.1.3(b): The policy concerning residential densities in Compatibility Zone D is not applicable to MARB/IPA.
- (c) Countywide Policy 3.1.4(b): The reference to special risk-reduction building design measures is not applicable to MARB/IPA.

2.2 Infill:

Countywide Policy 3.3.1(a)(2) notwithstanding, infill residential development in the vicinity of MARB/IPA need only be 50 percent bounded by similar uses to qualify as infill. All other provisions of Countywide Policy 3.3.1 apply.

2.3 Supporting Compatibility Criteria for Noise:

- (a) Countywide Policy 4.1.5: The CNEL considered normally acceptable for new residential land uses in the vicinity of MARB/IPA is 65 dB. Table 2B is not applicable.
- (b) Countywide Policy 4.1.6: Single-event noise levels from aircraft operations can be particularly intrusive at night. Compared to other airports in the county, current and projected nighttime activity by large aircraft at MARB/IPA warrants a greater degree of sound attenuation for the interiors of buildings housing certain uses as cited below.
 - (1) The maximum, aircraft-related, interior noise level that shall be considered acceptable shall be CNEL 40 dB for all new residences, schools, libraries, museums, hotels and motels, hospitals and nursing homes, places of worship, and other noise-sensitive uses. For office uses, the interior standard shall be CNEL 45 dB, the same as the countywide criterion.
 - (2) To ensure compliance with these criteria, an acoustical study shall be required to be completed for any development proposed to be situated where the aviation-related noise exposure is more than 20 dB above the interior standard (e.g., within the CNEL 60 dB contour where the interior standard is CNEL 40 dB). Standard building construction is presumed to provide adequate sound attenuation where the difference between the exterior noise exposure and the interior standard is 20 dB or less.

2.4 Supporting Compatibility Criteria for Safety:

- (a) Countywide Policy 4.2.3: The acceptability of land uses of special concern within certain compatibility zones around MARB/IPA shall be evaluated in accordance with the criteria indicated in Table MA-2. The criteria listed in Countywide Policy 4.2.3 do not apply.
- (b) Countywide Policy 4.2.4: The requirements for open land do not apply to the vicinity of MARB/IPA except with regard to Compatibility Zones A and B1.
- (c) Countywide Policy 4.2.5: For the vicinity of MARB/IPA, new nonresidential development shall not be clustered in a manner that would result in a usage intensity within any one acre (the number of people per single acre) exceeding the limits specified in Table MA-2. Clustering of residential development is encouraged, but the density within any one acre shall be limited to no more than 4.0 times the allowable average density for the zone in which the development is proposed.
- (d) Countywide Policy 4.2.6: The policy concerning risk reduction through building design is not applicable to the MARB/IPA influence area.
- (e) Calculation of Usage Intensities for Retail Uses: Notwithstanding the provisions of Appendix C and Table C1 of the Riverside County Airport Land Use Compatibility Plan, the usage intensities of retail sales and display areas (a.k.a. mercantile areas) or “showrooms” (excluding restaurants and other uses specifically identified separately from retail/mercantile in Table C1) shall be evaluated as having an occupancy level of 115 gross square feet per person without eligibility for the 50 percent reduction in the resulting usage intensity (people per acre) as described in the appendix.
- (f) Calculation of Usage Intensities for Warehouse Uses: Notwithstanding the provisions of Appendix C and Table C1 of the Riverside County Airport Land Use Compatibility Plan, the usage intensities of warehouses, distribution centers, e-commerce centers, fulfillment centers, and similar uses in buildings larger than 200,000 gross square feet, exclusive of offices, conference rooms, break rooms and other uses identified separately from warehouses in Table C1, shall be calculated as follows:
 - (1) High-cube warehouses and distribution centers, other than e-commerce centers and fulfillment centers, shall be evaluated on the basis of 35 percent of the usage intensity that results from the occupancy level indicated in Table C1.
 - (2) E-commerce centers, fulfillment centers, and other similar uses shall be evaluated on the basis of 50 percent of the usage intensity that results from the occupancy level indicated in Table C1.
 - (3) Office space in these buildings shall be evaluated on the basis of 50 percent of the usage intensity that results from the occupancy level indicated in Table C1. All other separately identified uses shall be evaluated on the basis of the occupancy level listed for the respective use in Table C1.

2.5 Supporting Compatibility Criteria for Airspace Protection:

- (a) Countywide Policy 4.3.3: For proposed objects in the MARB/IPA vicinity, the heights requiring ALUC review shall be as specified in Table MA-2.
- (b) Countywide Policy 4.3.4: Heights of objects shall be restricted in accordance with the airspace protection surfaces depicted in Table MA-2.
- (c) Countywide Policy 4.3.5: The compatibility zones within which dedication of an aviation easement shall be required as a condition of development is as indicated in Table MA-2. Except within Compatibility Zone A, aviation easements shall be dedicated to the March Inland Port Airport Authority or other civilian agency that may supersede it (successor-in-interest). Any aviation easements required within Zone A shall be dedicated to the United States of America.
- (d) Countywide Policy 4.3.7: Additional hazards to flight as listed in Table MA-2 are to be avoided in the vicinity of MARB/IPA.

2.6 Supporting Compatibility Criteria for Overflight:

- (a) Countywide Policy 4.4.3: The compatibility zones within which a deed notice shall be required as a condition of development are as indicated in Table MA-2.

Perris Valley Airport

Additional Compatibility Policies that may be relevant to the proposed project, of which portions are located in Zone E of the Perris Valley Airport Influence Area, are as follows:

2.1 Infill Intermediate Residential Density Development:

The criteria set forth in Countywide Policies 3.1.3(a), 3.1.3(b), 3.3.1(a), 3.3.1(b), and the Basic Compatibility Criteria matrix (table 2A) notwithstanding, as an alternative to development in accordance with the density ranges specified in Table 2A, residential development at densities of not more than five dwelling units per acre and not less than two dwelling units per acre may be permitted within those portions of Airport Compatibility Zones C and D located northerly of Ellis Avenue and westerly of Redlands Avenue, provided that at least 50 percent of the site's perimeter is bounded (disregarding roads) by existing (or approved) uses at densities similar to, or more intensive than, those proposed, and that the average density of the proposed development does not exceed the median density represented by all residentially designated lots that lie fully or partially within a distance of 300 feet from the boundary of the site proposed for development. It is further noted that the intent of the policy is not to encourage any areas planned for commercial or industrial development to be converted to residential uses, but to enable the density of future developments to be similar to existing neighborhood residential densities or densities approved through valid entitlement actions (such as approved tentative tract maps). Furthermore, nothing in this Plan shall be interpreted as prohibiting or restraining the development of a single-family residence on any property within the Airport Influence Area that is designated for residential use.

2.5 Calculation of Concentration of People in Retail Sales Establishments:

The provisions of Table C1 in Appendix C notwithstanding, retail sales and display areas of "showrooms" (excluding restaurants and other uses specifically identified separately from retail in Table C1) shall be evaluated as having an intensity in persons per acre equivalent to one person per 115 square feet of gross floor area.

2.6 Expanded Buyer Awareness Measures:

In addition to the requirements for avigation easement dedication or deed notification as indicated in Table 2A, avigation easement dedication shall be required for new developments located in the portion of Airport Compatibility Zone C northerly of Ellis Avenue, and deed notice recordation shall be required throughout the boundaries of the Downtown Perris Specific Plan.

Furthermore, any new single-family or multi-family residential development proposed for construction anywhere within the AIA, except for those portions of Compatibility Zone E located southerly of Ellis Avenue, shall include the following measures intended to ensure that prospective buyers or renters are informed about the presence of aircraft overflights of the property.

- (a) During initial sales of properties within newly created subdivisions, informational signs shall be posted in conspicuous locations in the subdivision sales office clearly depicting the proximity of the subdivision to the airport and aircraft traffic patterns,
- (b) An informational brochure shall be provided to prospective buyers or renters showing the locations of aircraft flight patterns. The frequency of overflights, the typical altitudes of the aircraft, and the range of noise levels that can be expected from individual aircraft overflights shall be described. A copy of the Compatibility Factors exhibit from this Airport Land Use Compatibility Plan shall be included in the brochure.

2.7 Noise-Sensitive Outdoor Nonresidential Uses Near Rail Line:

The criteria set forth in Table 2A and Table 2B notwithstanding, the prohibition of highly noise-sensitive outdoor nonresidential uses is not applicable to outdoor amphitheaters designed for a seating capacity of less than 300 persons located within 600 feet of a railroad line in regular use for the movement of passengers or freight.

Highway 74 Community Plan

The Highway 74 Community Plan sets forth the following goals and policies related to hazards and hazardous materials:

- Work on reducing illegal dumping, including hazardous waste, and increase access to affordable composting and recycling facilities; encourage the appropriate permitting of waste sites and reclamation of cleanup sites.
- Encourage the connection of municipal water and wastewater services to community residents and facilities to reduce reliance on septic systems in order to limit groundwater contamination.

3.9.4 - Methodology

The potential impacts associated with hazards were evaluated through a review of applicable plans and policies. The project site was visited in early 2018 and in September 2021, and reviewed resources from the State of California to evaluate potential hazards from future development that may occur pursuant to the proposed project.

3.9.5 - Thresholds of Significance

Section XIV of Appendix G to the California Environmental Quality Act (CEQA) Guidelines addresses typical adverse effects to biological resources and includes the following threshold questions to evaluate the project's impacts related to hazards or hazardous materials. Would the project:

- a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?
- b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?
- c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?
- d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?
- e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?
- f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?
- g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

Significance thresholds are set forth in Riverside County's Environmental Assessment Checklist, are derived from Section XIV of Appendix G to the State CEQA Guidelines (listed above), and state that the proposed project would have a significant impact on hazards or hazardous materials if construction and/or operation of the project would:

21. Hazards and Hazardous Materials

- a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?
- b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?
- c) Impair implementation of or physically interfere with an adopted emergency response plan or an emergency evacuation plan?
- d) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter (1/4) mile of an existing or proposed school?
- e) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

22. Airports

- a) Result in an inconsistency with an Airport Master Plan?
- b) Require review by the Airport Land Use Commission?
- c) For a project located within an airport land use plan or, where such a plan has not been adopted, within two (2) miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?
- d) For a project within the vicinity of a private airstrip, or heliport, would the project result in a safety hazard for people residing or working in the project area?

3.9.6 - Project Impacts and Mitigation Measures

This section discusses potential impacts associated with the development of the project and provides mitigation measures where appropriate.

Hazards and Hazardous Materials

Impact HAZ-21(a) **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.**

Impact Analysis

Short-term Impacts

Construction Activities

The proposed project does not include any specific proposals for development; however, future development that occurs within the planning area may include grading and construction activities. Grading and construction activities may involve the limited transport, storage, usage, or disposal of hazardous materials, such as the fueling/servicing of construction equipment. Such activity is short-term in nature and is subject to federal, State, and local health and safety requirements. If disturbed

soils or rubbish are determined to be hazardous, all standard regulations related to hazardous materials remediation and removal procedures would be adhered to. Transport of hazardous materials would occur only on designated routes and would avoid residential areas and areas with sensitive uses such as hospitals or schools. Disposal of hazardous materials would comply with all applicable regulations for such disposal. Thus, compliance with federal, State, and local health and safety requirements, including RCRA, the TSCA, USDOT regulations in 49 Code of Federal Regulations, and hazardous materials regulations in California Code of Regulations Title 26, and the RCFD and CHWMP, potential impacts associated with future development within the planning area creating a significant hazard to the public or the environment during the routine transport, use, or disposal of hazardous materials would remain less than significant.

Long-term Impacts

There are several potential hazards within the planning area, as shown in Tables 3.9-1 and 3.9-2. The proposed project seeks to promote land use compatibility by designating land uses for the most sensitive uses (i.e., residential and school) apart from the most intensive uses. Additionally, by designating land uses, the proposed project would separate non-sensitive land uses (e.g., office, retail, research and development, etc.) from intensive uses and the most sensitive uses to minimize hazards to the public or environment. As such, the proposed project would minimize exposure of the public or environment to existing routine hazardous materials usage within and near the planning area.

Future development implemented pursuant to the proposed project could include industrial uses. Should new uses within the planning area propose the use of large quantities of hazardous materials, the new use would be evaluated for compatibility with surrounding land uses during project review and, if necessary, would be required to incorporate appropriate protection measures. Therefore, impacts would be less than significant.

Level of Significance

Less than significant impact.

Mitigation Measures

No mitigation required.

Impact HAZ-21(b): The proposed project would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.

Impact Analysis

The project proposes a Community Plan to master plan future development within the planning area. Future development would include uses such as residential, commercial, mixed-use, industrial, public facilities, and conservation. As such, potentially hazardous materials would include limited amounts of common cleaning supplies and other potentially hazardous cleaning-related supplies that may be stored on-site. Uses of routine chemicals for typical residential and retail/commercial uses would not be of sufficient quantity to pose a significant hazard to the public or environment. Additionally, the retail/commercial uses of the project would comply with all applicable laws

regarding the use, storage, and disposal of hazardous materials, including provision of spill prevention kits in accordance with California Occupational Safety and Health Administration (Cal/OSHA) standards. Therefore, the proposed project would not create a significant hazard to the public or environment through reasonably foreseeable upset and accident conditions related to the release of hazardous materials into the environment. The operations on-site would comply with all applicable federal, State, and local laws regarding warehouse land uses, and there are no uses contemplated that would involve the use of hazardous materials.

Potential hazardous materials sites in and near the planning area boundaries are provided in Tables 3.9-1 and 3.9-2. Although a limited amount of cleaning supplies and other potentially hazardous cleaning-related supplies may be used in association with future projects, they are not anticipated to be of sufficient quantity to pose a significant hazard to the public or environment. Additionally, future development within the planning area would comply with all applicable laws regarding the use, storage, and disposal of such materials. Thus, the proposed project is anticipated to have a less than significant impact.

Level of Significance

Less than significant impact.

Mitigation Measures

No mitigation required.

Impact HAZ-21(c): The project would not impair implementation of or physically interfere with an adopted emergency response plan or an emergency evacuation plan.

Impact Analysis

The proposed project would not impair the implementation of, or physically interfere with, an emergency response plan and/or emergency evacuation plan. The County has an established Emergency Operations Plan (EOP).¹ The proposed project is not anticipated to interfere with the EOP, as it proposes no roadway closures or narrowing, nor would it result in incompatible land uses that could present additional risks to public safety. During construction of future development, traffic management plans will be in place to ensure that no impacts or delays to emergency response occur. Once operational, future projects would not impede emergency response access on any area roadway. Future development within the planning area would include adequate access for emergency response vehicles and personnel, as developed in consultation with RCFD personnel. Project frontage improvements would provide adequate access for emergency vehicles. Therefore, the proposed project would have a less than significant impact.

Level of Significance

Less than significant impact.

Mitigation Measures

No mitigation required.

¹ Riverside County. 2019. Riverside County Operational Area Emergency Operations Plan (EOP). August. Website: <http://riversidecountycalifornia.com/Citizens/FileOpen.aspx?Type=4&ID=23364>. Accessed August 25, 2021.

Impact HAZ-21(d): The proposed project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter (1/4) mile of an existing or proposed school.

Impact Analysis

There are no schools within 0.25 mile of any portion of the planning area. The nearest school, Perris Elementary School, is located 0.40 mile east of the planning area. Additionally, the following public schools are located within 1 mile of the planning area:

- Good Hope Elementary (24050 Theda Street, Perris)
- Keith McCarthy Academy (1405 Education Way, Lake Elsinore)
- Perris Elementary School (500 South A Street, Perris)
- Pinacate Middle School (1990 South A Street, Perris)
- Railway Elementary School (555 Alpine Drive, Perris)
- Earl Warren Elementary School (41221 Rosetta Canyon Drive, Lake Elsinore)
- Ortega High School (520 Chaney Street, Lake Elsinore)
- Perris Lake High School (418 West Ellis Avenue, Perris)
- Temescal Valley High School (28755 El Toro Road, Lake Elsinore)

The proposed project's land use changes would be consistent with the existing surrounding uses and would not have any unique operations or features that would create a safety risk. However, as outlined above in Impact HAZ-21(a) and HAZ-21(b), although a limited amount of cleaning supplies and other potentially hazardous cleaning-related supplies may be stored on-site, they are not anticipated to be of sufficient quantity to pose a significant hazard to the public or environment. Therefore, implementation of the proposed project would not result in hazardous emissions or otherwise cause hazardous materials impacts upon school facilities located within 0.25 mile of an existing or proposed school. There would be no impacts.

Level of Significance

No impact.

Mitigation Measures

No mitigation required.

Impact HAZ-21(e): The project would not be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, create a significant hazard to the public or the environment.

Potential hazardous materials sites are provided in Tables 3.9-1 and 3.9-2. As shown, there are no active LUST cleanup sites in the planning area. There is one landfill located at 18938 Mermack Avenue and there are 140 sites listed as hazardous waste generators either within the planning area boundaries or within 0.25 mile of the boundaries. Generally, the hazardous waste generator sites listed in the Government Records Report consist of businesses in the construction industry or auto body and automotive industry, retail stores, medical facilities, and landscaping (Appendix F).

Should hazardous materials be present in soil, groundwater, or building materials during construction of future development, hazardous materials could be released during construction and

could pose a health risk to construction workers and future residents and workers. Future development may be required to comply with additional investigation as required by local and State regulations, including a Phase I Environmental Site Assessment (Phase I ESA), as well as soil, groundwater, or soil gas sampling. Compliance with all applicable regulations would be required. Therefore, impacts would be less than significant.

Level of Significance

Less than significant impact.

Mitigation Measures

No mitigation required.

Airports

Impact HAZ-22(a): The proposed project would not result in an inconsistency with an Airport Master Plan.

Impact Analysis

The nearest airport is the Perris Valley Airport, a public use airport located 1.29 miles east of the planning area. Additionally, the March Air Reserve Base is located 5.6 miles north of the planning area. The northern portion of the planning area is located within Zone E of the Airport Influence Area of the March Air Reserve Base and is also located within Zone E of the Airport Influence Area of the Perris Valley Airport.² Therefore, the proposed Neighborhood 1 is within the County ALUC compatibility zones and would be subject to County ALUC land use review. Because development pursuant to the proposed project would be reviewed by the County ALUC, who would ensure land use compatibility and assess potential risks from airport operations, the proposed project would not result in an inconsistency with an Airport Master Plan. Impacts would be less than significant.

Level of Significance

Less than significant impact.

Mitigation Measures

No mitigation required.

Impact HAZ-22(b): The project would require review by the Airport Land Use Commission.

Impact Analysis

As previously discussed, the northern portion of the planning area is located within Zone E of the Airport Influence Area of the March Air Reserve Base and is also located within Zone E of the Airport Influence Area of the Perris Valley Airport.³ Therefore, the proposed Neighborhood 1 is within the County ALUC compatibility zones and would be subject to County ALUC land use review. Therefore,

² City of Menifee. 2013. Exhibit LU5a-c: Airport Land Use Compatibility Plans. Website: <https://cityofmenifee.us/DocumentCenter/View/6010>. Accessed August 25, 2021.

³ City of Menifee. 2013. Exhibit LU5a-c: Airport Land Use Compatibility Plans. Website: <https://cityofmenifee.us/DocumentCenter/View/6010>. Accessed August 25, 2021.

the proposed project would require review by the ALUC. Impacts would be less than significant, and no mitigation measures are required.

Level of Significance

Less than significant impact.

Mitigation Measures

No mitigation required.

Impact HAZ-22(c) For a proposed 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 not result in a safety hazard for people residing or working in the project area.

Impact Analysis

The nearest airports to the project are the Perris Valley Airport, located approximately 1.82 miles east and the March Air Reserve Base, located approximately 7.55 miles north of the project site. As adopted by the County ALUC, the County Airport Land Use Compatibility Plan Policy Document establishes policies applicable to land use compatibility planning in the vicinity of airports throughout the County. The March Air Reserve Base and Perris Valley Airport also have additional Compatibility Policies that are relevant to portions of the Community Plan area located within their airport influence areas.

As shown in the Perris Valley Airport document in Exhibit PV-8, General Plan Land Use Designations, the northernmost part of Neighborhood 1 is within compatibility Zone E for the Perris Valley Airport.⁴ Neighborhood 1 is within Zone E of the March Air Reserve Base, as shown in Exhibit MA-7A of the March Air Reserve Base document.⁵ Zone E represents Other Airport Environs, the noise impacts are categorized as low and are beyond a 55 Community Noise Equivalent Level (CNEL) contour, which means there are occasional overflight intrusions to some outdoor activities. The risk level of Zone E is considered low and within outer or occasionally used portions of flight corridors. Neighborhoods 2 and 3 are not located within an airport influence area or an airport compatibility zone.

As outlined above in Section 3.9.3, Regulatory Framework, any land use within the County ALUC compatibility zones would be subject to County ALUC land use review. Therefore, Neighborhood 1 is subject to County ALUC review to ensure compliance with the compatibility criteria set forth in Policy 1.5.2, specified above in the Regulatory Framework. The proposed project elements include typical industrial, residential, and commercial/retail buildings, similar to surrounding uses, which would not have any unique operations or features that would present a higher safety risk for people working or living in the planning area related to a nearby airport than would be typical throughout the region. All development would be required to comply with Federal Aviation Administration (FAA) regulations concerning building heights. Therefore, the proposed project would not result in a

⁴ Riverside County Airport Land Use Commission. 2010. Individual Airport Policies and Compatibility Maps – Chapter 3: Perris Valley Airport. Website: [https://rcaluc.org/Portals/13/19%20-%20Vol.%201%20Perris%20Valley%20\(Final-Mar.2011\).pdf?ver=2016-08-15-155627-183](https://rcaluc.org/Portals/13/19%20-%20Vol.%201%20Perris%20Valley%20(Final-Mar.2011).pdf?ver=2016-08-15-155627-183). Accessed on January 17, 2022.

⁵ Riverside County Airport Land Use Commission. 2014. March Air Reserve Base/Inland Port Airport Land Use Compatibility Plan. Website: <https://rcaluc.org/Portals/13/17%20-%20Vol.%201%20March%20Air%20Reserve%20Base%20Final.pdf?ver=2016-08-15-145812-700>. Accessed January 17, 2022.

significant risk to people or the environment from airport operations and the impact would be less than significant.

Level of Significance

Less than significant impact.

Mitigation Measures

No mitigation required.

Impact HAZ-22(d) For a proposed project within the vicinity of a private airstrip, or heliport, the project would not result in a safety hazard for people residing or working in the project area.

Impact Analysis

There are no private airstrips or helipads in the vicinity of the project site.⁶ There are three heliports within the vicinity of the planning area. The nearest heliport to the planning area is Castle Heliport, which is privately owned and located approximately 0.98 miles northwest of Neighborhood 1. The second nearest heliport is the Southern California Edison (SCE) Perris District Heliport located approximately 1.36 miles east of Neighborhood 1 and the third nearest heliport is the SCE San Jacinto Valley Service Center Heliport located approximately 6.01 miles away from Neighborhood 1. As discussed, the proposed project includes typical residential, commercial/retail, industrial buildings, and open space that are similar to the surrounding uses and would not have any unique operations or features that would present a higher safety risk for people working or residing in the planning area than would be typical throughout the region. Therefore, the proposed project will not present a significant safety hazard for people residing or working in the project area.

Level of Significance

Less than significant impact.

Mitigation Measures

No mitigation required.

⁶ Google Earth. Maps. 2018. Accessed November 2018.

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3.10 - Hydrology and Water Quality

3.10.1 - Introduction

This section of the Draft Program Environmental Impact Report (Draft Program EIR) describes the existing hydrology, drainage, flooding, water quality, and groundwater within the Highway 74 Community Plan Planning Area (planning area) and evaluates impacts anticipated to occur from implementation of the Highway 74 Community Plan (proposed project). Descriptions and analysis in this section are based, in part, on information contained in the Riverside County General Plan (General Plan) Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRMs), project utility plans, and the site-specific Preliminary Hydrology and Hydraulics Report and Preliminary Stormwater Control Plan (Appendix G). Water supply and wastewater conveyance and treatment are discussed in Section 3.19, Utilities and Service Systems. Issues regarding wetlands and waters of the United States are discussed in Section 3.4, Biological Resources.

3.10.2 - Environmental Setting

Flood Zone

Riverside County (County) has experienced severe flooding many times throughout its history. Flooding susceptibility in the County is primarily associated with several major stream drainages, including but not limited to the Santa Ana, San Jacinto, and Whitewater Rivers, as well as smaller scale and flash flood events on many of the alluvial fans of the County. Given the low permeabilities of the underlying bedrock, heavy runoff from the surrounding hills and mountains during strong storms cannot be prevented.

The nearest Special Flood Hazards Areas to the project area identified by the General Plan are located near Perris, California and near Lake Elsinore (Exhibit 3.10-1).¹

Regional Surface Water Hydrology

The County incorporates four major watershed areas in which river systems, lakes and reservoirs, and natural drainage areas are located. Specifically, the planning area is located within the San Jacinto River Watershed. The County's supply of water is limited by its arid climate, agricultural practices, projected population growth and its associated demand and development, and the dependence on low quality imported water. Additionally, the availability of imported surface water has been reduced due to changing regulations, despite an ever-increasing water demand.

Surface Water Quality

The cumulative effect of runoff from land uses in a region can have significant impacts on surface water quality, with both point- and non-point-source discharges contributing contaminants to surface waters. The land uses surrounding the project area vary from rural mountainous open space to low-density residential.

¹ County of Riverside. 2021. Riverside County General Plan, Chapter 6: Safety Element. Special Flood Hazard Areas Map. Page 41. Website: https://planning.rctlma.org/Portals/14/genplan/2021/elements/Ch06_Safety_092821.pdf. Accessed January 24, 2022.

Groundwater

Most groundwater basins within the County store local and imported water and are used to satisfy seasonal and drought-year demands. Under groundwater recharge programs, groundwater basins are artificially replenished in wet years with surplus imported water. Water is then extracted during drought years or emergencies. Groundwater recharge may also involve the recharge of reclaimed water, thereby enhancing the region's ability to meet water demand during years of short supply and increasing overall local supply reliability.

Seismically Induced Inundation

Seismically induced inundation refers to flooding that occurs when water retention structures fail during an earthquake. Often, inundation is triggered by damage from a seiche. A seiche is a wave that reverberates on the surface of water in an enclosed or semi-enclosed basin, such as a reservoir, lake, bay, or harbor, in response to ground shaking during an earthquake. The following water bodies are located in the vicinity of the project site: Canyon Lake (approximately 1.4 miles east), Lake Elsinore (approximately 1.7 miles south), the Perris Reservoir (approximately 5.6 miles north), and Lake Mathews (approximately 9.8 miles northwest).

3.10.3 - Regulatory Framework

Federal

Clean Water Act

The Clean Water Act (CWA) (33 United States Code [USC] § 1251, *et seq.*) is the major federal legislation governing the water quality aspects of construction and operation of the proposed project or variant. The CWA established the basic structure for regulating discharges of pollutants into waters of the United States (not including groundwater) and waters of the State. The objective of the CWA is “to restore and maintain the chemical, physical, and biological integrity of the nation’s waters.” The CWA establishes the basic structure for regulating the discharge of pollutants into waters of the United States.

The CWA authorizes the United States Environmental Protection Agency (EPA) to implement pollution control programs. Under the CWA, it is unlawful for any person to discharge any pollutant from a point source into navigable waters, unless a National Pollutant Discharge Elimination System (NPDES) permit is obtained. In addition, the CWA requires each state to adopt water quality standards for receiving water bodies and to have those standards approved by the EPA. Water quality standards consist of designated beneficial uses for a particular receiving water body (e.g., wildlife habitat, agricultural supply, fishing), along with water quality objectives necessary to support those uses.

Responsibility for protecting water quality in California resides with the California State Water Resources Control Board (State Water Board) and nine Regional Water Quality Control Boards (RWQCBs). The State Water Board establishes Statewide policies and regulations for the implementation of water quality control programs mandated by federal and State water quality statutes and regulations. The RWQCBs develop and implement water quality control plans (basin plans) that consider regional beneficial uses, water quality characteristics, and water quality

problems. Water quality standards applicable to the proposed project are listed in the Santa Ana RWQCB Basin Plan.

Section 303—Water Quality Standards and Total Maximum Daily Loads

Section 303(c)(2)(b) of the CWA requires states to adopt water quality standards for all surface waters of the United States based on the water body's designated beneficial use. Where multiple uses exist, water quality standards must protect the most sensitive use. Water quality standards are typically numeric, although narrative criteria based on biomonitoring methods may be employed where numerical standards cannot be established or where they are needed to supplement numerical standards.

CWA Section 303(d) requires states and authorized Native American tribes to develop a list of water quality-impaired segments of waterways. The list includes waters that do not meet water quality standards necessary to support a waterway's beneficial uses even after the minimum required levels of pollution control technology have been installed. Listed water bodies are to be priority ranked for development of a Total Maximum Daily Load (TMDL). A TMDL is a calculation of the TMDL (amount) of a pollutant that a water body can receive on a daily basis and still safely meet water quality standards. The TMDLs include waste load allocations for urban stormwater runoff as well as municipal and industrial wastewater discharges, with allocations apportioned for individual Multiple Separate Storm Sewer Systems (MS4s) and wastewater treatment plants, including those in the County. For stormwater, load reductions would be required to meet the TMDL waste load allocations within the 20 years required by the TMDLs.

The State Water Board, RWQCBs, and EPA are responsible for establishing TMDL waste load allocations and incorporating approved TMDLs into water quality control plans, NPDES permits, and Waste Discharge Requirements (WDRs) in accordance with a specified schedule for completion.

Section 401—Water Quality Certification

Section 401 of the CWA requires compliance with State water quality standards for actions within State waters. Under CWA Section 401, an applicant for a Section 404 permit (to discharge dredged or fill material into waters of the United States) must first obtain a certificate from the appropriate agency stating that the fill is consistent with the State's water quality standards and criteria. In California, the State Water Board delegates authority to either grant water quality certification or waive the requirements to the nine RWQCBs.

Section 402—National Pollution Discharge Elimination System Permits

The RWQCBs administer the NPDES stormwater permitting program, under Section 402(d) of the federal CWA, on behalf of the EPA. The objective of the NPDES program is to control and reduce levels of pollutants in water bodies from discharges of municipal and industrial wastewater and stormwater runoff. CWA Section 402(d) establishes a framework for regulating nonpoint-source stormwater discharges (33 USC § 1251). Under the CWA, discharges of pollutants to receiving water are prohibited unless the discharge complies with an NPDES permit. The NPDES permit specifies discharge prohibitions, effluent limitations, and other provisions, such as monitoring deemed necessary to protect water quality based on criteria specified in the National Toxics Rule (NTR) and the California Toxics Rule (CTR).

Discharge prohibitions and limitations in an NPDES permit for wastewater treatment plants are designed to maintain public health and safety, protect receiving water resources, and safeguard the water's designated beneficial uses. Discharge limitations typically define allowable effluent quantities for flow, biochemical oxygen demand, total suspended matter, residual chlorine, settleable matter, total coliform, oil and grease, pH, and toxic pollutants. Limitations also typically encompass narrative requirements regarding mineralization and toxicity to aquatic life. Under the NPDES permits issued to the County to operate the treatment plants, the County is required to implement a pretreatment program. This program must comply with the regulations incorporated in the CWA and the General Pretreatment Regulations (Code of Federal Regulations [CFR] Title 40, Part 403).

Section 404—Permitting Discharges of Dredge or Fill Material

Section 404 of the CWA regulates temporary and permanent fill and disturbance of wetlands and waters of the United States. Under Section 404, the discharge (temporary or permanent) of dredged or fill material into waters of the United States, including wetlands, typically must be authorized by the United States Army Corps of Engineers (USACE) through either the Nationwide Permit (general categories of discharges with minimal effects) or the Individual Permit.

River and Harbors Act Section 10

Section 10 of the Rivers and Harbors Act of 1899 requires that regulated activities conducted below the ordinary high-water elevation of navigable waters of the United States be approved and permitted by the USACE. Regulated activities include the placement or removal of structures, work involving dredging, disposal of dredged material, filling, excavation, or any other disturbance of soils/sediments or modification of a navigable waterway. Navigable waters of the United States are those waters of the United States that are subject to the ebb and flow of the tide shoreward to the mean high-water mark and/or are presently used, or have been used in the past, or may be susceptible to use to transport interstate or foreign commerce. Section 10 also regulates tributaries and backwater areas that are associated with navigable waters of the United States and are located below the ordinary high-water elevation of the adjacent navigable waterway.

A project proponent can apply for a permit/letter of permission for work regulated under CWA Section 404 and Rivers and Harbors Act Section 10 by completing and submitting one application form. An application for a USACE permit shall serve as an application for both Section 404 and Section 10 permits.

Federal Antidegradation Policy

The federal antidegradation policy is designed to protect existing water uses, water quality, and national water resources. The federal policy directs states to adopt a Statewide policy that includes the following primary provisions:

- Existing instream uses and the water quality necessary to protect those uses shall be maintained and protected.
- Where existing water quality is better than necessary to support fishing and swimming conditions, that quality shall be maintained and protected unless the State finds that allowing lower water quality is necessary for important local economic or social development.

- Where high-quality waters constitute an outstanding national resource, such as waters of national and State parks, wildlife refuges, and waters of exceptional recreational or ecological significance, that water quality shall be maintained and protected.

National Toxics Rule and California Toxics Rule

In 1992, the EPA promulgated the NTR under the CWA to establish numeric criteria for priority toxic pollutants for 14 states to bring all states into compliance with the requirements of CWA Section 303(c)(2)(B). The NTR established water quality standards for 42 pollutants not covered under California's Statewide water quality regulations at that time. Because of the court-ordered revocation of California's Statewide basin plans in September 1994, the EPA initiated efforts to promulgate additional federal water quality standards for California. In May 2000, the EPA issued the CTR, which includes all the priority pollutants for which the EPA has issued numeric criteria not included in the NTR.

Executive Order 11988

Executive Order 11988, "Floodplain Management," directs all federal agencies to avoid, to the extent possible, long- and short-term adverse impacts of occupancy and modification of floodplains, and to avoid supporting development in a floodplain either directly or indirectly wherever there is a practical alternative. Compliance requirements are outlined in 23 CFR 650, Subpart A, "Location and Hydraulic Design of Encroachment on Floodplains."

If a project involves significant encroachment into the floodplain, the final environmental document must include:

- The reasons why the proposed action must be located in the floodplain;
- Alternatives considered and the reasons they were not practical; and
- A statement indicating whether the action conforms to applicable State or local floodplain protection standards.

National Toxics Rule and California Toxics Rule

The National Flood Insurance Act of 1968 and the Flood Disaster Protection Act of 1973 were enacted to reduce the need for flood protection structures and limit disaster relief costs by restricting development in floodplains. FEMA, established in 1979, is responsible for predicting hazards from flooding events and forecasting the level of inundation under various conditions. As part of its duty to develop standards for delineating fluvial and coastal floodplains, FEMA provides information on FIRMs about the potential for flood hazards and inundation and, where appropriate, designates regions as Special Flood Hazard Areas (SFHAs). SFHAs are defined as areas that have a 1 percent chance of flooding in a given year.

FEMA also administers the National Flood Insurance Program (NFIP), a federal program that enables property owners in participating communities to purchase insurance as protection against flood losses in exchange for State and community floodplain management regulations that reduce future flood damages.

State

Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act of 1969 (Porter-Cologne Act) is California’s statutory authority for the protection of water quality. Under the Porter-Cologne Act, the State must adopt water quality policies, plans, and objectives that protect the State’s waters for the use and enjoyment of the people. Regional authority for planning, permitting, and enforcement is delegated to the nine RWQCBs. The RWQCBs are required to formulate and adopt basin plans for all areas in the region and establish water quality objectives in the plans. The Porter-Cologne Act sets forth the obligations of the State Water Board and RWQCBs to adopt and periodically update basin plans. The Santa Ana RWQCB is responsible for the project site.

Basin plans are the regional water quality control plans required by both the CWA and the Porter-Cologne Act that establish beneficial uses, water quality objectives, and implementation programs for each of the nine regions in California. The Porter-Cologne Act also requires waste dischargers to notify the RWQCBs of their activities by filing reports of waste discharge and authorizes the State Water Board and RWQCBs to issue and enforce WDRs, NPDES permits, CWA Section 401 water quality certifications, or other approvals. The RWQCBs are also authorized to issue waivers to reports of waste discharge and WDRs for broad categories of “low threat” discharge activities that have minimal potential to cause adverse water quality effects when implemented according to prescribed terms and conditions.

California Code of Regulations (Wetlands and Waters Definition)

The State Water Board indicates that no single accepted definition of wetlands exists at the State-level and that the RWQCBs may have different requirements and levels of analysis regarding the issuance of water quality certifications. Generally, an area is a wetland if, under normal circumstances:

- (1) the area has continuous or recurrent saturation of the upper substrate caused by groundwater, or shallow surface water, or both;
- (2) the duration of such saturation is sufficient to cause anaerobic conditions in the upper substrate; and
- (3) the area’s vegetation is dominated by hydrophytes or the area lacks vegetation.

Under California State law, waters of the State mean “any surface water or groundwater, including saline waters, within the boundaries of the State.” As such, water quality laws apply to both surface water and groundwater. After the U.S. Supreme Court decision in *Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers* (53 USC 159), the Office of Chief Counsel of the State Water Board released a legal memorandum confirming the State’s jurisdiction over isolated wetlands. The memorandum stated that under the Porter-Cologne Act, discharges to wetlands and other waters of the State are subject to State regulation, and this includes isolated wetlands. In general, the State Water Board regulates discharges to isolated waters in much the same way as it does for waters of the United States, using the Porter-Cologne Act rather than CWA authority.

National Pollutant Discharge Elimination System

The NPDES permits all involve similar processes, which include submitting notices of intent for discharging to water in areas under the Santa Ana RWQCB's jurisdiction and implementing Best Management Practices (BMPs) to minimize those discharges. The Santa Ana RWQCB may also issue site-specific WDRs, or waivers to WDRs, for certain waste discharges to land or waters of the State.

Construction Activity

The State Water Board stormwater general permit for construction activity (Order 2009-009-DWQ, as amended by Order Nos. 2010-0014-DWQ and 2012-0006-DWQ) applies to all construction activities that would disturb 1 acre of land or more. Construction activities subject to the general construction activity permit include clearing, grading, stockpiling, and excavation. Dischargers are required to eliminate or reduce non-stormwater discharges to storm sewer systems and other waters.

Through the NPDES and WDR processes, the State Water Board seeks to ensure that the conditions at a project site during and after construction do not cause or contribute to direct or indirect impacts on water quality (i.e., pollution and/or hydromodification) upstream and downstream. To comply with the requirements of the Construction General Permit, the project applicant must file a NOI with the State Water Board to obtain coverage under the permit; prepare a Storm Water Pollution Prevention Plan (SWPPP); and implement inspection, monitoring, and reporting requirements appropriate to the proposed project's risk level as specified in the SWPPP. The SWPPP includes a site map, describes construction activities and potential pollutants, and identifies BMPs that will be employed to prevent soil erosion and discharge of other construction-related pollutants that could contaminate nearby water resources, such as petroleum products, solvents, paints, and cement. The permit also requires the discharger to consider using post-construction permanent BMPs that will remain in service to protect water quality throughout the life of the project. All NPDES permits also have inspection, monitoring, and reporting requirements.

Project sites served by a combined sewer system are not required to obtain coverage under the NPDES Construction General Permit.

Industrial General Stormwater Permit

The Statewide stormwater NPDES permit for general industrial activity (Order 2014-0057-DWQ, superseding Order 97-03-DWQ) regulates discharges associated with 10 broad categories of industrial activities, such as operation of wastewater treatment works, and with recycling facilities. The industrial general permit requires the implementation of Best Available Technology Economically Achievable and Best Conventional Pollutant Control Technology to achieve performance standards. The permit also requires development of a SWPPP that identifies the site-specific sources of pollutants and describes the measures at the facility applied to reduce stormwater pollution. A monitoring plan is also required.

Stormwater

In November 1990, the EPA published regulations establishing NPDES permit requirements for municipal and industrial stormwater discharges. Phase I of the permitting program applied to municipal discharges of stormwater in urban areas where the population exceeded 100,000 persons. Phase II of the NPDES stormwater permit regulations, which became effective in March 2003,

required that NPDES permits be issued for construction activity for projects disturbing 1–5 acres. Phase II of the municipal permit system (known as the NPDES General Permit for Small MS4s, Order No. 2003-0005-DWQ as amended by 2013-0001-DWQ) required small municipalities of fewer than 100,000 persons to develop stormwater management programs. This permit authorizes discharges of stormwater and some categories of non-stormwater that are not “significant contributors of pollutants.”

California Toxics Rule and State Implementation Policy

The CTR, presented in 2000 in response to requirements of EPA’s NTR, establishes numeric water quality criteria for approximately 130 priority pollutant trace metals and organic compounds. The CTR regulatory criteria are adopted for inland surface waters, enclosed bays, and estuaries in California that are on the CWA Section 303(c) list for contaminants. The CTR includes criteria for the protection of aquatic life and human health. Human health criteria (water- and organism-based) apply to all waters with a municipal and domestic water supply beneficial use designation as indicated in the basin plans. The Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California, also known as the State Implementation Policy, was adopted by the State Water Board in 2000. It establishes provisions for translating CTR criteria, NTR criteria, and basin plan water quality objectives for toxic pollutants into:

- NPDES permit effluent limits,
- Effluent compliance determinations,
- Monitoring for 2,3,7,8-tcdd (dioxin) and its toxic equivalents,
- Chronic (long-term) toxicity control provisions,
- Site-specific water quality objectives, and
- Granting of effluent compliance exceptions.

The goal of the State Implementation Plan is to establish a standardized approach for permitting discharges of toxic effluent to inland surface waters, enclosed bays, and estuaries throughout the State.

California Fish and Wildlife Code, Sections 1601-1603

This legislation is intended to protect and conserve fish and wildlife resources of the State by requiring a permitting procedure for diverting, changing, or otherwise disturbing a current natural waterway. A Streambed Alteration Permit is required from the California Department of Fish and Wildlife (CDFW) for any changes to the stream, stream channel, or banks. For the proposed project, compliance with the Fish and Game Code would be required if tributaries on the project site are diverted, changed, or otherwise disturbed. Compliance is usually satisfied with issuance of a permit from CDFW, typically referred to as a “1602 Permit.”

Sustainable Groundwater Management Act

The 2014 Sustainable Groundwater Management Act (SGMA) requires governments and water agencies of high and medium-priority basins to halt overdraft and bring groundwater basins into balanced levels of pumping and recharge. Under SGMA, these basins should reach sustainability within 20 years of implementing their sustainability plans. The California Department of Water Resources (DWR) categorizes the priority of groundwater basins. For critically over-drafted basins,

the deadline is 2040. For the remaining high and medium-priority basins, the deadline is 2042. The SGMA also requires local public agencies and Groundwater Sustainability Agencies (GSAs) in high- and medium-priority basins to develop and implement Groundwater Sustainability Plans (GSPs) or Alternatives to GSPs. GSPs are detailed road maps for how groundwater basins will reach long-term sustainability. A GSA is responsible for developing and implementing a GSP to meet the sustainability goal of the basin to ensure that it is operated within its sustainable yield, without causing undesirable results. The GSP Emergency Regulations for evaluating GSPs, the implementation of GSPs, and coordination agreements were adopted by DWR and approved by the California Water Commission on May 18, 2016.²

Local

County of Riverside General Plan

Water Conservation Policies

The County incorporates four major watershed areas in which river systems, numerous lakes and reservoirs, and natural drainage areas are located. Water resources are mapped in Figure OS-1 of the General Plan. The County's supply of water is limited by its arid climate, agricultural practices, projected population growth and its associated demand and development, and the dependence on low quality imported water. Further, the availability of imported surface water has been reduced by changing regulations, despite an ever-increasing water demand.

In some areas within the County, contamination from natural or manufactured sources has reduced groundwater quality such that its use requires treatment. Management of the amount of water available (local and imported) and its quality is an important response to the gap between supply and demand in the County.

Following are water conservation policies that seek to manage existing supplies by promoting the efficient use of water to the maximum extent possible, so that they can be maintained for future use.

- OS 2.1** Implement a water-efficient landscape ordinance and corresponding policies that promote the use of water-efficient plants and irrigation technologies, minimizes the use of turf, and reduces water-waste without sacrificing landscape quality.

- OS 2.2** Encourage the installation of water-conserving systems such as dry wells and graywater systems, where feasible, especially in new developments. The installation of cisterns or infiltrators shall also be encouraged to capture rainwater from roofs for irrigation in the dry season and flood control during heavy storms.

- OS 3.7** Where feasible, decrease stormwater runoff by reducing pavement in development areas, reducing dry weather urban runoff, and by incorporating "Low Impact Development," green infrastructure and other Best Management Practice design measures such as permeable parking bays and lots, use of less pavement, bio-filtration, and use of multi-functional open drainage systems, etc.

² California Department of Water Resources. 2022. Sustainable Groundwater Management Act (SGMA). Website: <https://water.ca.gov/Programs/Groundwater-Management/SGMA-Groundwater-Management>. Accessed December 15, 2022.

Water Quality Policies

Water quality problems that have occurred in the County have been related to inadequate subsurface sewage disposal, waste disposal management of the Santa Ana River, agriculturally related problems such as agricultural runoff in the western County and increasing salinity of the desert groundwater basins, sediment buildup of water bodies from construction-related erosion, lake water quality problems, and pollution due to urban stormwater system runoff. RWQCBs for Regions 7, 8, and 9 provide State-level water quality policy for the County. Further, the NPDES mandates BMPs to minimize the adverse effects of pollution and protect water quality.

The following policy is intended to provide local guidance for the protection and maintenance of water quality in the County.

- OS 3.3** Minimize pollutant discharge into storm drainage systems, natural drainages and aquifers.

Groundwater Recharge Policies

Refer to the Groundwater discussion above regarding County groundwater policies. In order to facilitate groundwater recharge, the following policies may apply:

- OS 4.3** Ensure that adequate aquifer water recharge areas are preserved and protected.
- OS 4.4** Incorporate natural drainage systems into developments where appropriate and feasible.
- OS 4.6** Retain stormwater at or near the site of generation for percolation into the groundwater to conserve it for future uses and to mitigate adjacent flooding. Such retention may occur through “Low Impact Development” or other Best Management Practice measures.

Floodways, the Floodplain Fringe, and Riparian Area Policies

Floodplains are subject to geomorphic (land-shaping) and hydrologic (water flow) processes. The watercourse and its floodway are usually the focus of construction and control; while fertile, flat and “reclaimed” floodplain lands are usually the focal points for other activities such as agriculture, commerce, and residential development. These areas form a complex physical and biological system that not only supports a variety of natural resources, but also provides natural flood and erosion control. In addition, the floodplain represents a natural filtering system, with water percolating back into the ground and replenishing groundwater. When a watercourse is divorced from its floodplain with levees and other flood control facilities, then natural, built-in benefits are lost, altered, or significantly reduced.

Further, riparian habitat within floodplains is of great value to resident and migratory animal species, as it provides corridors and linkages to and from the biotic regions of the County. The numerous essential habitat elements provided by the remaining riparian corridors of Riverside County make them a significant contributor to wildlife habitat throughout the County. The intent of the County is to sustain “living” riparian habitats to the maximum extent possible.

The following set of policies addresses floodways, the floodplain fringe, and riparian areas in the County.

- OS 5.3** Based upon the site-specific study, all development shall be set back from the floodway boundary a distance adequate to address the following issues:
- a. Public safety
 - b. Erosion
 - c. Riparian or wetland buffer
 - d. Wildlife movement corridor or linkage
 - e. Slopes
 - f. Type of watercourse
 - g. Cultural resources
- OS 5.5** Preserve and enhance existing native riparian habitat and prevent obstruction of natural watercourses. Prohibit fencing that constricts flow across watercourses and their banks. Incentives shall be utilized to the maximum extent possible.
- OS 5.6** Identify and, to the maximum extent possible, conserve remaining upland habitat areas adjacent to wetland and riparian areas that are critical to the feeding, hibernation, or nesting of wildlife species associated with these wetland and riparian areas.

Flood and Inundation Hazard Abatement

While local agencies operate and maintain many flood control facilities, funding for the construction of such facilities often is shared with federal and State agencies. Nevertheless, local agencies independently fund many local projects without financial assistance from the federal or State governments.

Flooding susceptibility in the County is primarily associated with several major stream drainages, including but not limited to the Santa Ana, San Jacinto and Whitewater Rivers, as well as smaller scale and flash flood events on many of the alluvial fans that flank the County's hillsides. Large-scale developments have utilized golf courses and greenbelts as part of a network of channels that collect flood flows on the upstream side of a project, carry it safely through the project, and disperse it on the downstream side. However, given the low permeability of the underlying bedrock, heavy runoff from the surrounding hills and mountains during strong storms cannot be prevented.

A review of records maintained at the California Office of Emergency Services provided potential failure inundation maps for 23 dams affecting the County. These maps were compiled into the geographic information system digital coverage of potential dam inundation zones for the County. These maps are intended to be used by State and local officials for the development and approval of dam failure emergency procedures as described in Section 8589.5 of the California Government Code. The maps are also used to provide information needed to make natural hazard disclosure statements required under State law (Assembly Bill 1195 Chapter 65, June 9, 1998; Natural Hazard Disclosure Statement).

Seismically induced inundation refers to flooding that occurs when water retention structures fail during an earthquake. Often, inundation is triggered by damage from a seiche. A seiche is a wave

that reverberates on the surface of water in an enclosed or semi-enclosed basin, such as a reservoir, lake, bay or harbor, in response to ground shaking during an earthquake. Seismically induced inundation can also occur if strong ground shaking causes structural damage to aboveground water tanks. In response to this hazard, a new tank design includes flexible joints that can accommodate movement in any direction.

The following set of policies addresses flood and inundation hazard abatement in the County:

- S 4.5** Prohibit substantial modification to water courses, unless modification does not increase erosion or adjacent sedimentation, or increase water velocities, so as to be detrimental to adjacent property, nor adversely affect adjacent wetlands or riparian habitat.
- S 4.7** Any substantial modification to a watercourse shall be done in the least environmentally damaging manner possible in order to maintain adequate wildlife corridors and linkages and maximize groundwater recharge.
- S 4.10** Require all proposed projects anywhere in the County to address and mitigate any adverse impacts that it may have on the carrying capacity of local and regional storm drain systems.

The following policies are designed to prevent development from increasing flood risks:

- LU 9.4** Allow development clustering and/or density transfers in order to preserve open space, natural resources, cultural resources, and biologically sensitive resources. Wherever possible, development on parcels containing 100-year floodplains, blue-line streams and other higher-order watercourses, and areas of steep slopes adjacent to them shall be clustered to keep development out of watercourse and adjacent steep slope areas, and to be compatible with other nearby land uses.
- LU 12.1** Apply the following policies to areas where development is allowed and that contain natural slopes, canyons, or other significant elevation changes, regardless of land use designation:
 - a. Require that hillside development minimize alteration of the natural landforms and natural vegetation.
 - b. Allow development clustering to retain slopes in natural open space whenever possible.
 - c. Require that areas with slope be developed in a manner to minimize the hazards from erosion and slope failures.
 - d. Restrict development on visually significant ridgelines, canyon edges and hilltops through sensitive siting and appropriate landscaping to ensure development is visually unobtrusive.
 - e. Require hillside adaptive construction techniques, such as post and beam construction, and special foundations for development when the need is

identified in a soils and geology report which has been accepted by the County of Riverside.

- f. In areas at risk of flooding, limit grading, cut, and fill to the amount necessary to provide stable areas for structural foundations, street rights-of-way, parking facilities, and other intended uses.

Elsinore Area Plan

The Elsinore Area Plan (ELAP) contains the following policies related to hydrology and water quality:

- ELAP 5.11** Encourage the connection of municipal water and wastewater services to community residents and facilities to reduce reliance on septic systems in order to limit groundwater contamination.
- ELAP 18.1** Adhere to the flood proofing and flood protection requirements of the Riverside County Flood Control and Water Conservation District.
- ELAP 18.2** Protect proposed development projects that are subject to flood hazards, surface ponding, high erosion potential or sheet flow by requiring submittal to the Riverside County Flood Control and Water Conservation District for review..
- ELAP 18.3** When possible, create flood control projects that maximize multi-recreational use and water recharge.
- ELAP 18.4** Protect life and property from the hazards of flood events through adherence to the policies identified in the Flood and Inundation Hazards Abatement section of the General Plan Safety Element.

Mead Valley Area Plan

The Mead Valley Area Plan (MVAP) contains the following policies related to hydrology and water quality:

- MVAP 3.11** Encourage the connection of municipal water and wastewater services to community residents and facilities to reduce reliance on septic systems in order to limit groundwater contamination.
- MVAP 18.1** Protect life and property from the hazards of flood events through adherence to the policies identified in the Flood and Inundation Hazards Abatement section of the General Plan Safety Element.
- MVAP 18.2** Adhere to the flood proofing, flood protection requirements, and Flood Management Review requirements of Riverside County.
- MVAP 18.3** Require that proposed development projects that are subject to flood hazards, surface ponding, high erosion potential or sheet flow be submitted to the Riverside County Flood Control and Water Conservation District for review.

Highway 74 Community Plan

The Highway 74 Community Plan (proposed project) does not contain any policies related to hydrology and water quality.

3.10.4 - Methodology

Impacts related to hydrology and water quality were determined by reviewing information regarding regional and local hydrology, climate, topography, and geology contained in the General Plan and FEMA FIRMS. The evaluation of impacts is based on a comparison of existing conditions to anticipated conditions once the proposed project is in effect. This analysis identifies potential impacts to hydrology and water quality from construction, operation, and maintenance activities related to future development that could occur under the proposed project.

3.10.5 - Thresholds of Significance

Section XIV of Appendix G to the California Environmental Quality Act (CEQA) Guidelines addresses typical adverse effects to hydrology and includes the following threshold questions to evaluate the proposed project's impacts to hydrology and water quality. Would the project:

- a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?
- b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?
- c) Substantially alter the existing drainage pattern of area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:
 - (i) Result in substantial erosion or siltation on- or off-site;
 - (ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;
 - (iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or
 - (iv) Impede or redirect flood flows?
- d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?
- e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Significance thresholds are set forth in Riverside County's Environmental Assessment Checklist, are derived from Section XIV of Appendix G to the State CEQA Guidelines (listed above), and state that the proposed project would have a significant impact to hydrology and water quality if construction and/or operation of the project would:

23. Water Quality Impacts

- a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?
- b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?
- c) Substantially alter the existing drainage pattern of site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces?
- d) Result in substantial erosion or siltation on-site or off-site?
- e) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on-site or off-site?
- f) 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?
- g) Impede or redirect flood flows?
- h) In flood hazard, tsunami, or seiche zones, risk the release of pollutants due to project inundation?
- i) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

3.10.6 - Project Impacts and Mitigation Measures

This section discusses potential impacts associated with the development of the proposed project and provides mitigation measures where appropriate.

Water Quality Impacts

Impact HYD-23(a): The proposed project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality.

Impact Analysis

Implementation of the proposed project would result in construction activities that could have the potential to contribute to pollutants in off-site surface waters, potentially impacting the water quality of the San Jacinto River Watershed. Generally, construction-phase activities could generate pollutants such as increased silts, debris, chemicals, and dissolved solids related to the activities described below:

- Grading—Disruption of surface soils and increased susceptibility to erosion.
- Building construction—Use of sealants, glues, wood preservatives, oils, concrete, and the generation of debris related to construction activities.
- Painting—Paint fragments and stucco flakes.

- Construction equipment and vehicle maintenance—Washing, chemical degreasing.

Water quality in jurisdictional areas can be negatively affected by potential surface runoff and sedimentation during construction. The use of petroleum products (e.g., fuels, oils, and lubricants) and erosion of cleared land during construction could potentially contaminate surface water. Decreased water quality may adversely affect vegetation, aquatic animals, and terrestrial wildlife that depend upon these resources.

Because construction activities for future development could result in increased pollutants to surface water, construction of the project could potentially result in a short-term degradation to surface water quality. Accordingly, prior to the issuance of grading or construction permits, the project applicant for individual development pursuant to the proposed project would be required to prepare a SWPPP that conforms to the State Water Board NPDES permit. With compliance to NPDES requirements, all development that results from the proposed project's buildout would employ source control BMPs to reduce water quality impacts. Source control BMPs must be addressed in each project-specific Water Quality Management Plan (WQMP), this includes both nonstructural and structural source control BMPs. Nonstructural source control BMPs applicable to the proposed project include activity restrictions, irrigation system and landscape maintenance, and drainage facility inspection and maintenance. Structural source control BMPs would be applicable to the projects that would result from the proposed project's buildout. Furthermore, any construction that results from the proposed project would comply with SWPPP and WQMP requirements as well. Additionally, the SWPPP would identify BMPs to prevent construction-related pollutants from reaching stormwater and all products of erosion from moving off-site.

In addition, the Riverside County WQMP states that MS4 Permits which include significant redevelopment projects and new development projects represented by a map or permit for which discretionary approval is sought, are required to prepare, approve, and implement a project-specific WQMP. Project-specific WQMP preparation includes site design and source control BMPs and where applicable, project-specific treatment control BMPs or a regional watershed approach is included with an operation and maintenance program. Therefore, temporary construction impacts would be considered less than significant.

Future development (including redevelopment of existing developed sites) that disturbs 1 acre or more of soil or that is part of a common plan of development that disturbs 1 acre or more of soil must obtain permit coverage under the Construction General Permit by filing a Notice of Intent (NOI) and SWPPP with the RWQCB prior to commencement of construction. The SWPPP must describe the site, the facility, erosion and sediment controls, runoff water quality monitoring, means of waste disposal, implementation of approved local plans, control of construction sediment and erosion control measures, maintenance responsibilities, and non-stormwater management controls. Inspection of construction sites before and after storms is also required to identify stormwater discharge from the construction activity and to identify and implement erosion controls, where necessary.

Additionally, future development pursuant to the proposed project would be required to comply with the CWA, NPDES requirements, and regulations enforced by the RWQCB to control stormwater

discharges during project operation. In addition, future projects would comply with requirements of the County Code of Ordinances and General Plan, MVAP, and ELAP policies and actions related to water quality. Therefore, future development pursuant to the proposed project at operation would not violate any water quality standards or WDR or otherwise substantially degrade surface or groundwater quality.

As such, compliance with mandatory NPDES permit requirements, adherence to the County Code of Ordinances and preparation of a WQMP and SWPPP (if required), and implementation of General Plan policies and actions would ensure that impacts related to water quality degradation from development under the proposed project for both construction and operation would be less than significant.

Level of Significance

Less than significant impact.

Mitigation Measures

No mitigation required.

Impact HYD-23(b): The proposed project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the proposed project may impede sustainable groundwater management of the basin.

Impact Analysis

Buildout of the proposed project could lead to an increased demand for water, which could lead to an increase in groundwater pumping. Although the proposed project could increase impervious surfaces compared to existing conditions, the proposed project would comply with WQMP requirements by including site design BMPs. Site design BMPs are intended to create a hydrologically functional project design that mimics the natural hydrology, such as including a stormwater drainage system that allows water to infiltrate the project site soils through bioretention basins. These measures would minimize urban runoff and impervious footprints, and conserve natural areas or by minimizing directly connected impervious areas where applicable.

Elsinore Valley Municipal Water District (EVMWD) and Eastern Municipal Water District (EMWD) provide water services to the planning area. A portion of the EVMWD's water supply comes from the Elsinore Valley Subbasin and the Bedford-Coldwater Subbasin. EMWD produces potable groundwater from the West San Jacinto Basin and the Hemet/San Jacinto Basin, both located within the San Jacinto Groundwater Basin. GSPs are required by the SGMA for these subbasins. The GSPs determine the sustainable water budget for these subbasins, develop sustainable management criteria, establish minimum thresholds to evaluate groundwater conditions, and implement a monitoring network.

According to the General Plan Final EIR, roughly one-third of the County's water demand is met by groundwater, whose unpredictability and variability means that significant impacts associated with the proposed project's operation over time cannot be ruled out. However, the adverse effects associated with potential demands on groundwater and effects on groundwater recharge would be

avoided, reduced, or minimized through adherence to and compliance with federal, State, and local regulations and General Plan policies. As discussed in Section 3.20, Utilities, future implementing projects would comply with federal, State, and local water conservation standards to ensure that the future demands would not lead to substantial decrease in groundwater supplies.

Implementation of the proposed project has the potential to increase impervious surfaces on-site with future development. The conversion of permeable land to impervious surfaces could reduce groundwater recharge. Development under the proposed project could reduce the area available for aquifer recharge and interfere with the process of groundwater recharge. However, General Plan policies and actions as well as MVAP and ELAP policies designed to reduce reliance on septic systems would reduce the impacts of the proposed project on groundwater supplies and groundwater recharge. Further, compliance with mandatory NPDES permit requirements, adherence to the County Code of Ordinances, preparation of a WQMP and SWPPP (if required), and implementation of General Plan policies and actions would ensure that impacts related to groundwater supplies would be reduced to a less than significant level.

Level of Significance

Less than significant impact.

Mitigation Measures

No mitigation required.

Impact HYD-23(c): The proposed project would not 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.

Impact Analysis

The proposed project would have a significant impact if it were to substantially alter the existing drainage pattern of the site through the alteration of the course of a stream or river or through the addition of large impervious surfaces. Such drainage effects could occur from grade changes at the site, exposure of soils for periods of time during precipitation events, or alterations to creek beds. These types of changes could have a significant impact on project site drainage patterns.

The proposed project would comply with mandatory NPDES permit requirements, prepare a WQMP and SWPPP (if required), and implement General Plan policies and actions to ensure that the proposed project reduces impacts on drainage patterns to the maximum extent possible. Specifically, the proposed project would implement General Plan Policy OS 3.7, which states to decrease stormwater runoff by reducing pavement in development areas, reducing dry weather urban runoff, and by incorporating Low Impact Development (LID) requirements, and other BMPs such as permeable parking lots and the use of less pavement where feasible. Development pursuant to the proposed project would not occur within or adjacent to existing streams or rivers. General Plan Policy OS 4.4 requires incorporating natural drainage systems into development where feasible, while General Plan Policy OS 4.6 requires retaining stormwater at or near the site of generation. In addition, Chapter 13.12.060 of the County Code of Ordinances states new development or redevelopment projects shall control stormwater runoff with BMPs such as increasing permeable

areas, directing runoff to permeable areas, or maximizing stormwater storage. Therefore, by managing stormwater and implementing BMPs, these regulations would reduce impacts associated with grading land or altering streams to a less than significant level.

The proposed project would guide the development of residential neighborhoods of varying densities, commercial retail, mixed-use, light industrial, business park, public facilities, rural, open space, and recreation areas.. However, development associated with the proposed project would be reviewed to ensure coverage under the Construction General Permit and site-specific environmental review would be required for all future development projects to ensure compliance with the CWA. Further, compliance with existing regulations and General Plan policies, as well as adherence to the County Code of Ordinances, would reduce long-term impacts due to altered drainage pathways and is considered to be less than significant.

Level of Significance

Less than significant impact.

Mitigation Measures

No mitigation required.

Impact HYD-23(d): The proposed project would not result in substantial erosion or siltation on-site or off-site.

Impact Analysis

As discussed above under Impact HYD-23(c), implementation of the proposed project would not alter the course of a stream or river or substantially alter the existing drainage patterns within the planning area. As part of future project-specific implementation, grading of land surfaces would occur prior to construction. On-site grading has the potential to result in substantial erosion or siltation; however, the project would not substantially increase the rate or amount of surface runoff in a manner that would result in erosion.

Buildout of the planning area and development within watersheds that are tributary to the planning area, but not a part of the planning area, could increase the amount of paved impervious surfaces. Construction activities that result from the proposed project could result in erosion or siltation. However, compliance with applicable policies, laws, and regulations would minimize the potential to increase sedimentation or siltation. With the implementation of these uniformly applied standards and procedures, construction impacts related to erosion or siltation would be less than significant.

Development within the watersheds or drainage areas tributary to the planning area that are within the County are also required to comply with the grading plan check process. Grading construction projects require professional inspections, soil compaction (fill placement) testing, and a final grading report from a professional licensed engineer verifying that the grading construction was done correctly. Further, County grading inspectors ensure the work follows the approved grading plans, the WQMP, building codes and local ordinances, and assure a safe site development for public safety welfare. These processes would ensure that the development sites in the planning area are properly graded in accordance with applicable ordinances and the NPDES Construction General Permit.

Additionally, Chapter 13.12 of the County Code of Ordinances sets forth rules and regulations to manage stormwater and urban runoff and control stormwater discharge to prevent and reduce pollutants from entering the storm drainage system. Compliance with existing regulations and General Plan policies, as well as adherence to the County Code of Ordinances, would further reduce the potential for erosion and off-site siltation. As such, potential impacts would be less than significant.

Level of Significance

Less than significant impact.

Mitigation Measures

No mitigation required.

Impact HYD-23(e): The proposed project would not substantially increase the rate or amount of surface runoff in a manner which would result in flooding on-site or off-site.

Impact Analysis

As discussed above under Impact HYD-23(d), implementation of the proposed project would not alter the course of a stream or river or substantially alter existing drainage patterns within the planning area. New development or redevelopment pursuant to the proposed project could increase impervious areas within the planning area and increase stormwater runoff, which could result in flooding.

However, as previously described, the County Code of Ordinances contains regulations that minimize impervious surfaces, minimize impacts to stormwater runoff, and follow LID requirements. Further, General Plan Policy OS 3.7 would further reduce impacts from surface runoff.

Development within the watersheds or drainage areas tributary to the planning area that are within the County are also required to adhere to the grading plan check process as mentioned in Impact HYD-23(c) and Impact HYD-23(d). These processes ensure that the developments within the planning area are properly graded consistent with existing ordinances and the NPDES Construction General Permit. Compliance with existing regulations and General Plan policies, as well as adherence to the County Code of Ordinances, would maximize infiltration and rainwater retention, which in turn would reduce stormwater runoff that could result from project implementation. Therefore, impacts related to surface water and flooding would be considered less than significant.

Level of Significance

Less than significant impact.

Mitigation Measures

No mitigation required.

Impact HYD-23(f): The proposed project would not 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.

Impact Analysis

Changes to land use could result in development that could have impacts on stormwater collection and disposal facilities depending on whether the change increases or decreases runoff rates and volumes from a drainage area. Land use changes that increase runoff rates and volumes can have a negative impact on drainage area collection and disposal facilities. Conversely, land use changes that decrease runoff rates and volumes can have a positive impact on drainage area collection and disposal facilities. A prime contributor to runoff rates and volumes is the amount of impervious surface within a drainage area. The amount of impervious surface in a drainage area is calculated as the sum of all of the individual land use areas times their runoff factors. As water cannot infiltrate through impervious surfaces, the greater the amount of impervious surface in a given area, the greater the likelihood that water will run overland in a storm event instead of filtering into the ground, causing runoff that can collect and move pollution from ground surfaces.

Development under the proposed project would result in new light industrial, commercial retail, business park, residential neighborhoods of varying densities, and mixed-use land uses. Development in the planning area would utilize the County's existing street network and would potentially convert currently paved surfaces into pervious planted areas and prospective LID stormwater treatment sites.

Additionally, development under the proposed project would comply with NPDES requirements and employ source control BMPs to reduce water quality impacts. Furthermore, any construction that results from the proposed project would comply with SWPPP and WQMP requirements as well.

All future development would be reviewed for consistency with General Plan Policy OS 3.3 to minimize pollutant discharge into storm drainage systems, natural drainages and aquifers and General Plan Policy OS 4.3 to ensure that aquifer water recharge areas are preserved and protected. Therefore, all development that results from the proposed project's buildout would comply with General Plan policies and be subject to preparing a project-specific WQMP that outlines nonstructural and structural source control BMPs. All future development would require the implementation of water quality and watershed protection measures and comply with NPDES and other applicable CWA regulations. Therefore, future development would not result in substantial additional sources of polluted runoff. In addition, Chapter 13.12 of the County Code of Ordinances sets forth rules and regulations to manage stormwater and urban runoff and control of stormwater discharge.

In summary, the project would not substantially increase the rate or amount of surface runoff or result in substantial sources of polluted runoff, and stormwater runoff would not exceed the capacity of existing or planned stormwater drainage systems. Therefore, impacts are less than significant.

Level of Significance

Less than significant impact.

Mitigation Measures

No mitigation required.

Impact HYD-23(g): The proposed project would not impede or redirect flood flows.

Impact Analysis

The project site contains areas that are in a flood hazard zone as mapped by the County.³ Riverside County is a participating community in the NFIP, which requires participating agencies to adopt floodplain management ordinances. The intent of the ordinance, Ordinance No. 458, is to ensure that new construction and/or substantial improvements within mapped floodplains are done in a manner that reduces damage to the public and property. Any development or substantial improvement within a regulatory floodplain under the proposed project may require floodplain review by the County. This includes the submittal of a floodplain application permit form to County Building and Safety along with corresponding fees and attachments.

General Plan Policy LU 12.1 would apply certain requirements to areas where development is allowed and that contain natural slopes, canyons, or other significant elevation changes that could result in flood hazards, regardless of land use designation. Specifically, in areas at risk of flooding, General Plan Policy LU 12.1 would limit grading, cut, and fill to the amount necessary to provide stable areas for structural foundations, street right-of-way, parking facilities, and other intended uses. Furthermore, General Plan Policy LU 9.4 encourages clustered development to keep development out of watercourses and steep slope areas that contain 100-year floodplains, streams, or watercourses, which would minimize flood risks. General Plan Policy OS 4.6 requires stormwater retention through LID or BMPs to help mitigate flooding. General Plan Policies OS 5.3, OS 5.5, and OS 5.6 are designed to address floodways, the floodplain fringe, and riparian areas, including the requirement that development shall be set back from floodway boundaries. Policy S 4.5, S 4.7, and S 4.10 prohibit and apply certain requirements regarding substantial modification to watercourses.

The ELAP and MVAP each impose additional policies related to flooding. For example, Policy ELAP 18.2 and Policy MVAP 18.3 require development projects that are subject to flood hazards to be submitted to the Riverside County Flood Control and Water Conservation District for review. Policy ELAP 18.4 and Policy MVAP 18.1 require adherence to the policies identified in the Flood and Inundation Hazards Abatement section of the General Plan Safety Element.

Implementation of the above policies would help to reduce the risk of flooding. Furthermore, future development in the project area would be required to implement the 2015 County of Riverside General Plan Environmental Impact Report (General Plan EIR) Mitigation Measures (MMs) related to flood risk. Specifically, implementation of MM 4.9.1A, MM 4.9.1B, MM 4.9.1C, MM 4.9.1D, MM 4.9.2A, MM 4.9.2B, MM 4.9.2C, and MM 4.9.2D would ensure that future development projects in the project area would not expose people or structures to significant flood risks.

Additionally, the proposed project would include the land use designation of Open Space – Water, which would include bodies of water or artificial drainage corridors. The Open Space – Conservation designation would include the protection of open space for natural hazard protection.

Project compliance with Ordinance No. 458, as well as General Plan, MVAP, and ELAP policies, the General Plan EIR MMs outlined above, and the proposed land use designations would render any impacts to structures due to a flood hazard area less than significant.

³ Riverside County. 2013. General Plan Figure 4.11.1, 100-Year Flood Hazard Zones.

Level of Significance

Less than significant impact.

Mitigation Measures

No mitigation required.

Impact HYD-23(h): In flood hazard, tsunami, or seiche zones, the proposed project would not risk the release of pollutants due to project inundation.

Impact Analysis

The planning area is not located in a tsunami or seiche zone. A seiche is defined as a standing wave in an enclosed or partially enclosed body of water. The nearest bodies of surface water near the proposed planning areas include Canyon Lake (approximately 1.8 miles east of the project area), Lake Elsinore (approximately 1.8 miles south of the project area), and Lake Perris (approximately 5.6 miles north of the project area). Because of the proposed project's distance from each lake, the proposed project would not be subject to impacts associated with a seiche. The dam failure inundation zones of these lakes are shown in Exhibit 3.10-2. Likewise, the planning area's distance from the Pacific Ocean precludes any impacts associated with tsunamis.

The planning area does not contain any areas that are mapped by FEMA as a 100-year flood hazard zone, as shown in Exhibit 3.10-1. However, portions of the planning area are located in a flood hazard zone as mapped by the County.⁴ Specifically, County-designated flood hazard zones occur in the northern portion of the planning area between Mountain Avenue and Mapes Road and adjacent to Highway 74 from Mapes Road to Spring Street. There is also a linear flood hazard zone crossing Highway 74 between Kimes Way and River Road, and a linear flood hazard zone between Peach Street and Wasson Canyon Road, which crosses Aubrey Street, Larimark Street, and Greenwald Avenue in the southern portion of the project site. Development would be required to adhere to the applicable policies, including General Plan Policies LU 12.1, LU 9.4, OS 4.6, OS 5.3, OS 5.5, OS 5.6, S 4.5, S 4.7, and S 4.10. Additionally, Policy ELAP 18.2 and Policy MVAP 18.3, Policy ELAP 18.4, and Policy MVAP 18.1 would apply. Furthermore, Mitigation Measures 4.9.1A, 4.9.1B, 4.9.1C, 4.9.1D, 4.9.2A, 4.9.2B, 4.9.2C, and 4.9.2D would be implemented as required.

The project's stormwater drainage system includes open channels, storm drain facilities, and extended detention basins. Additionally, a riparian mitigation area along the majority of the southern planning area boundary, as well as other mitigation, will be provided to offset project impacts to natural water/drainage courses and riparian areas. These drainage improvements help reduce flood hazard impacts while collectively encouraging on-site and adjacent off-site percolation and groundwater recharge.

Drainage patterns would not substantially change in the planning area as a result of development pursuant to the proposed project. Future development would not involve substantial transport, use, or disposal of hazardous materials (see Section 3.9, Hazards and Hazardous Materials) and inundation of the planning area by seiche is not likely because of the distance of existing water

⁴ Riverside County. 2013. General Plan Figure 4.11.1, 100-Year Flood Hazard Zones.

bodies from the planning area. Furthermore, General Plan Policy OS 3.3 requires minimizing pollutant discharge into storm drainage systems, natural drainages, and aquifers in order to maintain water quality. Project compliance with Ordinance No. 458, as well as General Plan, MVAP, and ELAP policies and the General Plan EIR MMs outlined above would be required. Therefore, impacts related to risk of pollutant release due to inundation by seiche would be less than significant.

Level of Significance

Less than significant impact.

Mitigation Measures

No mitigation required.

Impact HYD-23(i): The proposed project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.

Impact Analysis

Currently, the County relies on imported water and local groundwater for its municipal water supplies. Desalted groundwater is also being pursued as a supply option in western Riverside County. To maintain acceptable water quality, future development would be required to comply with federal, State, and local regulations and policies. The General Plan's policies help reduce significant water quality impacts by addressing wastewater treatment and protection of water quality through pollution discharge standards and compliance with the NPDES.

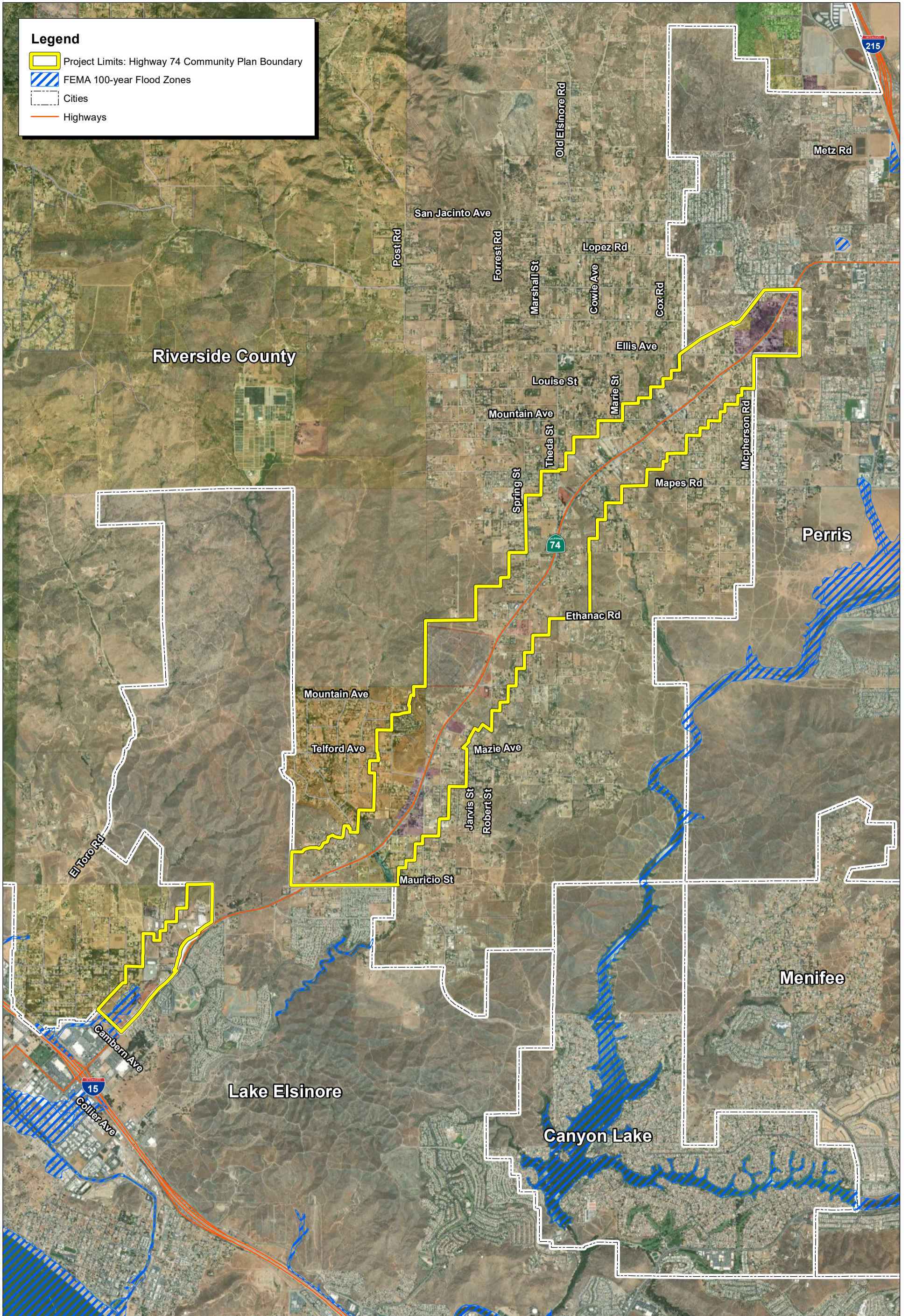
The Santa Ana RWQCB provide water quality policy guidance for the County (e.g., via NPDES general permits and MS4 Permits). In particular, the NPDES permit process mandates the use of BMPs to minimize the adverse effects of pollution and to protect water quality. With the implementation of the above regulations and General Plan policies, the proposed project would not conflict with or obstruct implementation of a water quality control plan or groundwater management plan. Therefore, impacts would be less than significant.

Level of Significance

Less than significant impact.

Mitigation Measures

No mitigation required.

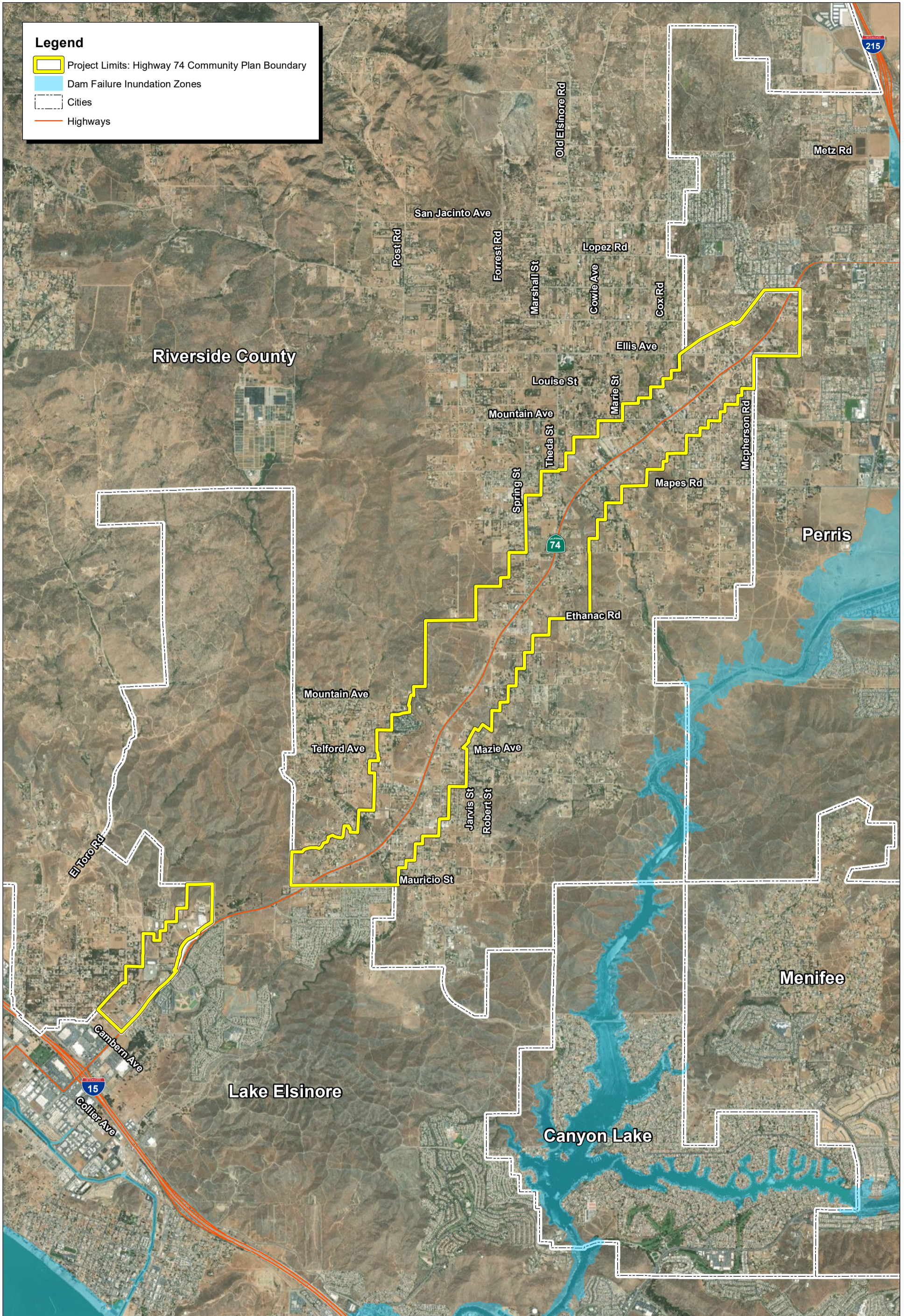


Source: ESRI Aerial Imagery, Riverside County GIS Data.



Exhibit 3.10-1
100-Year Flood Hazard Zones

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Legend

- Project Limits: Highway 74 Community Plan Boundary
- Dam Failure Inundation Zones
- Cities
- Highways

Source: ESRI Aerial Imagery, Riverside County GIS Data.

Exhibit 3.10-2
Dam Failure Inundation Zones

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3.11 - Land Use and Planning

3.11.1 - Introduction

This section describes the existing land use, applicable land use plans, policies, and regulations, and potential effects from project implementation on the site and its surrounding area. Descriptions and analysis in this section are based, in part, on review of the County of Riverside General Plan (General Plan), Code of Ordinances, and the proposed Highway 74 Community Plan (proposed project).

3.11.2 - Environmental Setting

Land Use

Community Plan Area

The Highway 74 Community Plan area (planning area) is located along a 6.8-mile corridor of Highway 74 between the City of Lake Elsinore and the City of Perris in western Riverside County, as shown in Chapter 2, Project Description, Exhibit 2-1. The planning area encompasses approximately 2,220 acres of unincorporated land and includes portions of the communities of Warm Springs, Meadowbrook, and Good Hope. The planning area is characterized by significant stretches of undeveloped land, large parcel, rural residential uses, as well as scattered commercial and industrial uses. The planning area is relatively rural and residential surrounded by low hilly terrain with large boulders and has many undeveloped or underutilized properties.

The planning area is divided into three neighborhoods, as discussed in detail in Chapter 2, Project Description, and as shown in Exhibit 2-2a and Exhibit 2-2b.

Land Use Designations

Project Site

Neighborhood 1

Neighborhood 1 has land use designations of Commercial Retail, Business Park, and Mixed-Use Areas, and include Light Industrial and Very Low-Density Residential on the outskirts of its boundary. This neighborhood is within the Mead Valley Area Plan (MVAP).

Neighborhood 2

Neighborhood 2 has land use designations of Commercial Retail, Business Park, and Mixed-Use Areas, and has Very Low-Density Residential on the outskirts of its boundary. This neighborhood is within the Elsinore Area Plan (ELAP).

Neighborhood 3

This neighborhood has land use designations of Commercial Retail, Business Park, Light Industrial and some Very Low-Density Residential on the outskirts of its boundary. This neighborhood is within the ELAP and is also within the City of Lake Elsinore General Plan's North Central Sphere of Influence.

Surrounding Land Uses

In general, the planning area is bounded to the west by unincorporated Riverside County, to the north by 7th Street and the City of Perris, to the east by unincorporated Riverside County, and to the south by Crater Drive and the City of Lake Elsinore.

Land uses surrounding the planning area are set forth in the area specific plans, which include the MVAP and ELAP, as well as the City of Perris General Plan and the City of Lake Elsinore General Plan (Chapter 2, Project Description, Exhibit 2-3). Specifically, land uses surrounding each neighborhood are as follows:

Neighborhood 1

Surrounding land uses primarily consist of Rural Community–Very Low-Density Residential (RC-VLDR) and Rural Residential in unincorporated Riverside County.¹ Additionally, this area is bordered on the north by the boundary of the City of Perris and includes Planning Area 7: Westside Residential, which is primarily made up of residential uses and minimal retail commercial development.²

Neighborhood 2

Surrounding land uses primarily consist of Very Low-Density Residential, Rural Mountainous, and Light Industrial uses in unincorporated Riverside County. This neighborhood is also bordered on the south by residential, agriculture, and vacant lands in the City of Lake Elsinore.³

Neighborhood 3

Surrounding land uses include residential and vacant lands, with some manufacturing/industrial, agricultural, and public/utility uses in unincorporated Riverside County.⁴ This neighborhood is also bordered by residential uses and vacant lands in the City of Lake Elsinore. Additionally, the area separating Neighborhood 2 and Neighborhood 3 is within the City of Lake Elsinore. Land uses in this area are primarily residential and vacant, but include limited commercial and agriculture uses.

3.11.3 - Regulatory Framework

State

State Aeronautics Act

The State Aeronautics Act requires each county with an airport to establish an Airport Land Use Commission (ALUC) to regulate land use around airports, in order to protect public safety and ensure that land uses near airports do not interfere with aviation operations. The Riverside County ALUC regulates land use around the Perris Valley and March Air Reserve Base by requiring compliance with the applicable policies and would be subject to County ALUC land use review. In certain circumstances, local governments have the ability to override the decisions of the ALUC.

¹ County of Riverside. 2018. Mead Valley Area Plan. Figure 3, Mead Valley Area Plan Land Use Plan. Website: https://planning.rctlma.org/Portals/14/genplan/2019/ap/MVAP_062618.pdf. Accessed January 19, 2022.

² City of Perris. 2016. General Plan Land Use Element. Website: <https://www.cityofperris.org/home/showpublisheddocument/457/637203139714030000>. Accessed January 19, 2022.

³ County of Riverside. 2021. Elsinore Area Plan. Figure 3, Elsinore Area Plan Land use Plan. Website: https://planning.rctlma.org/Portals/14/genplan/2021/ELAP_6.29.21.pdf. Accessed January 19, 2022.

⁴ City of Lake Elsinore. 2011. General Plan – Certified Recirculated Program Environmental Impact Report. Figure 3.1-1: City of Lake Elsinore Existing Land Use. Website: <http://www.lake-elsinore.org/home/showdocument?id=7238>. Accessed January 19, 2022.

Regional

Southern California Association of Governments

The Southern California Association of Governments (SCAG) is the nation's largest Metropolitan Planning Organization (MPO), and it represents six counties, 191 cities in an area covering more than 38,000 square miles, and over 19 million residents. SCAG undertakes a variety of planning and policy initiatives to encourage a more sustainable Southern California. Over the past 40 years, SCAG has evolved as the largest of nearly 700 councils of government in the United States, functioning as the MPO for six counties: Los Angeles, Orange, San Bernardino, Riverside, Ventura, and Imperial. As the designated MPO, SCAG is mandated by federal and State law to research and draw up plans for transportation, growth management, hazardous waste management, and air quality. SCAG develops long-range regional transportation plans including sustainable communities strategy and growth forecast components, regional transportation improvement programs, regional housing needs allocations and a portion of the South Coast Air Quality Management District (South Coast AQMD) management plans. Additional mandates exist at the State level.⁵

Regional Transportation Plan/Sustainable Communities Strategy

On April 7, 2016, the Regional Council of SCAG adopted the 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS): Toward a Sustainable Future. The RTP/SCS is the culmination of a multi-year effort involving stakeholders from across the SCAG Region. The Regional Transportation Plan (RTP) is a long-range transportation plan that is developed and updated by SCAG every 4 years. The RTP provides a vision for transportation investments throughout the region. Using growth forecasts and economic trends that project out over a 20-year period, the RTP considers the role of transportation in the broader context of economic, environmental, and quality-of-life goals for the future, identifying regional transportation strategies to address our mobility needs.

Multiple Species Habitat Conservation Plan

The Multiple Species Habitat Conservation Plan (MSHCP) is a comprehensive multi-jurisdictional effort that includes Riverside County and 14 cities in western Riverside County. Rather than address sensitive species on an individual basis, the MSHCP focuses on the conservation of 146 species, proposing a reserve system of approximately 500,000 acres and a mechanism to fund and implement the reserve system. Most importantly, the MSHCP allows participating entities to issue take permits for listed species so that individual applicants need not seek their own permits from the United States Fish and Wildlife Service (USFWS) and/or California Department of Fish and Wildlife (CDFW). The planning area is subject to the MSHCP, but it is not located within an MSHCP criteria cell for any sensitive species.

Local

County of Riverside

General Plan

The Land Use Element of the General Plan functions as a guide to planners, the general public, and decision makers regarding how land within the County is to be utilized. The following are summaries

⁵ Southern California Association of Governments (SCAG). 2022. About Us. Website: <https://scag.ca.gov/about-us>. Accessed January 19, 2022.

of relevant land use designations set forth in the General Plan. The Community Plan would be consistent with the general land use tenants and specific policies found within the Land Use Element and listed below.

- Policy LU 2.1** Accommodate land use development in accordance with the patterns and distribution of use and density depicted on the General Plan Land Use Map and the Area Plan Land Use Maps, in accordance with the following:
- Provide a land use mix at the countywide and area plan levels based on projected need and supported by evaluation of impacts to the environment, economy, infrastructure, and services.
 - Accommodate a range of community types and character, from agricultural and rural enclaves to urban and suburban communities.
 - Provide for a broad range of land uses, intensities, and densities, including a range of residential, commercial, business, industry, open space, recreation, and public facilities uses.
 - Concentrate growth near community centers that provide a mixture of commercial, employment, entertainment, recreation, civic, and cultural uses to the greatest extent possible.
 - Concentrate growth near or within existing urban and suburban areas to maintain the rural and open space character of Riverside County to the greatest extent possible.
 - Site development to capitalize upon multi-modal transportation opportunities and promote compatible land use arrangements that reduce reliance on the automobile.
 - Prevent inappropriate development in areas that are environmentally sensitive or subject to severe natural hazards.
- Policy LU 3.3** Promote the development and preservation of unique communities in which each community exhibits a special sense of place and quality of design.
- Policy LU 7.1** Require land uses to develop in accordance with the General Plan and area plans to ensure compatibility and minimize impacts.
- Policy LU 8.1** Accommodate the development of a balance of land uses that maintain and enhance Riverside County’s fiscal viability, economic diversity, and environmental integrity.

Zoning Ordinance

The Riverside County Zoning Ordinance regulates development and land use activities within unincorporated Riverside County. The ordinance establishes zoning districts and associated development standards and land use activity requirements.

Elsinore Area Plan

The ELAP contains the following policies relevant to land use and planning:

- ELAP 5.1** Encourage consolidation of parcels to promote better land use development and project design.
- ELAP 5.3** The Mixed-Use Area (MUA) Land Use Designation may be found consistent with any nonresidential zoning classification that implements the intent of the land use designation or provides for a community serving use(s).
- ELAP 5.5** Development may include live-work spaces within the MUAs where appropriate.
- ELAP 8.1** Adhere to the lighting requirements of Riverside County for standards that are intended to limit light leakage and spillage that may interfere with the operations of the Palomar Observatory.
- ELAP 9.1** Design and develop the vehicular roadway system per Figure 7, Circulation, and in accordance with the functional classifications and standards specified in the Planned Circulation Systems section of the General Plan Circulation Element.

The following policy applies to Neighborhood 3 of the Highway 74 planning area:

- ELAP 5.15** Encourage effective and comprehensive coordination efforts with the City of Lake Elsinore regarding planning programs, including circulation policies, that affect commercial and industrial development/entitlement activity.

Mead Valley Area Plan

The MVAP contains the following policies relevant to land use and planning:

- MVAP 3.1** Encourage consolidation of parcels to promote better land use development and project design.
- MVAP 3.3** The Mixed-Use Area (MUA) Land Use Designation may be found consistent with any nonresidential zoning classification that implements the intent of the land use designation or provides for a community serving use(s).
- MVAP 3.5** Development may include live-work spaces within the MUAs where appropriate.
- MVAP 6.2** A minimum 50 foot setback shall be required for any new industrial project on properties zoned I-P, if that property abuts a property that is zoned for residential, agricultural, or commercial uses. A minimum of 20 feet of the setback shall be landscaped, unless a tree screen is approved, in which case the setback area may be used for automobile parking, driveways or landscaping. Block walls or other fencing may be required.
- MVAP 8.1** Adhere to the lighting requirements specified in Riverside County Ordinance No. 655 for standards that are intended to limit light leakage and spillage that may interfere with the operations of the Mount Palomar Observatory.

Highway 74 Community Plan

The Highway 74 Community Plan sets forth the following policies related to land use and planning:

- Policy 1** Encourage consolidation of parcels to promote better land use development and project design.
- Policy 3** The Mixed-Use Area (MUA) Land Use Designation may be found consistent with any nonresidential zoning classification that implements the intent of the land use designation or provides for a community serving use(s).
- Policy N 3.1** Encourage effective and comprehensive coordination efforts with the City of Lake Elsinore regarding planning, including circulation policies that affect commercial and industrial development/entitlement activity.

3.11.4 - Methodology

The potential for land use impacts was evaluated through site reconnaissance, use of aerial photos, and review of applicable land use policy documents. The General Plan, ELAP, MVAP, and the Zoning Ordinance were reviewed to identify applicable policies and provisions that pertain to the proposed project. Finally, the proposed project was evaluated for consistency with the General Plan and Code of Ordinances.

3.11.5 - Thresholds of Significance

Section XI of Appendix G to the California Environmental Quality Act (CEQA) Guidelines, as updated in December 2018, addresses typical adverse effects on land use and planning, and includes the following threshold questions to evaluate the proposed project's impacts on land use and planning:

- Would the project physically divide an established community?
- 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?

Significance thresholds are set forth in Riverside County's Environmental Assessment Checklist, and have been updated to reflect the 2018 updates to Section XI of Appendix G to the State CEQA Guidelines (listed above). Accordingly, the proposed project would have a significant impact on land use and planning if construction and/or operation of the project would:

24. Land Use

- a) Physically divide an established community?
- b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

The significance thresholds set forth in Riverside County's Environmental Assessment Checklist, as modified/updated per the 2018 updates to the CEQA Guidelines, were used to evaluate the

significance of the proposed project's impacts on land use and planning. It should be noted that the project's consistency with the Western Riverside County MSHCP, which is the only habitat conservation plans or natural community conservation plans applicable to the planning area, is evaluated in Section 3-04, Biological Resources, under the analysis of Threshold (a), and the analysis concludes that impacts due to a conflict with the MSHCP would be less than significant with mitigation. Project consistency with the MSHCP is not further discussed in this subsection.

3.11.6 - Project Impacts and Mitigation Measures

This section discusses potential impacts associated with the proposed project and provides mitigation measures where necessary.

Land Use

Impact LUP-24(a): The proposed project would not physically divide an established community.

Impact Analysis

The planning area contains scattered development with underutilized properties, and much of the infrastructure is limited in terms of extent and size, as explained in Chapter 2, Project Description. The proposed project would support the General Plan criteria of clustered development in order to create appropriate built environments and to improve neighborhood identity and connectivity. Additionally, the proposed project would promote fewer rural land uses and more low-density residential, high-density residential, mixed-use, commercial, and industrial land uses that are part of the Community Development Foundation Component and includes policies addressing character, design, and environmental impacts. Neighborhood-specific policies would be designed to support each neighborhood's emerging identity; to encourage complete streets, including sidewalks, greenbelts, and trails for use by pedestrians and bicyclists; and to address any deficiencies or disconnection of transit routes through the neighborhood. Further, the proposed project includes policies and programs that promote cohesive and compatible neighborhoods and prevent new development from dividing existing uses where different land uses abut one another. Thus, the proposed project would not disrupt the physical arrangement of an established community.

According to Figure LU-4.1 of the General Plan Land Use Element, several areas between Interstate 15 (I-15) and Interstate 215 (I-215) are identified as an Environmental Justice Community (EJC) within the planning area. These include the communities of Good Hope, Meadowbrook, and Warm Springs. As discussed in Chapter 2, Project Description, these areas within the Highway 74 planning area are subject to all relevant EJC policies of the Healthy Communities Element, which addresses civic engagement, reduction of health risks, and prioritization of infrastructure improvements. The proposed project includes policies to support and address EJC concerns that are specific to this area.

Because the proposed project would support emerging neighborhood identity, connections, and transit routes, and would include policies to support and address EJC concerns in the existing Good Hope, Meadowbrook, and Warm Springs communities, the proposed project would not disrupt or divide an established community. Therefore, impacts would be less than significant.

Level of Significance

Less than significant impact.

Mitigation Measures

No mitigation required.

Impact LUP-24(b): The proposed project would not cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.

Impact Analysis

The proposed project would provide additional policies, land use controls, and design guidelines that are anticipated to result in improved land use planning. The proposed planning area boundaries encompass an approximately 2,220 acres of unincorporated land and contain primarily undeveloped land, large parcel, rural residential uses, as well as scattered commercial and industrial uses. The proposed project is designed to guide future development with the planning area by providing a blueprint for future development. For this reason, the proposed project includes a General Plan Amendment (GPA No. 1205). Existing land use designations would be updated, which would alter the General Plan Foundations primarily from the Rural and Rural Community Foundations to Community Development and corresponding land use designations. The proposed project would also alter other land use designations and provide guiding policies to support modification of the planning area’s structure. These land use designations and guiding policies are intended to prevent any adverse effects related to land use. Furthermore, the proposed land use designations complement the surrounding land uses by clustering commercial and industrial development around the Highway 74 corridor while supporting the development of residential neighborhoods of varying densities.

The proposed project includes policies, land use designations, and design guidelines that preserve and protect the environment and that are anticipated to result in improvements in land use planning, improved connectivity, and reduced environmental impacts. Therefore, the proposed project would improve land use planning in the area and would not 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. Impacts would be less than significant.

Level of Significance

Less than significant impact.

Mitigation Measures

No mitigation required.

3.12 - Mineral Resources

3.12.1 - Introduction

This section of the Draft Program Environmental Impact Report (Draft Program EIR) describes mineral resources in relation to the planning area and discusses the impacts to these resources that would potentially occur with implementation of the proposed project. Descriptions and analysis in this section are based upon existing conditions, project plans/exhibits of the planning area, the County of Riverside General Plan (General Plan), and the County of Riverside General Plan EIR (General Plan EIR).

3.12.2 - Environmental Setting

County of Riverside

As discussed in the General Plan, classification of land within California takes place according to a priority list that was established by the State Mining and Geology Board (SMGB) in 1982 or when the SMGB is petitioned to classify a specific area. The SMGB established Mineral Resources Zones (MRZ) to designate lands that contain mineral deposits. The State of California has also designated Aggregate Mineral Resource areas within Riverside County (County). Based on a review of the Multipurpose Open Space Element of the General Plan, the proposed project site is designated MRZ-3, which are areas where the available geologic information indicates that mineral deposits are likely to exist but the significance of the deposit in these areas is undetermined. The area surrounding the planning area is also classified as MRZ-3.

3.12.3 - Regulatory Framework

Federal and State

State Regulations

Surface Mining and Reclamation Act

The Surface Mining and Reclamation Act of 1975, referred to as SMARA, was enacted by the California Legislature to address the need for a continuing supply of mineral resources and to prevent or minimize the negative impacts of surface mining to public health, property, and the environment. The Department of Conservation's Office of Mine Reclamation and the SMGB jointly ensure proper administration of SMARA's requirements. The SMGB promulgates regulations to clarify and interpret the Act's provisions and serves as a policy/appeals board. The Office of Mine Reclamation provides an ongoing technical assistance program for lead agencies and operators, maintains a database of mine locations and operational information statewide, and is responsible for compliance-related matters.¹

The California Geological Survey has produced a report and a series of Mineral Land Classification Maps for the area that designate MRZs as follows:

¹ California Department of Conservation. 2022. SMARA FAQs. Website: <https://www.conservation.ca.gov/dmr/Documents/SMARA%20Mines%20FAQs-%20ADA%20Compliant.pdf>. Accessed January 11, 2022.

- MRZ-1** Areas where adequate information indicates that no significant mineral deposits are present, or where it is judged that little likelihood exists for their presence.
- MRZ-2** Areas where adequate information indicates that significant mineral deposits are present, or where it is judged that a high likelihood for their presence exists.
- MRZ-3** Areas containing mineral deposits, the significance of which cannot be evaluated from available data.
- MRZ-4** Areas where available information is inadequate for assignment to any other MRZ zone.

Local

County of Riverside General Plan

Mineral extraction is an important component of Riverside County's economy. The Multipurpose Open Space Element of the General Plan Element states that the County has extensive deposits of clay, limestone, iron, sand, and aggregates.

The non-renewable resources discussed in this element are mineral resources and energy resources. The Mineral Resources section of this element addresses those resources that are classified under the SMARA.

In addition to agricultural production, mineral extraction is an important component of the County's economy. The County has extensive deposits of clay, limestone, iron, sand, and aggregates. Classification of land within California takes place according to a priority list that was established by the SMGB in 1982, or when the SMGB is petitioned to classify a specific area. The SMGB has also established MRZs to designate lands that contain mineral deposits. The State of California has also designated Aggregate Mineral Resource areas within the County.

The Multipurpose Open Space Element of the General Plan identifies the classifications to define MRZs as follows:

- MRZ-1** Areas where the available geologic information indicates no significant mineral deposits or a minimal likelihood of significant mineral deposits.
- MRZ-2a** Areas where the available geologic information indicates that there are significant mineral deposits.
- MRZ-2b** Areas where the available geologic information indicates that there is a likelihood of significant mineral deposits.
- MRZ-3** Areas where the available geologic information indicates that mineral deposits are likely to exist, however, the significance of the deposit is undetermined.
- MRZ-4** Areas where there is not enough information available to determine the presence or absence of mineral deposits.

Elsinore Area Plan

The ELAP contains the following policies relevant to mineral extraction.

- ELAP 15.1** Protect the economic viability of mineral resources as well as the life and property of Elsinore Area Plan residents through adherence to the Mineral Resources section of the General Plan Multipurpose Open Space Element.
- ELAP 15.2** Avoid mineral resource extraction within the Temescal Wash Policy Area, which contains viable riparian habitat, in favor of areas containing very sparse or non-existent riparian habitat.
- ELAP 15.3** Require a biologically designed and professionally implemented revegetation program as part of reclamation plans, where avoidance is not feasible.
- ELAP 15.4** Require hydrologic studies by a qualified consultant as part of the environmental review process for all proposed surface mining permits within or adjacent to the Temescal Wash Policy Area. This shall include proper management of surface run-off.

Highway 74 Community Plan

The Highway 74 Community Plan does not set forth any additional goals and policies related to mineral resources.

3.12.4 - Methodology

The proposed project was evaluated for potential project impacts on mineral resources through a review of applicable plans and policies. The planning area was visited in early 2018 and again in August 2021 and the existing land uses were documented. FirstCarbon Solutions (FCS) personnel reviewed resources from the California Department of Conservation, aerial photographs, and topographical maps to identify surrounding land uses and evaluate potential impacts from future development that may occur pursuant to the Highway 74 Community Plan. FCS personnel also reviewed the General Plan to determine applicable mineral resource designations.

3.12.5 - Thresholds of Significance

Section XII of Appendix G to the California Environmental Quality Act (CEQA) Guidelines addresses typical adverse effects to mineral resources and includes the following threshold questions to evaluate a project's impacts on mineral resources. Would the project:

- a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the State?
- b) Result in the loss of availability of a locally important mineral resource recover site delineated on a local general plan, specific plan, or other land use plan?

Significance thresholds as implemented by Riverside County are set forth in Riverside County's Environmental Assessment Checklist form, are derived from Section XII of Appendix G to the State

CEQA Guidelines (listed above), and state that the proposed project would have a significant impact on mineral resources if construction and/or operation of the project would:

25. Mineral Resources

- a) Result in the loss of availability of a known mineral resource that would be of value to the region or the residents of the State?
- b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other local land use plan?
- c) Potentially expose people or property to hazards from proposed, existing, or abandoned quarries or mines?

3.12.6 - Project Impacts and Mitigation Measures

Mineral Resources

Impact MIN-25(a): The proposed project would not result in the loss of availability of a known mineral resource that would be of value to the region or the residents of the State.

Impact Analysis

The planning area does not currently contain any known mineral resources. The General Plan's Multipurpose Open Space Element (Figure OS-6) identifies most of western Riverside County as being within MRZ-3 (significance of mineral deposits undetermined) and Unstudied (no MRZ designation issued). Western Riverside County also contains a small number of areas designated as MRZ-1 (no significant mineral deposits), MRZ-2 (known or inferred significant mineral resources), and MRZ-4 (presence and significance of mineral deposits undetermined).²

According to Figure OS-6, the entire planning area is within the MRZ-3 designation. Areas with the MRZ-3 designation are described as areas where the available geologic information indicates that mineral deposits are likely to exist; however, the significance of the deposit is undetermined. The General Plan provides no specific policies regarding property identified as MRZ-3 and does not designate the Highway 74 Corridor for mineral resource-related uses; therefore, there is no indication that the planning area contains any mineral resources that would be of value to the region or to residents of the State.

Furthermore, the proposed project comprises a series of General Plan Amendments; no specific development is proposed and no earthwork or earthmoving activities would occur as a result of the implementation of the proposed project. Any future development proposed as a result of the proposed project would require additional study to determine whether any significant mineral resources exist on an individual property at the time such a project is proposed. Such additional study is typically required on a case-by-case basis when the County Geologist determines it is needed.³ Subsequent development applicants would be required to submit such studies as may be

² County of Riverside. 2015. General Plan. Chapter 5: Multipurpose Open Space Element. Website: https://planning.rctlma.org/Portals/14/genplan/general_Plan_2017/elements/OCT17/Ch05_MOSE_120815.pdf?ver=2017-10-11-102103-833. Accessed January 11, 2022.

³ County of Riverside. 2015. General Plan Environmental Impact Report. Website: https://planning.rctlma.org/Portals/14/genplan/general_plan_2015/DEIR%20521/DEIR%20No.%20521.pdf. Accessed August 11, 2021.

required by the County Geologist during the entitlement process and would be required to implement any identified recommendations. Therefore, impacts would be less than significant.

Level of Significance

Less than significant impact.

Mitigation Measures

No mitigation required.

Impact MIN-25(b): The proposed project would not result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other local land use plan.

Impact Analysis

Based on analysis contained in Impact MIN-1, there are no known mineral resources within the surrounding region, and the project area is not designated as a resource recovery site. Furthermore, there is no evidence that the planning area contains significant resources.

As discussed in Impact MIN-1, the General Plan’s Multipurpose Open Space Element (Figure OS-6) identifies most of western Riverside County as MRZ-3, indicating that the significance of potential mineral deposits is undetermined, and Unstudied (no MRZ designation issued). The entire planning area is designated MRZ-3.⁴ These designations indicate that there are no locally important mineral resource recovery sites delineated within the planning area. Furthermore, neither the Mead Valley Area Plan nor the Elsinore Area Plan (ELAP) designate any sites within the planning area as a resource recovery site.^{5,6} Therefore, the proposed project would not result in the loss of availability of a locally important mineral resource recovery site.

Level of Significance

No impact.

Mitigation Measures

No mitigation required.

Impact MIN-25(c): The proposed project would not potentially expose people or property to hazards from proposed, existing, or abandoned quarries or mines.

Impact Analysis

The planning area is not adjacent to a State-classified, designated area, existing surface, or dormant mine. The lands adjacent to the planning area to the north, south, east, and west are not designated Open Space-Mineral Resource (OS-MIN) by the County, which would allow for mineral extraction and processing facilities. The California Department of Conservation does not designate the planning

⁴ California Department of Conservation. 2022. SMARA FAQs. Website: <https://www.conservation.ca.gov/dmr/Documents/SMARA%20Mines%20FAQs-%20ADA%20Compliant.pdf>. Accessed January 11, 2022.

⁵ County of Riverside. 2011. Elsinore Area Plan. October 2011.

⁶ County of Riverside. 2014. Mead Valley Area Plan. March 2014.

area as having any proposed, existing, or abandoned mines or quarries.^{7,8} Therefore, buildout of the proposed project would not impact any ongoing mining operations as there are no known active or dormant mining sites within the vicinity of the planning area.

The proposed project would not expose people or property to hazards from proposed, existing, or abandoned quarries or mines. Therefore, no impact would occur.

Level of Significance

No impact.

Mitigation Measures

No mitigation required.

⁷ California Department of Conservation. 2016. Mines Online. Website: <https://maps.conservation.ca.gov/mol/index.html>. Accessed January 11, 2022.

⁸ California Department of Conservation. 2018. Mines and Mineral Resource Related Data and Maps. Website: <https://maps.conservation.ca.gov/mineralresources/>. Accessed January 11, 2022.

3.13 - Noise

3.13.1 - Introduction

This section describes the existing noise setting and potential effects from project implementation on the site and its surrounding area. Descriptions and analysis in this section are based, in part, on traffic data provided by the County and noise modeling performed by County's consultant. The noise modeling output is included in this Draft Program Environmental Impact Report (Draft Program EIR) as Appendix G.

3.13.2 - Environmental Setting

Characteristics of Noise

Noise is defined as unwanted sound. Sound becomes unwanted when it interferes with normal activities, when it causes actual physical harm or when it has adverse effects on health. Sound is produced by the vibration of sound pressure waves in the air. Sound pressure levels are used to measure the intensity of sound and are described in terms of decibels. The decibel (dB) is a logarithmic unit, which expresses the ratio of the sound pressure level being measured to a standard reference level. The 0 point on the dB scale is based on the lowest sound level that the healthy, unimpaired human ear can detect. Changes of 3 dB or less are only perceptible in laboratory environments. Audible increases in noise levels generally refer to a change of 3 dB or more, as this level has been found to be barely perceptible to the human ear in outdoor environments. Only audible changes in existing ambient or background noise levels are considered potentially significant.

A-weighted decibels (dBA) approximate the subjective response of the human ear to a broad frequency noise source by discriminating against very low and very high frequencies of the audible spectrum. They are adjusted to reflect only those frequencies that are audible to the human ear.

Because decibels are logarithmic units, they cannot be added or subtracted by ordinary arithmetic means. For example, if one noise source produces a noise level of 70 dB, the addition of another noise source with the same noise level would not produce 140 dB; rather, they would combine to produce a noise level of 73 dB.

Noise Descriptors

There are many ways to rate noise for various time periods, but an appropriate rating of ambient noise affecting humans also accounts for the annoying effects of sound. Equivalent continuous sound level (L_{eq}) is the total sound energy of time-varying noise over a sample period. However, the predominant rating scales for human communities in the State of California are the L_{eq} and Community Noise Equivalent Level (CNEL) or the day-night average level (L_{dn}) based on dBA. CNEL is the time-varying noise over a 24-hour period, with a 5 dBA weighting factor applied to the hourly L_{eq} for noises occurring from 7:00 p.m. to 10:00 p.m. (defined as relaxation hours) and a 10 dBA weighting factor applied to noise occurring from 10:00 p.m. to 7:00 a.m. (defined as sleeping hours). L_{dn} is similar to the CNEL scale but without the adjustment for events occurring during the evening hours. CNEL and L_{dn} are within one dBA of each other and are normally exchangeable. The noise adjustments are added to the noise events occurring during the more sensitive hours.

Other noise rating scales of importance when assessing the annoyance factor include the maximum noise level (L_{max}), which is the highest exponential time-averaged sound level that occurs during a stated time period. The noise environments discussed in this analysis are specified in terms of maximum levels denoted by L_{max} for short-term noise impacts. L_{max} reflects peak operating conditions and addresses the annoying aspects of intermittent noise.

Noise Propagation

From the noise source to the receiver, noise changes both in level and frequency spectrum. The most obvious is the decrease in noise as the distance from the source increases. The manner in which noise reduces with distance depends on whether the source is a point or line source, as well as ground absorption, atmospheric effects and refraction, and shielding by natural and manmade features. Sound from point sources, such as an air conditioning condenser, a piece of construction equipment, or an idling truck, radiates uniformly outward as it travels away from the source in a spherical pattern.

The attenuation or sound drop-off rate is dependent on the conditions of the land between the noise source and receiver. To account for this ground-effect attenuation (absorption), two types of site conditions are commonly used in noise models: soft-site and hard-site conditions. Soft-site conditions account for the sound propagation loss over natural surfaces such as normal earth and ground vegetation. For point sources, a drop-off rate of 7.5 dBA per each doubling of the distance (dBA/DD) is typically observed over soft ground with landscaping, as compared with a 6 dBA/DD drop-off rate over hard ground such as asphalt, concrete, stone, and very hard packed earth. For line sources, such as traffic noise on a roadway, a 4.5 dBA/DD is typically observed for soft-site conditions compared to the 3 dBA/DD drop-off rate for hard-site conditions. Table 3.13-1 briefly defines these measurement descriptors and other sound terminology used in this section.

Table 3.13-1: Sound Terminology

Term	Definition
Sound	A vibratory disturbance created by a vibrating object which, when transmitted by pressure waves through a medium such as air, can be detected by a receiving mechanism such as the human ear or a microphone.
Noise	Sound that is loud, unpleasant, unexpected, or otherwise undesirable.
Ambient Noise	The composite of noise from all sources near and far in a given environment.
Decibel (dB)	A unitless measure of sound on a logarithmic scale, which represents the squared ratio of sound pressure amplitude to a reference sound pressure. The reference pressure is 20 micropascals, representing the threshold of human hearing (0 dB).
A-weighted Decibel (dBA)	An overall frequency-weighted sound level that approximates the frequency response of the human ear.

Term	Definition
Equivalent Noise Level (L_{eq})	The average sound energy occurring over a specified time period. In effect, L_{eq} is the steady-state sound level that in a stated period would contain the same acoustical energy as the time-varying sound that actually occurs during the same period.
Maximum and Minimum Noise Levels (L_{max} and L_{min})	The maximum or minimum instantaneous sound level measured during a measurement period.
Day-Night Level (DNL or L_{dn})	The energy average of the A-weighted sound levels occurring during a 24-hour period, with 10 dB added to the A-weighted sound levels occurring between 10 p.m. and 7 a.m. (nighttime).
Community Noise Equivalent Level (CNEL)	The energy average of the A-weighted sound levels occurring during a 24-hour period, with 5 dB added to the A-weighted sound levels occurring between 7 p.m. and 10 p.m. and 10 dB added to the A-weighted sound levels occurring between 10 p.m. and 7 a.m.
Source: Data compiled by FirstCarbon Solutions (FCS) 2022.	

Traffic Noise

The level of traffic noise depends on the three primary factors: (1) the volume of the traffic, (2) the speed of the traffic, and (3) the number of trucks in the flow of traffic. Generally, the loudness of traffic noise is increased by heavier traffic volumes, higher speeds, and greater number of trucks. Vehicle noise is a combination of the noise produced by the engine, exhaust, and tires. Because of the logarithmic nature of noise levels, a doubling of the traffic volume (assuming that the speed and truck mix do not change) results in a noise level increase of 3 dBA. Based on the Federal Highway Administration (FHWA) community noise assessment criteria, this change is “barely perceptible”; for reference a doubling of perceived noise levels would require an increase of approximately 10 dBA. The truck mix on a given roadway also has an effect on community noise levels. As the number of heavy trucks increases and becomes a larger percentage of the vehicle mix, adjacent noise levels increase.

Stationary Noise

A stationary noise producer is any entity in a fixed location that emits noise. Examples of stationary noise sources include machinery, engines, energy production, and other mechanical or powered equipment and activities such as loading and unloading or public assembly that may occur at commercial, industrial, manufacturing, or institutional facilities. Furthermore, while noise generated by the use of motor vehicles over public roads is preempted from local regulation, the County considers the use of these vehicles to be a stationary noise source when operated on private property such as at a truck terminal or warehousing facility. The emitted noise from the producer can be mitigated to acceptable levels either at the source or on the adjacent property through the use of proper planning, setbacks, block walls, acoustic-rated windows, dense landscaping, or by changing the location of the noise producer.

The effects of stationary noise depend on factors such as characteristics of the equipment and operations, distance and pathway between the generator and receptor, and weather. Stationary noise sources may be regulated at the point of manufacture (e.g., equipment or engines), with limitations on the hours of operation, or with provision of intervening structures, barriers, or topography.

Construction activities are a common source of stationary noise. Construction-period noise levels are higher than background ambient noise levels but eventually cease once construction is complete. Construction is performed in discrete steps, each of which has its own mix of equipment and, consequently, its own noise characteristics. These various sequential phases would change the character of the noise generated on each construction site, and therefore, would change the noise levels as construction progresses. Despite the variety in the type and size of construction equipment, similarities in the dominant noise sources and patterns of operation allow construction-related noise ranges to be categorized by work phase. Table 3.13-2 shows typical noise levels of construction equipment as measured at a distance of 50 feet from the operating equipment.

Table 3.13-2: Typical Construction Equipment Maximum Noise Levels, L_{max}

Type of Equipment	Specification Maximum Sound Levels for Analysis (dBA at 50 feet)
Impact Pile Driver	95
Auger Drill Rig	85
Vibratory Pile Driver	95
Jackhammers	85
Pneumatic Tools	85
Pumps	77
Scrapers	85
Cranes	85
Portable Generators	82
Rollers	85
Bulldozers	85
Tractors	84
Front-end Loaders	80
Backhoe	80
Excavators	85
Graders	85
Air Compressors	80
Dump Truck	84
Concrete Mixer Truck	85
Pickup Truck	55

Type of Equipment	Specification Maximum Sound Levels for Analysis (dBA at 50 feet)
Notes: dBA = A-weighted decibel Source: Federal Highway Administration (FHWA). 2006. Highway Construction Noise Handbook, August.	

Noise from Multiple Sources

Because sound pressure levels in decibels are based on a logarithmic scale, they cannot be added or subtracted in the usual arithmetical way. Therefore, sound pressure levels in decibels are logarithmically added on an energy summation basis. In other words, adding a new noise source to an existing noise source, both producing noise at the same level, will not double the noise level. Instead, if the difference between two noise sources is 10 dBA or more, the louder noise source will dominate and the resultant noise level will be equal to the noise level of the louder source. In general, if the difference between two noise sources is 0–1 dBA, the resultant noise level will be 3 dBA higher than the louder noise source, or both sources if they are equal. If the difference between two noise sources is 2–3 dBA, the resultant noise level will be 2 dBA above the louder noise source. If the difference between two noise sources is 4–10 dBA, the resultant noise level will be 1 dBA higher than the louder noise source.

Characteristics of Vibration

Groundborne vibrations consist of rapidly fluctuating motions within the ground that have an average motion of zero. The effects of groundborne vibrations typically only cause a nuisance to people, but in extreme cases, excessive groundborne vibration has the potential to cause structural damage to buildings. Although groundborne vibration can be felt outdoors, it is typically only an annoyance to people indoors where the associated effects of the shaking of a building can be notable. Groundborne noise is an effect of groundborne vibration and only exists indoors, since it is produced from noise radiated from the motion of the walls and floors of a room, and may also consist of the rattling of windows or dishes on shelves.

Several different methods are used to quantify vibration amplitude such as the maximum instantaneous peak in the vibrations velocity, which is known as the peak particle velocity (PPV) or the root mean square (rms) amplitude of the vibration velocity. Because of the typically small amplitudes of vibrations, vibration velocity is often expressed in decibels—denoted as LV—and is based on the reference quantity of 1 microinch per second. To distinguish vibration levels from noise levels, the unit is written as “VdB.”

Although groundborne vibration can be felt outdoors, it is typically only an annoyance to people indoors where the associated effects of the shaking of a building can be notable. When assessing annoyance from groundborne vibration, vibration is typically expressed as rms velocity in units of decibels of 1 microinch per second, with the unit written in VdB. Typically, developed areas are continuously affected by vibration velocities of 50 VdB or lower. Human perception to vibration starts at levels as low as 67 VdB. Annoyance due to vibration in residential settings starts at approximately 70 VdB.

Off-site sources that may produce perceptible vibrations are usually caused by construction equipment, steel-wheeled trains, and traffic on rough roads, while smooth roads rarely produce perceptible groundborne noise or vibration. Construction activities, such as blasting, pile driving and operating heavy earthmoving equipment, are common sources of groundborne vibration.

Construction vibration impacts on building structures are generally assessed in terms of PPV. Typical vibration source levels from construction equipment are shown in Table 3.13-3.

Table 3.13-3: Vibration Levels of Construction Equipment

Construction Equipment	PPV at 25 Feet (inches/second)	rms Velocity in Decibels (VdB) at 25 Feet
Water Trucks	0.001	57
Scraper	0.002	58
Bulldozer—small	0.003	58
Jackhammer	0.035	79
Concrete Mixer	0.046	81
Concrete Pump	0.046	81
Paver	0.046	81
Pickup Truck	0.046	81
Auger Drill Rig	0.051	82
Backhoe	0.051	82
Crane (Mobile)	0.051	82
Excavator	0.051	82
Grader	0.051	82
Loader	0.051	82
Loaded Trucks	0.076	86
Bulldozer—large	0.089	87
Caisson drilling	0.089	87
Vibratory Roller—small	0.101	88
Compactor	0.138	90
Clam shovel drop	0.202	94
Vibratory Roller—large	0.210	94
Pile Driver (impact-typical)	0.644	104
Pile Driver (impact-upper range)	1.518	112
Notes: PPV = peak particle velocity rms = root mean square VdB = Velocity in Decibels Source: Compilation of scientific and academic literature, generated by Federal Transportation Administration (FTA) and Federal Highway Administration (FHWA).		

The propagation of groundborne vibration is not as simple to model as airborne noise. This is because noise in the air travels through a relatively uniform medium, while groundborne vibrations travel through the earth, which may contain significant geological differences. Factors that influence groundborne vibration include:

- **Vibration source:** Type of activity or equipment, such as impact or mobile, and depth of vibration source;
- **Vibration path:** Soil type, rock layers, soil layering, depth to water table, and frost depth; and
- **Vibration receiver:** Foundation type, building construction, and acoustical absorption.

Among these factors that influence groundborne vibration, there are significant differences in the vibration characteristics when the source is underground compared to at the ground surface. In addition, soil conditions are known to have a strong influence on the levels of groundborne vibration. Among the most important factors are the stiffness and internal damping of the soil and the depth to bedrock. Vibration propagation is more efficient in stiff clay soils than in loose sandy soils, and shallow rock seems to concentrate the vibration energy close to the surface and can result in groundborne vibration problems at large distance from the source. Factors such as layering of the soil and depth to the water table can have significant effects on the propagation of groundborne vibration. Soft, loose, sandy soils tend to attenuate more vibration energy than hard, rocky materials. Vibration propagation through groundwater is more efficient than through sandy soils. There are three main types of vibration propagation: surface, compression, and shear waves. Surface waves, or Rayleigh waves, travel along the ground's surface. These waves carry most of their energy along an expanding circular wave front, similar to ripples produced by throwing a rock into a pool of water. P-waves, or compression waves, are body waves that carry their energy along an expanding spherical wave front. The particle motion in these waves is longitudinal (i.e., in a "push-pull" fashion). P-waves are analogous to airborne sound waves. S-waves, or shear waves, are also body waves that carry energy along an expanding spherical wave front. However, unlike P-waves, the particle motion is transverse, or side-to-side, and perpendicular to the direction of propagation.

As vibration waves propagate from a source, the vibration energy decreases in a logarithmic nature and the vibration levels typically decrease by 6 VdB per doubling of the distance from the vibration source. As stated above, this drop-off rate can vary greatly depending on the soil type, but it has been shown to be effective enough for screening purposes in order to identify potential vibration impacts that may need to be studied through actual field tests. The vibration level (calculated below as "PPV") at a distance from a point source can generally be calculated using the vibration reference equation:

$$PPV = PPV_{ref} * (25/D)^n \text{ (in/sec)}$$

Where:

- PPV_{ref} = reference measurement at 25 feet from vibration source
- D = distance from equipment to the receptor
- n = vibration attenuation rate through ground

According to Section 7 of the Federal Transit Administration (FTA) Transit Noise and Vibration Impact Assessment Manual, an “n” value of 1.5 is recommended to calculate vibration propagation through typical soil conditions.¹

Existing Noise Levels

The plan area is a 6.8-mile corridor of Highway 74, a noncontiguous portion, in the unincorporated area between the City of Lake Elsinore and the City of Perris in western Riverside County. The planning area encompasses 1,026 parcels on approximately 2,220 acres of unincorporated land and includes portions of the communities of Warm Springs, Meadowbrook, and Good Hope that are located within 1,000 feet of the centerline of Highway 74. The dominant noise source in the project area is traffic on Highway 74.

Existing traffic noise levels along selected roadway segments in the project vicinity were modeled using the FHWA Traffic Noise Prediction Model (FHWA-RD-77-108). Site-specific information is entered, such as roadway traffic volumes, roadway active width, source-to-receiver distances, travel speed, noise source and receiver heights, and the percentages of automobiles, medium trucks, and heavy trucks that the traffic is made up of throughout the day, among other variables. The modeled Average Daily Traffic (ADT) volumes were obtained directly from the traffic study prepared by Urban Crossroads for the proposed project. The model inputs and outputs, including the 60 dBA, 65 dBA, and 70 dBA CNEL traffic noise contour distances, are provided in Appendix G. A summary of the modeling results is shown in Table 3.13-4.

Table 3.13-4: Existing (Year 2021) Traffic Noise Levels

Roadway Segment	ADT	Centerline to 70 CNEL (feet)	Centerline to 65 CNEL (feet)	Centerline to 60 CNEL (feet)	CNEL (dBA) 50 feet from Centerline of Outermost Lane
SR-74—Dexter Avenue to Cambern Avenue	41,300	129	270	577	73.0
SR-74—Cambern Avenue to Conard Avenue	42,400	129	273	587	73.9
SR-74—Conard Avenue to Rosetta Canyon Drive	42,600	130	275	589	73.5
SR-74—Rosetta Canyon Drive to Riverside Street	35,400	115	243	521	73.1
SR-74—Riverside Street to Wasson Canyon Road	31,500	106	225	482	72.6
SR-74—Wasson Canyon Road to Greenwald Avenue/Meadowbrook Avenue	30,400	104	220	471	72.4
SR-74—Greenwald Avenue/Meadowbrook Avenue to Richard Street	27,900	99	207	445	72.0

¹ Federal Transit Administration (FTA). 2018. Transit Noise and Vibration Impact Assessment Manual. September.

Roadway Segment	ADT	Centerline to 70 CNEL (feet)	Centerline to 65 CNEL (feet)	Centerline to 60 CNEL (feet)	CNEL (dBA) 50 feet from Centerline of Outermost Lane
SR-74—Richard Street to Ethanac Road	24,900	92	193	412	71.5
SR-74—Ethanac Road to Theda Street	25,900	94	198	423	71.7
SR-74—Theda Street to Sophie Street	25,500	93	196	419	71.6
SR-74—Sophie Street to Ellis Avenue	32,800	109	231	495	72.7
SR-74—Ellis Avenue to Navajo Road	27,900	99	207	445	72.0
4 th Street (SR-74)—Navajo Road to A Street	43,900	95	200	429	71.8
4 th Street (SR-74)—A Street to Perris Boulevard	24,400	67	137	291	69.3
4 th Street (SR-74)—Perris Boulevard to Redlands Avenue	21,100	62	124	264	68.6
4 th Street (SR-74)—East of Redlands Avenue	1,300	< 50	< 50	< 50	56.5
Redlands Avenue (SR-74)—South of 4 th Street	10,600	< 50	81	168	65.6
Redlands Avenue (SR-74)—4 th Street to I-215 SB	27,800	74	150	317	69.4
Redlands Avenue (SR-74)—I-215 SB to I-215 NB	24,400	72	139	292	68.5
Redlands Avenue (SR-74)—North of I-215 NB	26,200	72	144	305	69.2
Dexter Avenue—North of SR-74	14,200	< 50	62	134	65.7
Dexter Avenue—South of SR-74	10,200	< 50	< 50	108	64.3
Cambern Avenue—North of SR-74	8,600	< 50	< 50	97	62.5
Cambern Avenue—South of SR-74	220	< 50	< 50	< 50	47.6
Conard Avenue—North of SR-74	1,400	< 50	< 50	< 50	55.7
Rosetta Canyon Drive—South of SR-74	7,200	< 50	< 50	87	61.7
Riverside Street—South of SR-74	4,900	< 50	< 50	67	60.5
Wasson Canyon Road—South of SR-74	740	< 50	< 50	< 50	52.9
Meadowbrook Avenue—West of SR-74	2,200	< 50	< 50	< 50	57.6
Greenwald Avenue—East of SR-74	7,400	< 50	< 50	87	62.3
Ethanac Road—East of SR-74	240	< 50	< 50	< 50	48.0
Theda Street—West of SR-74	5,300	< 50	< 50	70	61.4
Sophie Street—South of SR-74	2,800	< 50	< 50	< 50	58.7
Ellis Avenue—West of SR-74	6,100	< 50	< 50	76	62.0
Navajo Road—West of SR-74	12,300	< 50	58	122	64.5

Roadway Segment	ADT	Centerline to 70 CNEL (feet)	Centerline to 65 CNEL (feet)	Centerline to 60 CNEL (feet)	CNEL (dBA) 50 feet from Centerline of Outermost Lane
A Street–North of 4 th Street	9,000	< 50	< 50	100	62.7
A Street–South of 4 th Street	5,900	< 50	< 50	77	60.8
Perris Boulevard–North of 4 th Street	15,400	< 50	67	142	65.5
Perris Boulevard–South of 4 th Street	9,600	< 50	< 50	104	63.4

Notes:
 ADT = Average Daily Traffic; The ADT values are calculated based on the PM peak-hour traffic volumes multiplied by a factor of 10.
 CNEL = Community Noise Equivalent Level
 dBA = A-weighted decibel
 NB = Northbound
 SB = Southbound
 * Modeling results do not take into account mitigating features such as topography, vegetative screening, fencing, building design, or structure screening. Rather, they assume a worst-case scenario of having a direct line of site on flat terrain.
 Source: FirstCarbon Solutions (FCS) 2022.

3.13.3 - Regulatory Framework

Federal

The adverse impact of noise was officially recognized by the federal government in the Noise Control Act of 1972, which serves three purposes:

- Promulgating noise emission standards for interstate commerce
- Assisting state and local abatement efforts
- Promoting noise education and research

The Federal Office of Noise Abatement and Control (ONAC) was initially tasked with implementing the Noise Control Act. However, the ONAC has since been eliminated, leaving the development of federal noise policies and programs to other federal agencies and interagency committees. For example, the Occupational Safety and Health Administration (OSHA) agency limits noise exposure of workers to 90 dB L_{eq} or less for 8 continuous hours, or 105 dB L_{eq} or less for 1 continuous hour. The United States Department of Transportation (USDOT) assumed a significant role in noise control through its various operating agencies. The Federal Aviation Administration (FAA) regulates noise of aircraft and airports. Surface transportation system noise is regulated by a host of agencies, including the FTA. Transit noise is regulated by the federal Urban Mass Transit Administration (UMTA), while freeways that are part of the interstate highway system are regulated by the FHWA. Finally, the federal government actively advocates that local jurisdictions use their land use regulatory authority to arrange new development in such a way that “noise-sensitive” uses are either prohibited from being sited adjacent to a highway or, alternately, that the developments are planned and constructed in such a manner that potential noise impacts are minimized.

Since the federal government has preempted the setting of standards for noise levels that can be emitted by the transportation sources, local jurisdictions are limited to regulating the noise generated by the transportation system through nuisance abatement ordinances and land use planning.

The FTA has established industry accepted standards for groundborne vibration impact criteria and impact assessment. These guidelines are published in its Transit Noise and Vibration Impact Assessment document.² The FTA guidelines include thresholds for construction vibration impacts for various structural categories as shown in Table 3.13-5.

Table 3.13-5: Federal Transit Administration Construction Vibration Impact Criteria

Building Category	PPV (in/sec)	Approximate VdB
I. Reinforced-Concrete, Steel or Timber (no plaster)	0.5	102
II. Engineered Concrete and Masonry (no plaster)	0.3	98
III. Non-engineered Timber and Masonry Buildings	0.2	94
IV. Buildings Extremely Susceptible to Vibration Damage	0.12	90
Notes: PPV = peak particle velocity VdB = Velocity in Decibels Source: Federal Transit Administration (FTA). 2006. Transit Noise and Vibration Impact Assessment.		

State

The State of California has established regulations that help prevent adverse impacts to occupants of buildings located near noise sources. Referred to as the “State Noise Insulation Standard,” it requires buildings to meet performance standards through design and/or building materials that would offset any noise source in the vicinity of the receptor. State regulations include requirements for the construction of new hotels, motels, apartment houses, and dwellings other than detached single-family dwellings that are intended to limit the extent of noise transmitted into habitable spaces. These requirements are found in the California Code of Regulations, Title 24 (known as the Building Standards Administrative Code), Part 2 (known as the California Building Code), Appendix Chapters 12 and 12A. For limiting noise transmitted between adjacent dwelling units, the noise insulation standards specify the extent to which walls, doors, and floor-ceiling assemblies must block or absorb sound. For limiting noise from exterior noise sources, the noise insulation standards set an interior standard of 45 dBA CNEL in any habitable room with all doors and windows closed. In addition, the standards require preparation of an acoustical analysis demonstrating the manner in which dwelling units have been designed to meet this interior standard, where such units are proposed in an area with exterior noise levels greater than 60 dBA CNEL.

Government Code Section 65302 mandates that the legislative body of each county and city in California adopt a noise element as part of its comprehensive general plan. The local noise element must recognize the land use compatibility guidelines published by the State Department of Health Services. These guidelines rank noise and land use compatibility in terms of normally acceptable, conditionally acceptable, normally unacceptable, and clearly unacceptable.

² Federal Transit Administration (FTA) 2006. Transit Noise and Vibration Impact Assessment.

Local Regulations

The planning area is located in western Riverside County. The County of Riverside General Plan (General Plan)³ is the master land use plan for the planning area. The County of Riverside addresses noise in the Noise Element of its General Plan and in the Noise Ordinance No. 847.

Riverside General Plan

The objective of the General Plan's Noise Element is to provide a systematic approach to identifying and appraising noise problems in the community; quantifying existing and projected noise levels; addressing excessive noise exposure; and community planning for the regulation of noise. To assist with meeting this objective, the General Plan establishes Land Use Compatibility for Community Noise Exposure standards, as well as acceptable interior noise levels for noise-sensitive land uses. These standards are summarized below:

The General Plan Noise Element identifies noise impact criteria depending on the noise source. Impact criteria that apply to the proposed project include criteria for transportation noise impacts to noise-sensitive land uses (e.g., an airport, freeway, or arterial traffic noise in residential areas); and criteria that apply to stationary noise impacts to sensitive land uses (e.g., stationary noise impacting neighboring communities). The County has also adopted noise criteria for land use planning purposes, as shown in Table 3-13.6. These criteria set outdoor noise level standards that are normally acceptable, conditionally acceptable, normally unacceptable, and clearly unacceptable for a variety of land uses.

The following policies from the General Plan are applicable to the proposed project:

- Policy N 1.1** Protect noise-sensitive land uses from high levels of noise by restricting noise-producing land uses from these areas. If the noise-producing land use cannot be relocated, then noise buffers such as setbacks, landscaping, or block walls shall be used.
- Policy N 1.2** Guide noise-tolerant land uses into areas irrevocably committed to land uses that are noise-producing, such as transportation corridors or within the projected noise contours of any adjacent airports.
- Policy N 1.3** Consider the following uses noise-sensitive and discourage these uses in areas in excess of 65 CNEL: schools, hospitals, rest homes, long term care facilities, mental care facilities, residential uses, libraries, passive recreation uses, and places of worship. According to the State of California Office of Planning and Research General Plan Guidelines, an acoustical study may be required in cases where these noise-sensitive land uses are located in an area of 60 CNEL or greater. Any land use that is exposed to levels higher than 65 CNEL will require noise attenuation measures.
- Policy N 1.4** Determine if existing land uses will present noise compatibility issues with proposed projects by undertaking site surveys.

³ Riverside County Transportation and Land Management Agency. County of Riverside General Plan. December 8, 2015. Website: <https://planning.rctlma.org/Zoning-Information/General-Plan>. Accessed January 31, 2022.

- Policy N 1.5** Prevent and mitigate the adverse impacts of excessive noise exposure on the residents, employees, visitors, and noise-sensitive uses of Riverside County.
- Policy N 1.6** Minimize noise spillover or encroachment from commercial and industrial land uses into adjoining residential neighborhoods or noise-sensitive uses.
- Policy N 1.7** Require proposed land uses, affected by unacceptably high noise levels, to have an acoustical specialist prepare a study of the noise problems and recommend structural and site design features that will adequately mitigate the noise problem.
- Policy N 1.8** Limit the maximum permitted noise levels that cross property lines and impact adjacent land uses, except when dealing with noise emissions from wind turbines. Please see the Wind Energy Conversion Systems section for more information.
- Policy N 2.2** Require a qualified acoustical specialist to prepare acoustical studies for proposed noise-sensitive projects within noise impacted areas to mitigate existing noise
- Policy N 2.3** Mitigate exterior and interior noises to the levels listed in Table N-2 below to the extent feasible, for stationary sources:

Table N-2:

Stationary Source Land Use Noise Standards ¹		
Land Use	Interior Standards	Exterior Standards
Residential		
10:00 p.m. to 7:00 a.m.	40 L _{eq} (10 minute)	45 L _{eq} (10 minute)
7:00 a.m. to 10:00 p.m.	55 L _{eq} (10 minute)	65 L _{eq} (10 minute)
Notes:		
¹ These are only preferred standards; final decision will be made by the Riverside County Planning Department and Office of Public Health. Source: County of Riverside. 2015. County of Riverside General Plan. December.		

- Policy N 4.1** Prohibit facility-related noise received by any sensitive use from exceeding the following worst-case noise levels:
- 45 dBA L_{eq} (10 minute), between the hours of 10:00 p.m. and 7:00 a.m. (nighttime standard).
 - 65 dBA L_{eq} (10 minute), between the hours of 7:00 a.m. and 10:00 p.m. (daytime standard).
- Policy N 4.2** Develop measures to control non-transportation noise impacts.
- Policy N 4.3** Ensure any use determined to be a potential generator of significant stationary noise impacts be properly analyzed and ensure that the recommended mitigation measures are implemented.

Policy N 4.4 Require that detailed and independent acoustical studies be conducted for any new or renovated land uses or structures determined to be potential major stationary noise sources.

Policy N 4.8 Require that the parking structures, terminals, and loading docks of commercial or industrial land uses be designed to minimize the potential noise impacts of vehicles on the site as well as on adjacent land uses.

Policy N 6.4 Restrict the use of motorized trail bikes, mini-bikes and other off-road vehicles in areas of the County except where designated for that purpose. Enforce strict operating hours for these vehicles in order to minimize noise impacts on sensitive land uses adjacent to public trails and parks.

Table 3.13-6: Land Use Compatibility for Community Noise Exposure

Land Use Category	Community Noise Exposure DNL or CNEL, dB					
	55	60	65	70	75	80
Residential	Light Blue			Medium Blue		Dark Blue
Transient Lodging—Motels, Hotels	Light Blue			Medium Blue		Dark Blue
Schools, Libraries, Churches, Hospitals, Nursing Homes	Light Blue			Medium Blue		Dark Blue
Auditoriums, Concert Halls, Amphitheaters	Medium Blue				Dark Blue	
Sports Arena, Outdoor Spectator Sports	Medium Blue					Dark Blue

Land Use Category	Community Noise Exposure DNL or CNEL, dB					
	55	60	65	70	75	80
Playgrounds, Neighborhood Parks						
Golf Courses, Riding Stables, Water Recreation, Cemeteries						
Office Buildings, Business Commercial and Professional						
Industrial, Manufacturing, Utilities, Agriculture						
	Normally Acceptable: Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special insulation requirements.					
	Conditionally Acceptable: New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design.					
	Normally Unacceptable: New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.					
	Clearly Unacceptable: New construction or development clearly should not be undertaken.					
Source: California Office of Noise Control.						

Riverside County Noise Ordinance

The County’s Noise Ordinance contains the County’s noise performance standards. However, the ordinance specifically notes that this ordinance is not intended to establish thresholds of significance for the purpose of any analysis required by the State California Environmental Quality Act (CEQA) Guidelines. However, these standards do apply to activity conducted by all persons within the Community Plan Area. Therefore, the following provides a summary of these standards.

Section 4 of the Noise Ordinance establishes restricts persons from creating or allowing the creation of any sound on any property that causes the exterior sound level on any other occupied property from exceeding the sound level standards set forth in Table 1 of the Ordinance. This table establishes maximum sound level standards for receiving land uses. For example, the ordinance establishes that an exterior noise performance standard of 55 dBA L_{max} may not be exceeded between the hours of 7:00 a.m. and 10:00 p.m. and 45 dBA L_{max} between the hours of 10:00 p.m. and 7:00 a.m. for residential land uses. For light industrial land use, an exterior noise performance standard of 75 dBA L_{max} may not be exceeded between the hours of 7:00 a.m. and 10:00 p.m. and 55 dBA L_{max} between the hours of 10:00 p.m. and 7:00 a.m. Business park land uses have an exterior noise performance standard of 65 dBA L_{max} that may not be exceeded between the hours of 7:00 a.m. and 10:00 p.m. and 45 dBA L_{max} between the hours of 10:00 p.m. and 7:00 a.m.

Section 6 of the Noise Ordinance restricts the operation of any power tool or construction equipment between the hours of 10:00 p.m. and 8:00 a.m. such that the power tool or construction equipment are audible to the human ear inside an inhabited dwelling.

According to Section 7 of the Noise Ordinance, an exception to the standards imposed by Ordinance Section 4 and 6, as referenced above, may be granted if an application for a construction-related exception is made to and considered by the Building and Safety Department and shall be accompanied by the appropriate filing fee.⁴

Elsinore Area Plan

The Elsinore Area Plan (ELAP) sets forth the following goals and policies related to noise:

- ELAP 5.8** Commercial Parking: should be screened/buffered from any public right-of-way with incorporation of landscaping, walls, berms with trees in support of the streetscape.
- ELAP 7.8** All new residential uses shall be designed to sufficiently reduce noise levels and other potential impacts associated with retained on-site and adjacent industrial uses.

Mead Valley Area Plan

The Mead Valley Area Plan (MVAP) sets forth the following goals and policies related to noise:

- MVAP 3.8** Commercial Parking: should be screened/buffered from any public right-of-way with incorporation of landscaping, walls, berms with trees in support of the streetscape.

Highway 74 Community Plan

The Highway 74 Community Plan sets forth the following goals and policies related to noise:

- Commercial Parking: should be screened/buffered from any public right-of-way with incorporation of landscaping, walls, berms with trees in support of the streetscape.

⁴ Riverside County. 2007. An Ordinance of the County of Riverside Amending Ordinance No. 847 Regulating Noise. Website: <https://www.rivcocob.org/ords/800/847.pdf>. Accessed December 13, 2022.

3.13.4 - Methodology

Construction Noise Analysis Methodology

A worst-case scenario was analyzed assuming each piece of modeled equipment would operate simultaneously at the nearest reasonable locations to the closest noise-sensitive receptor for the loudest phase of construction. Noise emission levels recommended by FHWA's Highway Construction Noise Handbook were used to ascertain the noise generated by specific types of construction equipment. The construction noise impact was evaluated in terms of maximum levels (L_{max}). Analysis requirements were based on the sensitivity of nearby receptors and the Noise Ordinance specifications.

Traffic Noise Modeling Methodology

The FHWA highway traffic noise prediction model (FHWA-RD-77-108) was used to evaluate traffic-related noise conditions in the vicinity of the planning area. Traffic data used in the model was provided by the County. The resultant noise levels were weighted and summed over a 24-hour period in order to determine the CNEL values. The FHWA-RD-77-108 Model arrives at a predicted noise level through a series of adjustments to the reference energy mean emission level. Adjustments are then made to the reference energy mean emission level to account for the roadway active width (i.e., the distance between the center of the outermost travel lanes on each side of the roadway); the total ADT; the percentage of ADT that flows during the day, evening, and night; the travel speed; the vehicle mix on the roadway; a percentage of the volume of automobiles, medium trucks, and heavy trucks; the roadway grade; the angle of view of the observer exposed to the roadway; and the site conditions ("hard" or "soft") as they relate to the absorption of the ground, pavement, or landscaping.

The level of traffic noise depends on the three primary factors: (1) the volume of the traffic, (2) the speed of the traffic, and (3) the number of trucks in the flow of traffic. Generally, the loudness of traffic noise is increased by heavier traffic volumes, higher speeds, and greater number of trucks. Vehicle noise is a combination of the noise produced by the engine, exhaust, and tires. Because of the logarithmic nature of traffic noise levels, a doubling of the traffic volume (assuming that the speed and truck mix do not change) results in a noise level increase of 3 dBA. Based on the FHWA community noise assessment criteria, this change is considered "barely perceptible."

The model calculated traffic noise levels under without project conditions, as well as levels that would occur under project-generated traffic conditions. The traffic noise levels were calculated based on a single-lane-equivalent noise source combining both directions of travel. A single-lane-equivalent noise source is when the vehicular traffic from all lanes is combined into a theoretical single-lane that has a width equal to the distance between the two outside lanes of a roadway, which provides almost identical results to analyzing each lane separately where elevation changes are minimal. The modeling assumes a direct line of sight to the roadway and flat terrain conditions.

Stationary Noise Source Analysis Methodology

The proposed project would generate noise from future development that could contain new exterior mechanical equipment sources, such as rooftop ventilation systems on proposed industrial

uses, and potential new parking lot activities. To provide a conservative analysis, the highest end of the range of reference noise levels for these stationary noise sources was used to calculate the reasonable worst-case hourly average noise levels from each noise source. These noise levels were then compared to the County's applicable noise performance threshold to determine whether these noise sources would result in a substantial increase in excess of this standard.

Vibration Impact Analysis Methodology

The County does not have adopted criteria for construction or operational groundborne vibration impacts. Therefore, the FTA's vibration impact criteria and modeling and analysis methodology were utilized to evaluate potential vibration impacts. The FTA has established industry accepted standards for vibration impact criteria and impact assessment. These guidelines are published in its Transit Noise and Vibration Impact Assessment document,⁵ and are summarized in Table 3.13-5 in the regulatory discussion above.

3.13.5 - Thresholds of Significance

Section XIII of Appendix G to the State CEQA Guidelines addresses typical adverse effects to noise, and includes the following threshold questions to evaluate a project's impacts on noise:

- Would the project result in the generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?
- Would the project result in the generation of excessive groundborne vibration or noise levels?
- For a project located within the vicinity of a private airstrip or an airport land use plan, or where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

The above threshold questions have been incorporated into the following thresholds derived from Riverside County's Environmental Assessment Checklist, which are used to evaluate the significance of the proposed project's impacts due to noise. Therefore, for purposes of this analysis, project-related noise impacts are evaluated against the following criteria:

26. Airport Noise

- a) For a project located within an airport land use plan or, where such a plan has not been adopted, within two (2) miles of a public airport or public use airport would the project expose people residing or working in the project area to excessive noise levels?
- b) For a project located within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?

⁵ Federal Transit Administration (FTA). 2006. Transit Noise and Vibration Impact Assessment. May.

27. Noise Effects by the Project

- a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan, noise ordinance, or applicable standards of other agencies?
- b) Generation of excessive groundborne vibration or groundborne noise levels?

3.13.6 - Project Impacts and Mitigation Measures

This section discusses potential impacts associated with the development of the proposed project and provides mitigation measures where appropriate.

Airport Noise

Impact NOI-26(a): For a project located within an airport land use plan or, where such a plan has not been adopted, within two (2) miles of a public airport or public use airport, the project would not expose people residing or working in the project area to excessive noise levels.

Impact Analysis

The nearest public airport to the planning area is the Corona Municipal Airport, located approximately 20 miles to the northwest. At this distance, the planning area is located well outside of the airport's 65 dBA CNEL noise contours. Therefore, implementation of the proposed project would not expose persons residing or working at future development within the planning area to noise levels from airport activity that would be in excess of normally acceptable standards. Therefore, no impact would occur.

Level of Significance

No impact.

Mitigation Measures

None required.

Impact NOI-26(b): For a project located within the vicinity of a private airstrip, the project would not expose people residing or working in the project area to excessive noise levels.

Impact Analysis

The nearest private airport to the development area is the Perris Valley Airport, located approximately 1.5 miles east of the planning area. At this distance, the planning area is located well outside of the airport's 65 dBA CNEL noise contours. Therefore, implementation of the proposed project would not expose persons residing or working at future development within the planning area to noise levels from airport activity that would be in excess of normally acceptable standards. Therefore, no impact would occur.

Level of Significance

No impact.

Mitigation Measures

None required.

Noise Effects by the Project

Substantial Increase Impacts

Impact NOI-27(a): The proposed project could 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, noise ordinance, or applicable standards of other agencies.

Impact Analysis

Short-term Construction Impacts

A significant impact would occur if project-related, noise-producing construction activities would result in a substantial temporary increase in ambient noise levels in the vicinity of any future development project that would exceed standards established in the local general plan or noise ordinance. For purposes of this analysis, a substantial temporary increase is considered one that would result in sleep disturbance or that would interrupt normal activities at adjacent land uses.

Development that could occur from implementation of the proposed project is expected to result in construction activities within the planning area. Noise impacts from construction activities would be a function of the noise generated by construction equipment, equipment location, sensitivity, of nearby land uses, and the timing and duration of the construction activities.

For future development projects, two types of short-term noise impacts would occur during site preparation and project construction. The first type would result from the increase in traffic flow on local streets, associated with the transport of workers, equipment, and materials to and from the planning area. The transport of workers and construction equipment and materials to a development site would incrementally increase noise levels on access roads leading to the site. Typically, a doubling of the ADT hourly volumes on a roadway segment is required in order to result in an increase of 3 dBA in traffic noise levels, which, as discussed in the characteristics of noise discussion above, is the lowest change that can be perceptible to the human ear in outdoor environments. Individual development project's construction trips would not be expected to double the hourly or daily traffic volumes along roadway segments in the vicinity of a development site. For this reason, short-term intermittent noise from construction trips would not be expected to result in a perceptible increase in hourly or daily average traffic noise levels. Therefore, short-term construction-related noise impacts associated with the transportation of workers and equipment to a development site would be less than significant.

For future development projects, the second type of short-term noise impact is related to noise generated during site preparation, grading, and construction activities. Construction is performed in discrete steps, each of which has its own mix of equipment, and consequently, its own noise characteristics. These various sequential phases would change the character of the noise generated on-site. Thus, the noise levels vary as construction progresses. Despite the variety in the types and sizes of construction equipment, similarities in the dominant noise sources and patterns of operation allow construction noise ranges to be categorized by work phase. Table 3.13-2 shows typical noise

levels of construction equipment as measured at a distance of 50 feet from the operating equipment.

The site preparation phase of a future project, which includes excavation and grading activities, generates the highest noise levels because the noisiest construction equipment is earthmoving equipment. Earthmoving equipment includes excavating machinery and compacting equipment, such as bulldozers, draglines, backhoes, front loaders, roller compactors, scrapers, and graders. Typical operating cycles for these types of construction equipment may involve 1 or 2 minutes of full power operation followed by 3 or 4 minutes at lower power settings. Operating cycles for these types of construction equipment may involve 1 or 2 minutes of full power operation followed by 3 or 4 minutes at lower power settings.

The proposed project does not approve any specific development; however, development projects consistent with the Community Plan would be expected to require the use of some of the loudest pieces of construction equipment listed in Table 3.13-2. For example, the maximum noise level generated by each scraper is assumed to be 85 dBA L_{max} at 50 feet from this equipment. Bulldozers would generate 85 dBA L_{max} at 50 feet. The maximum noise level generated by graders is approximately 85 dBA L_{max} at 50 feet. Each doubling of sound sources with equal strength increases the noise level by 3 dBA. Assuming that each piece of construction equipment operates at some distance from the other equipment, a reasonable worst-case combined noise level during this phase of construction would be 90 dBA L_{max} at a distance of 50 feet from the acoustical center of a construction area. This would result in a reasonable worst-case hourly average of 86 dBA L_{eq} . The acoustical center reference is used because construction equipment must operate at some distance from one another on a project site, and the combined noise level as measured at a point equidistant from multiple sources operating simultaneously would represent the worst-case noise levels.

There are no site-specific development plans, however future project development in the planning area could result in a relatively high single event noise exposure potential causing an intermittent noise nuisance that could result in annoyance or sleep disturbances at nearby sensitive receptors. Therefore, mitigation is required to reduce this potential impact. Implementation of mitigation requiring use of best management noise reduction techniques and practices and other site-specific noise reduction measures would ensure that construction noise would not result in sleep disturbances at nearby off-site sensitive receptors or expose persons to excessive noise levels. Therefore, with implementation of MM NOI-1, the potential short-term construction noise impacts to noise-sensitive receptors in the project vicinity would be reduced to a less than significant level.

Traffic Noise Impacts

A significant impact would occur if project-generated traffic would result in a substantial increase in ambient noise levels compared with those that would exist without the proposed project. The County does not define “substantial increase;” therefore, for purpose of this analysis, a substantial increase is based on the following criteria. A characteristic of noise is that audible increases in noise levels generally refer to a change of 3 dBA or more, as this level has been found to be barely perceptible to the human ear in outdoor environments. A change of 5 dBA is considered the minimum readily perceptible change to the human ear in outdoor environments. Therefore, for

purposes of this analysis, a significant impact would occur if the proposed project would cause the CNEL to increase by any of the following:

- 5 dBA or more even if the CNEL would remain below normally acceptable levels for a receiving land use.
- 3 dBA or more, thereby causing the CNEL in the project vicinity to exceed normally acceptable levels and result in noise levels that would be considered conditionally acceptable for a receiving land use.
- 1.5 dBA or more where the CNEL currently exceeds conditionally acceptable levels.

As identified in Table 3.13-6, noise environments with noise levels of up to 60 dBA CNEL are considered normally acceptable for new residential-low-density land use development; environments with noise levels of up to 70 dBA CNEL are considered normally acceptable for new business and commercial land use development; environments with noise levels of up to 75 dBA CNEL are considered normally acceptable for new industrial land use development.

The FHWA highway traffic noise prediction model (FHWA-RD-77-108) was used to evaluate existing and future project-related traffic noise conditions along modeled roadway segments in the vicinity of the planning area. Traffic modeling was performed using the data provided by the County. The resultant noise levels were weighed and summed over a 24-hour period to determine the CNEL values. The traffic noise modeling input and output files—including the 60 dBA, 65 dBA, and 70 dBA CNEL noise contour distances—are included in Appendix G. Table 3.13-7 shows a summary of the traffic noise levels for year 2050 projected traffic conditions without and with the proposed project, as measured at 50 feet from the centerline of the outermost travel lane.

Table 3.13-7: Year 2050 Traffic Noise Levels Without and With the Proposed Project

Roadway Segment	Without Project		With Project		Increase Over Without Project Conditions (dBA)
	ADT	CNEL (dBA)	ADT	CNEL (dBA)	
SR-74—Dexter Avenue to Cambern Avenue	80,800	75.9	79,100	75.8	-0.1
SR-74—Cambern Avenue to Conard Avenue	105,100	77.8	102,600	77.7	-0.1
SR-74—Conard Avenue to Rosetta Canyon Drive	90,500	76.8	88,900	76.7	-0.1
SR-74—Rosetta Canyon Drive to Riverside Street	93,500	77.3	92,300	77.2	-0.1
SR-74—Riverside Street to Wasson Canyon Road	113,500	78.1	99,700	77.6	-0.5
SR-74—Wasson Canyon Road to Greenwald Avenue/Meadowbrook Avenue	99,100	77.5	96,900	77.4	-0.1
SR-74—Greenwald Avenue/ Meadowbrook Avenue to Richard Street	u96,600	77.4	98,200	77.5	0.1

Roadway Segment	Without Project		With Project		Increase Over Without Project Conditions (dBA)
	ADT	CNEL (dBA)	ADT	CNEL (dBA)	
SR-74—Richard Street to Ethanac Road	94,200	77.3	110,500	78.0	0.7
SR-74—Ethanac Road to Theda Street	111,000	78.0	48,700	74.5	-3.5
SR-74—Theda Street to Sophie Street	48,900	74.5	48,900	74.5	0.0
SR-74—Sophie Street to Ellis Avenue	46,800	74.3	44,500	74.1	-0.2
SR-74—Ellis Avenue to Navajo Road	42,100	73.8	34,600	73.0	-0.8
4 th Street (SR-74)—Navajo Road to A Street	32,100	70.4	39,500	71.3	0.9
4 th Street (SR-74)—A Street to Perris Boulevard	38,200	71.2	25,300	69.4	-1.8
4 th Street (SR-74)—Perris Boulevard to Redlands Avenue	24,800	69.3	12,700	66.4	-2.9
4 th Street (SR-74)—East of Redlands Avenue	12,400	66.3	1,800	57.9	-8.4
Redlands Avenue (SR-74)—South of 4th Street	1,700	57.7	14,600	67.0	9.3
Redlands Avenue (SR-74)—4th Street to I-215 SB	14,100	66.5	38,200	70.8	4.3
Redlands Avenue (SR-74)—I-215 SB to I-215 NB	36,900	70.3	35,500	70.2	-0.1
Redlands Avenue (SR-74)—North of I-215 NB	34,400	70.4	41,100	71.1	0.7
Dexter Avenue—North of SR-74	40,500	70.3	27,300	68.6	-1.7
Dexter Avenue—South of SR-74	27,900	68.6	19,600	67.1	-1.5
Cambern Avenue—North of SR-74	20,000	66.1	20,700	66.3	0.2
Cambern Avenue—South of SR-74	21,200	67.5	10,000	64.2	-3.3
Conard Avenue—North of SR-74	10,200	64.3	2,800	58.7	-5.6
Rosetta Canyon Drive—South of SR-74	2,900	57.7	18,600	65.8	8.1
Riverside Street—South of SR-74	18,900	66.4	15,500	65.5	-0.9
Wasson Canyon Road—South of SR-74	15,400	66.1	2,400	58.0	-8.1
Meadowbrook Avenue—West of SR-74	2,400	58.0	31,200	69.1	11.1
Greenwald Avenue—East of SR-74	39,900	69.6	20,800	66.8	-2.8
Ethanac Road—East of SR-74	20,000	67.2	73,600	72.9	5.7
Theda Street—West of SR-74	73,900	72.9	10,100	64.2	-8.7
Sophie Street—South of SR-74	9,700	64.1	16,000	66.2	2.1
Ellis Avenue—West of SR-74	16,800	66.4	11,100	64.6	-1.8
Navajo Road—West of SR-74	10,300	63.7	5,500	61.0	-2.7

Roadway Segment	Without Project		With Project		Increase Over Without Project Conditions (dBA)
	ADT	CNEL (dBA)	ADT	CNEL (dBA)	
A Street–North of 4th Street	5,300	60.4	14,000	64.6	4.2
A Street–South of 4 th Street	13,200	64.3	9,200	62.8	-1.5
Perris Boulevard–North of 4th Street	8,600	63.0	39,700	69.6	6.6
Perris Boulevard–South of 4 th Street	38,900	69.5	24,700	67.5	-2.0

Note:
 ADT = Average Daily Traffic
 CNEL = Community Noise Equivalent Level
 dBA = A-weighted decibel
 NB = Northbound
 SB = Southbound
Bolded values indicate roadway segments with noise levels that would exceed acceptable standards for new residential-low-density land use development.
 Source: FirstCarbon Solutions (FCS) 2022.

The majority of modeled roadway segments would experience a reduction in traffic noise levels with implementation of the proposed project, compared to conditions that would exist without the proposed project, due to lower anticipated average daily trips generated by the proposed land uses compared to the total development that could occur under existing conditions land use designations.

However, all the bolded values shown in Table 3.13-7 identify the roadway segments that would experience project-related increases greater than 5 dBA, or that would experience increases of 3 dBA or greater and also exceed the normally acceptable threshold of 60 dBA CNEL for new residential-low-density land use development. The impacted roadway segments are as follows:

- Redlands Avenue (SR-74)–South of 4th Street
- Redlands Avenue (SR-74)–4th Street to I-215
- Rosetta Canyon Drive–South of SR-74
- Meadowbrook Avenue–West of SR-74
- Ethanac Road–East of SR-74
- A Street–North of 4th Street
- Perris Boulevard–North of 4th Street

These increases would be considered a significant impact and site-specific analysis would be required for future development in these areas.

Noise Policy N 1.3 of the County’s Noise Element requires any proposed land use development that would be exposed to noise levels higher than 65 dBA CNEL would require noise attenuation measures. Noise Policy N 1.7 of the County’s Noise Element specifies that any proposed land use development that would be exposed to unacceptably high noise levels shall be required to prepare a noise study that identifies recommended structural and site design features that would adequately mitigate potential noise impacts. Policy N 2.2 also requires for any proposed noise-sensitive land use

development project that would be located within a noise impacted area to prepare a site-specific noise study that identifies mitigation design features to mitigate existing noise.

There are a variety of noise reduction measures that can be incorporated into future project designs that would reduce traffic noise impacts to future land use development in the planning area. For example, based on the United States Environmental Protection Agency (EPA) Protective Noise Levels, with a combination of walls, doors, and windows, standard construction in accordance with building code requirements for residential developments would provide 25 dBA in exterior-to-interior noise reduction with windows closed and 15 dBA or more with windows open. Setbacks can also reduce traffic noise impacts to land uses along impacted roadways. For line sources, such as traffic noise on a roadway, a 4.5 dBA/DD is typically observed for soft-site conditions. For example, future development sites that are set back a minimum of 100 feet from the roadway centerline would experience traffic noise levels 4.5 dBA lower than at 50 feet from the roadway centerline. Effectively designed structural screening, such as building placement or sound walls, can typically provide 6 dBA to 20 dBA in noise reduction for shielded areas compared to no shielding.

Therefore, any proposed development project that would include noise-sensitive land use development along noise impacted roadway segments identified in Table 3.13-7 shall demonstrate compliance with Noise Policies N 1.3, N 1.7, and N 2.2 of the County's Noise Element by implementing Mitigation Measure (MM) NOI-2, which requires preparation of a noise study to identify appropriate design measures, where required, to reduce the potential effect of traffic noise. With implementation of MM NOI-2, impacts would be reduced to less than significant.

Stationary Operational Noise Impacts

A significant impact would occur if operational noise levels generated by stationary noise sources at development projects with implementation of the proposed project exceed the following noise performance standards:

- **Residential:** 55 dBA L_{max} between 7:00 a.m. and 10:00 p.m. and 45 dBA L_{max} between the hours of 10:00 p.m. and 7:00 a.m.
- **Light Industrial:** 75 dBA L_{max} between 7:00 a.m. and 10:00 p.m. and 55 dBA L_{max} between the hours of 10:00 p.m. and 7:00 a.m.
- **Business Park:** 65 dBA L_{max} between 7:00 a.m. and 10:00 p.m. and 45 dBA L_{max} between the hours of 10:00 p.m. and 7:00 a.m.

Development projects that could occur with implementation of the proposed project would include new stationary noise sources such as parking lot activities, and mechanical ventilation system equipment. These would be potential point sources of noise that could affect noise-sensitive receptors in the project vicinity.

Parking Lot Activities

Parking activities include vehicles cruising at slow speeds, doors shutting, or cars starting, would generate noise levels of approximately 60 dBA to 70 dBA L_{max} at 50 feet. Conversation between two persons at 3 to 5 feet apart would generate a noise level of 60 dBA L_{eq} at 5 feet, or approximately 40 dBA L_{eq} as measured at 50 feet.

These stationary source operational noise levels could exceed the County's thresholds if they were to occur in areas adjacent to sensitive receptor land uses. Therefore, mitigation would be required to reduce this potential impact. Parking activity noise can be mitigated either at the source or at the receiving land use using setbacks, block walls, acoustic-rated windows, or by siting parking areas on sides of buildings opposite sensitive receptors (using buildings as shielding). For example, at a distance of 300 feet, unobstructed parking lot activity noise levels would attenuate to below 55 dBA L_{max} ; while properly sited structural (building or sound wall) shielding can provide a minimum of 15 dBA reduction.

Noise Policy N 4.8 of the County's Noise Element requires that any proposed parking structures, terminals, and loading docks of commercial or industrial land uses be designed to minimize the potential noise impacts of vehicles on the site as well as on adjacent land uses.

Therefore, with implementation of MM NOI-2, which requires preparation of a noise study to identify appropriate design measures, where required, to reduce the potential effect of parking lot noise, impacts generated by future development projects would be reduced to less than significant.

Mechanical Equipment Operations

At the time of preparation of this analysis, details were not available pertaining to proposed mechanical ventilation systems for future development projects. Therefore, a reference noise level for typical mechanical ventilation systems was used for this analysis. Noise levels from typical residential mechanical ventilation equipment are anticipated to range up to approximately 60 dBA L_{eq} at a distance of 25 feet.

These stationary source operational noise levels could exceed the County's thresholds if they were to occur in areas adjacent to sensitive receptor land uses. Therefore, mitigation would be required to reduce this potential impact. Mechanical equipment operational noise can be mitigated either at the source or at the receiving land use using setbacks, shielding, acoustic-rated windows, or by locating such equipment on rooftops or sides of buildings opposite sensitive receptors (using buildings as shielding). For example, at a distance of 50-feet, unobstructed mechanical ventilation equipment operational noise levels would attenuate to below 55 dBA L_{max} ; while properly sited structural (building or sound wall) shielding can provide a minimum of 15 dBA reduction.

Therefore, with implementation of MM NOI-2, which requires preparation of a noise study to identify appropriate design measures, where required, to reduce the potential effect of mechanical ventilation noise, impacts generated by future development projects would be reduced to less than significant.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

MM NOI-1 Construction Noise Mitigation Plan

Prior to issuance of grading and/or building permits, a note shall be provided on grading and building plans indicating that during grading and construction, the

property owner/developer shall be responsible for requiring contractors to implement the following measures to limit construction-related noise:

- The construction contractor shall limit construction activities to the daytime hours of 7:00 a.m. to 10:00 p.m., Monday through Saturday.
- The construction contractor shall ensure that all internal combustion engine-driven equipment is equipped with mufflers that are in good condition and appropriate for the equipment.
- The construction contractor shall locate stationary noise-generating equipment as far as possible from sensitive receptors when sensitive receptors adjoin or are near a construction project area. In addition, the project contractor shall place such stationary construction equipment so that emitted noise is directed away from sensitive receptors nearest the planning area.
- The construction contractor shall prohibit unnecessary idling (no more than 5-minutes) of internal combustion engines.
- The construction contractor shall, to the maximum extent practical, locate on-site equipment staging areas to maximize the distance between construction-related noise sources and noise-sensitive receptors nearest the planning area during all project construction.
- For construction activity within 50 feet of any noise-sensitive receptors, a temporary noise barrier shall be installed by the applicant/developer. This temporary noise barrier shall be installed prior to the onset of construction activities that would require the use of heavy construction equipment. The barrier shall be located between the construction zone and all adjacent sensitive receptor land uses. The temporary sound barrier shall provide a reduction in noise that shall meet the County's construction noise threshold of 55 dBA L_{max} as measured at the façade of the sensitive receptor land uses. The noise barrier shall be a minimum height of 8 feet and be free of gaps and holes and must achieve a Sound Transmission Class (STC) of 35 or greater. The barrier can be either (a) a 0.75-inch-thick plywood wall OR (b) a hanging blanket/curtain with a surface density of at least 2 pounds per square foot. For either configuration, the construction side of the barrier shall have an exterior lining of sound absorption material with a Noise Reduction Coefficient (NRC) rating of 0.7 or higher.
- The construction contractor shall designate a "disturbance coordinator" who would be responsible for responding to any complaints about construction noise. The disturbance coordinator shall determine the cause of the noise complaint (e.g., bad muffler, etc.) and shall require that reasonable measures be implemented to correct the problem.
- These measures may only be granted an exception if an application for construction-related exception is made to and considered by the Building and Safety Department in accordance with Section 7 in the Noise Ordinance.

MM NOI-2 Operational Noise Reduction Plan

Prior to issuance of building permits, the property owner/developer shall be responsible to implement the following measures to limit on-site operational stationary noise source impacts:

- Any proposed development project that would include noise-sensitive land use development along noise impacted roadway segments identified in Table 3.13-7 shall demonstrate compliance with Noise Policies N 1.3, N 1.7, and N 2.2 of the County's Noise Element by submitting a final acoustical report prepared to the satisfaction of the Planning Director that identifies any necessary design features that would address potential traffic noise impacts to proposed noise-sensitive land uses.
- Any proposed development projects that include parking structures, terminals, or loading docks of commercial or industrial land uses shall demonstrate compliance with Noise Policy N 4.8 of the County's Noise Element by submitting a final acoustical report prepared to the satisfaction of the Planning Director that identifies design measures to adequately minimize the potential noise impacts of vehicles on the site to adjacent land uses.
- For any future development project that would include stationary noise sources, such as parking areas within 300 feet or mechanical systems within 50 feet of a residential receptor, the property owner/developer shall submit a final acoustical report prepared to the satisfaction of the Planning Director to address potential stationary source noise impacts to nearby residences. Noise reduction design features may include, but are not limited to, locating stationary noise sources on the site to be shielded by structures (buildings, enclosures, or sound walls) or by using equipment that has a quieter rating.
- These reports shall demonstrate that the proposed project incorporates sufficient noise attenuation features if needed to meet the County's exterior and interior noise standards. The individual project owner/developer shall submit the noise mitigation report to the Planning Director for review and approval. Upon approval by the County, the proposed acoustical design features shall be incorporated into the future development.

Level of Significance After Mitigation

Less than significant impact.

Groundborne Vibration Impacts

Impact NOI-27(b): The proposed project could generate excessive groundborne vibration or Groundborne Vibration Impacts during construction. The proposed project would not generate excessive groundborne vibration or Groundborne Vibration Impacts during operation.

Impact Analysis

This section analyzes both construction and operational groundborne vibration impacts. The County has not adopted criteria for groundborne vibration impacts; therefore, for purposes of this analysis, the FTA's vibration impact criteria are utilized to analyze vibration impacts. The FTA has established industry accepted standards for vibration impact criteria and impact assessment. These guidelines are published in its Transit Noise and Vibration Impact Assessment Manual. The construction vibration impact criteria are summarized in Table 3.13-5 in the regulatory section above.

Short-term Construction Vibration Impacts to off-site Receptors

Construction activity can result in varying degrees of ground vibration, depending on the equipment used on the site. Operation of construction equipment causes ground vibrations that spread through the ground and diminish in strength with distance. Buildings in the vicinity of a construction site respond to these vibrations with varying results ranging from no perceptible effects at the low levels, to slight damage at the highest levels. Table 3.13-3 provides approximate vibration levels for specific types of construction equipment and activities.

Of the variety of equipment used during construction, impact pile drivers that could be used in the site preparation phase of construction would produce the greatest groundborne vibration levels. Impact pile drivers produce groundborne vibration levels ranging up to 0.644 inch per second (in/sec) PPV at 25 feet from the operating equipment.

Construction vibration levels from future development projects could exceed the FTA's damage threshold criteria of 0.12 in/sec PPV. Therefore, mitigation would be required to reduce this potential impact. Construction vibration sources can be mitigated to acceptable levels either at the source or on the adjacent property using alternate equipment, adequate setbacks, or by digging temporary trenches between the source and the receptor. For example, at a distance of 200 feet, vibration levels from an impact pile driver would attenuate to 0.02 in/sec PPV.

Therefore, implementation of MM NOI-3, which requires preparation of a Construction Vibration Reduction Plan, would ensure that these vibration level impacts generated by future development projects would be reduced to a less than significant impact.

Operational Vibration Impacts

Based on the proposed types of land uses as part of the proposed project, future related development projects are not anticipated to include any permanent sources of vibration that would expose persons in the project vicinity to excessive groundborne vibration levels. In addition, there are no existing significant permanent sources of groundborne vibration located within the planning area to which future development projects would be exposed. Therefore, project operational groundborne vibration level impacts would be considered less than significant.

Level of Significance Before Mitigation

Potentially significant during construction. Less than significant impact at operation.

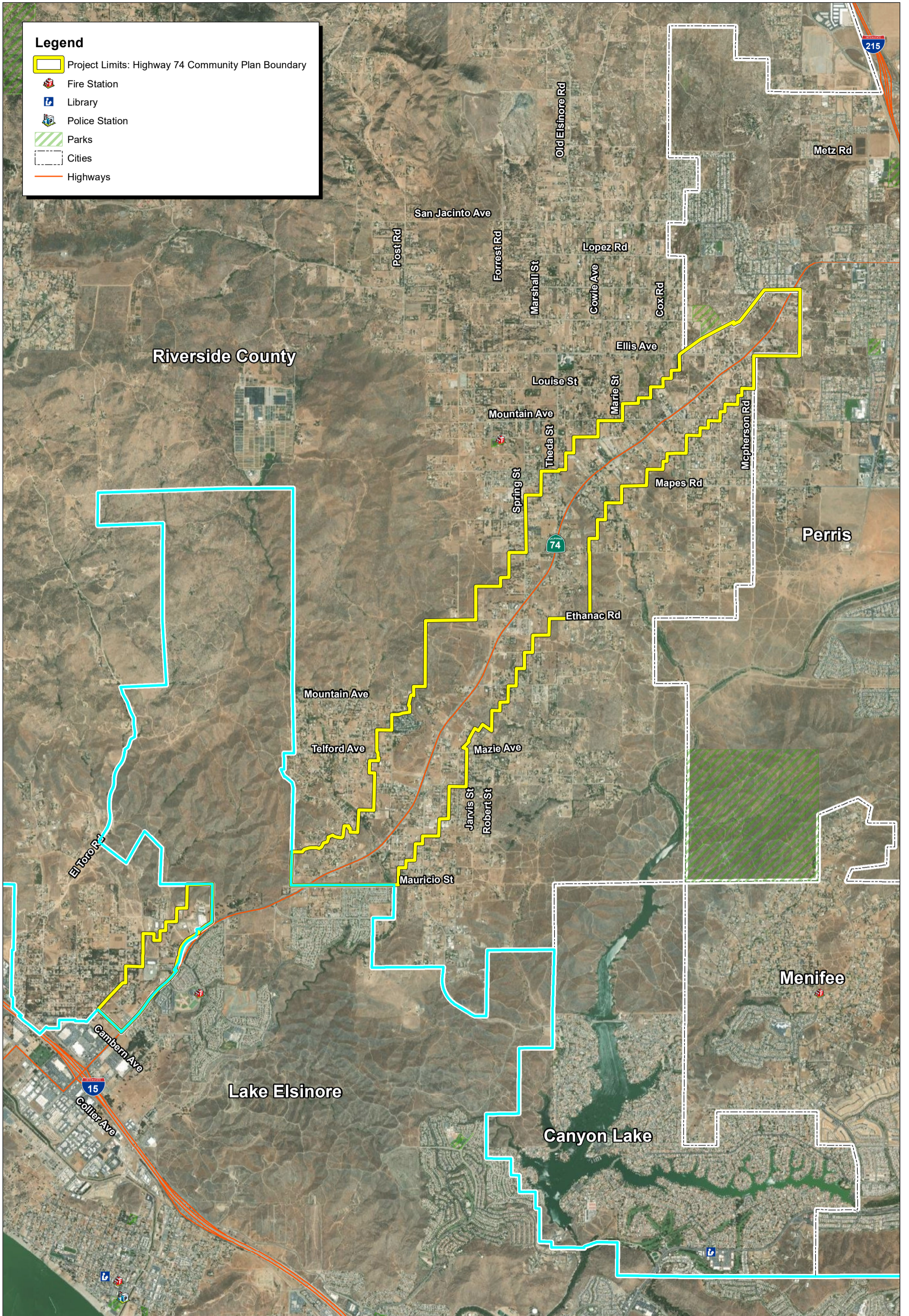
Mitigation Measures**MM NOI-3 Construction Vibration Reduction Plan**

Prior to issuance of grading and/or building permits, a note shall be provided on grading and building plans indicating that during grading and construction, the property owner/developer shall be responsible for requiring contractors to implement the following measures to limit construction-related vibration impacts:

- For any future development projects that would necessitate the use of pile driving within 200 feet of an off-site structure, shall submit a Construction Vibration Reduction Plan that identifies specific techniques, such as the depth and location of temporary trenching, that would reduce potential vibration impacts to less than significant for the impacted structure.
- For any future development projects that would necessitate the use of large vibratory rollers within 30-feet of an off-site structure, or the use of other heavy construction equipment within 15-feet of an off-site structure, shall submit a Construction Vibration Reduction Plan that identifies specific techniques, such as the depth and location of temporary trenching, that would reduce potential vibration impacts to less than significant for the impacted structure.
- The individual project owner/developer shall submit the Construction Vibration Reduction Plan to the Planning Director for review and approval. Upon approval by the County, the construction vibration reduction measures shall be incorporated into the construction documents.

Level of Significance After Mitigation

Less than significant impact.



Source: ESRI Aerial Imagery, Riverside County GIS Data.



Exhibit 13.10-1
Public Services and Facilities

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3.14 - Paleontological Resources

3.14.1 - Introduction

This section describes the paleontological resources existing setting in the Highway 74 Community Plan area (planning area) and County, summarizes the applicable regulatory framework, and identifies potential significant impacts regarding paleontological resources for development within the planning area. Setting information for this section is drawn from the County of Riverside General Plan (General Plan), the County of Riverside General Plan Environmental Impact Report (General Plan EIR), and other public sources.

3.14.2 - Environmental Setting

According to the General Plan, paleontological resources are the fossilized biotic remains of ancient environments. They are valued for the information they yield about the history of the earth and its past ecological settings. Riverside County has been inventoried for geologic formations known to potentially contain paleontological resources. Lands with high, low or undetermined potential for finding paleontological resources are mapped on Figure OS-8, the Paleontological Sensitivity Resources Map. This map is used in the environmental assessment of development proposals and the determination of required impact mitigation.

3.14.3 - Regulatory Framework

Federal Regulations

Paleontological Resources Preservation Act

The Paleontological Resources Preservation Act (PRPA) was signed into law on March 30, 2009 (Public Law 111-11, Title VI, Subtitle D; 16 United States Code [USC] §§ 470aaa–470aaa-11). PRPA directs the Department of Agriculture (USDA) and the Department of the Interior (National Park Service, Bureau of Land Management [BLM], United States Bureau of Reclamation [USBR], and Fish and Wildlife Service [USFWS]) to implement comprehensive paleontological resource management programs. Section 6310 of PRPA specifically states, “As soon as practical after the date of enactment of this Act, the Secretary shall issue such regulations as are appropriate to carry out this subtitle, providing opportunities for public notice and comment.”

State Regulations

California Administrative Code, Title 14, Section 4308

Section 4308, Archaeological Features, of Title 14 of the California Administrative Code provides that: “No person shall remove, injure, disfigure, deface, or destroy any object of archaeological, or historical interest or value.”

California Public Resources Code

Public Resources Code Section 5097.5 states that “A person shall not knowingly and willfully excavate upon, or remove, destroy, injure, or deface, any historic or prehistoric ruins, burial grounds, archaeological or vertebrate paleontological site, including fossilized footprints, inscriptions made by human agency, rock art, or any other archaeological, paleontological or historical feature, situated

on public lands, except with the express permission of the public agency having jurisdiction over the lands.” Public Resources Code Section 30244 states that, “Where development would adversely impact archaeological or paleontological resources as identified by the State Historic Preservation Officer, reasonable mitigation measures shall be required.”

Local Regulations

County of Riverside General Plan

Policy OS 19.7 Whenever existing information indicates that a site proposed for development has low paleontological sensitivity as shown on Figure OS-8, no direct mitigation is required unless a fossil is encountered during site development. Should a fossil be encountered, the County Geologist shall be notified and a Paleontologist shall be retained by the project proponent. The Paleontologist shall document the extent and potential significance of the paleontological resources on the site and establish appropriate mitigation measures for further site development.

Policy OS 19.8 Whenever existing information indicates that a site proposed for development has undetermined paleontological sensitivity as shown on Figure OS-8, a report shall be filed with the County Geologist documenting the extent and potential significance of the paleontological resources on-site and identifying mitigation measures for the fossil and for impacts to significant paleontological resources prior to approval of that department.

Policy OS 19.9 Whenever paleontological resources are found, the County Geologist shall direct them to a facility within Riverside County for their curation, including the Western Science Center in the City of Hemet.

3.14.4 - Methodology

Evaluation of potential paleontological resource -related impacts were based on the General Plan.

3.14.5 - Thresholds of Significance

According to Appendix G, Environmental Checklist of the State California Environmental Quality Act (CEQA) Guidelines, as well as Riverside County’s environmental checklist, paleontological resources impacts resulting from the implementation of the proposed project would be considered significant if the project would:

28. Paleontological Resources

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

3.14.6 - Project Impacts and Mitigation Measures

This section discusses potential impacts associated with the proposed project and provides mitigation measures where necessary.

Paleontological Resources

Impact PALEO-28(a): The proposed project would/would not directly or indirectly destroy a unique paleontological resource, site, or unique geologic feature.

Impact Analysis

Riverside County has been inventoried for geologic formations known to potentially contain paleontological resources. Lands with high, low, or undetermined potential for finding paleontological resources have been mapped and are included in Figure OS-8 of the General Plan (as well as the County Geographic Information System [GIS] database). The mapped paleontological sensitivity is used in the environmental assessment of development proposals and the determination of required impact mitigation. According to the Riverside County Map My County GIS database, the planning area predominantly contains areas of low paleontological sensitivity, as well as areas with undetermined paleontological sensitivity.¹

General Plan Policy OS 19.7 states that: Whenever existing information indicates that a site proposed for development has low paleontological sensitivity as shown on Figure OS-8, no direct mitigation is required unless a fossil is encountered during site development. Should a fossil be encountered, the County Geologist shall be notified, and a Paleontologist shall be retained by the project proponent. The Paleontologist shall document the extent and potential significance of the paleontological resources on the site and establish appropriate mitigation measures for further site development.

Furthermore, General Plan Policy OS 19.8 states that: Whenever existing information indicates that a site proposed for development has undetermined paleontological sensitivity as shown on Figure OS-8, a report shall be filed with the County Geologist documenting the extent and potential significance of the paleontological resources on-site and identifying mitigation measures for the fossil and for impacts to significant paleontological resources prior to approval of that department.

Lastly, General Plan Policy OS 19.9 states that: Whenever paleontological resources are found, the County Geologist shall direct them to a facility within Riverside County for their curation, including the Western Science Center in the City of Hemet.

In addition to such County policies, there are a number of existing State and federal laws that regulate development impacts to paleontological resources, including those outlined under the California Public Resources Code PRPA. Because of the low paleontological sensitivity and unique geologic features within the planning area and required conformance with existing regulations intended for the protection of sensitive paleontological resources, impacts to paleontological resources would be less than significant.

Level of Significance

Less than significant impact.

Mitigation Measures

No mitigation required.

¹ County of Riverside. 2015. County of Riverside Environmental Impact Report No. 521, Figure 4.9.3 Paleontological Sensitivity. Website: https://planning.rctlma.org/Portals/14/genplan/general_plan_2015/DEIR%20521/04-09_CulturalAndPaleoResrcs.pdf. Accessed October 12, 2021.

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3.15 - Population and Housing

3.15.1 - Introduction

This section addresses potential impacts to population and housing resulting from the proposed Highway 74 Community Plan (proposed project). The purpose of this section is to evaluate current housing needs, growth projections, and project characteristics as a basis for evaluating potential impacts of the proposed project and to identify any measures necessary to mitigate potential impacts to population and housing. Descriptions and analysis in this section are based, in part, upon existing site conditions, plans/exhibits of the planning area, the County of Riverside General Plan (General Plan), the County of Riverside General Plan Environmental Impact Report (General Plan EIR), Southern California Association of Governments (SCAG) 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (Connect SoCal), and the California Department of Finance (CDF) website.

3.15.2 - Environmental Setting

Existing development and land use activities along the Highway 74 corridor consist primarily of large-parcel rural residential uses as well as a variety of commercial and industrial uses. The planning area consists of vacant, underutilized land and commercial and industrial uses such as autobody and repair shops, interspersed with existing single-family residential neighborhoods.

Population and Housing

The population of unincorporated Riverside County in 2019 was 382,077 based on CDF information. The CDF estimates that the population increased by 0.79 percent from 2019 to 2020 (382,077 in 2019 to 385,084 in 2020) and estimates 143,000 housing units in unincorporated Riverside County (County) in 2020. Table 3.14-1 provides additional historical information for both the Unincorporated Areas and the County as a whole. According to Table 3.15-1, there are 143,000 household units within the unincorporated areas of the County for year 2020, with an average of 3.20 persons per household. Approximately 70 percent of the housing in this region is single-family housing.¹

Table 3.15-1: Department of Finance Population and Housing Estimates 2017 to 2020

	2017	2018	2019	2020
Unincorporated Areas of Riverside County				
Population	378,894	386,738	382,077	385,084
Housing Units	137,571	138,782	140,890	143,000
Average Household Size	3.20	3.20	3.20	3.20
Riverside County (All)				
Population	2,373,894	2,403,528	2,413,561	2,432,578

¹ Southern California Association of Governments (SCAG). 2020. Pre-Certified Local Housing Data for the Unincorporated Riverside County. Website: <https://scag.ca.gov/sites/main/files/file-attachments/unincorporated-riverside-county-he-0421.pdf?1620756635>. Accessed December 27, 2021.

	2017	2018	2019	2020
Housing Units	834,652	840,904	847,851	856,124
Average Household Size	3.24	3.24	3.24	3.23

Source: California Department of Finance (CDF). 2020.

On the six-county regional level, SCAG projects that the region will add 3,672,000 people, 1,621,000 households, and 1,660,000 jobs over the Connect SoCal planning horizon (2016-2045). Annual household growth (0.83 percent) is expected to outpace both population growth (0.61 percent) and employment growth (0.62 percent). Population growth rates are expected to be slower than the previous period of 2000-2016 (0.82 percent) and substantially slower than historical growth for the region from 1970-2000 (1.65 percent). This projection is slightly below the 2016-2045 anticipated growth rates for the State of California (0.66 percent) but slightly above the anticipated growth rate of the United States (0.57 percent) as reported by the CDF and U.S. Census Bureau, respectively.

SCAG forecasts growth in population in unincorporated Riverside County to reach 525,600 by 2045, with a projected 180,900 households. Growth projections for Riverside County in 2045 are 3,252,000 persons and 1,086,000 households, yielding a person per household (pph) ratio Countywide of 2.99,² somewhat lower than the existing pph ratio in 2020 of 3.23 according to the CDF.³ Changing demographics and increase in housing construction will likely result in a decrease in the pph ratio region-wide to 2.90 by 2045.⁴

Future Housing Needs

SCAG prepares a Regional Housing Needs Assessment (RHNA) as mandated by State Housing Law as part of the periodic process of updating local housing elements of a General Plan. An RHNA quantifies the need for housing within each jurisdiction during specified 8-year planning periods. The 6th cycle RHNA allocation plan covered the 2021-2029 planning period. Table 3.15-2 summarizes the RHNA allocation for unincorporated Riverside County and all of Riverside County for the planning period.

Table 3.15-2: 6th Cycle RHNA Allocation—Riverside County

	Very Low Income	Low Income	Moderate Income	Above Moderate Income	Total
Unincorporated. Riverside County	10,371	6,627	7,347	16,302	40,647
Riverside County (All)	41,995	26,473	29,167	69,716	167,351

Source:
Southern California Association of Governments (SCAG). 5th Cycle RHNA Allocation 2021.

² Southern California Association of Governments (SCAG). 2020. Connect SoCal Plan, Demographics and Growth Forecast.

³ Growth projections for unincorporated Riverside County are only listed for 2016 and 2045.

⁴ Southern California Association of Governments (SCAG). 2020. Connect SoCal Plan, Demographics and Growth Forecast.

Employment

The CDF estimates a total of 122,032 employees in unincorporated Riverside County in 2020, with a projected increase to 219,613 in 2035.⁵ Countywide, employment is projected to increase from 927,300 in 2020 to 1,285,284 in 2035. According to SCAG projections, employment is anticipated to increase Countywide from 1,774,000 in 2020 to 1,928,000 in 2035, somewhat greater than CDF estimates.⁶

3.15.3 - Regulatory Framework

State

Housing Element Law (Government Code, § 65580 et seq.)

State law recognizes the vital role local governments play in the supply and affordability of housing. Each governing body (City Council or Board of Supervisors) of a local government in California is required to adopt a comprehensive, long-term general plan for the physical development of the city, city and county, or county. The housing element is one of the seven mandated elements of the local general plan. Housing element law, enacted in 1969, mandates that local governments adequately plan to meet the existing and projected housing needs of all economic segments of the community. Housing element law also requires the California Department of Housing and Community Development (HCD) review local housing elements for compliance with State law and to report its written findings to the local government.

Regional Housing Needs Assessment

As discussed above, the RHNA is a key tool to plan for growth. Communities have to plan, consider, and decide how they will address this need through the process of completing the Housing Elements of their General Plans. The RHNA does not necessarily encourage or promote growth but rather allows communities to anticipate growth, so that they can grow in ways that enhance quality of life, improve access to jobs, transportation, and housing, and not adversely impact the environment. The RHNA is completed periodically by SCAG and its counterparts in other parts of the State, as mandated by State law. It consists of two measurements to meet the housing needs: existing need and future need. The existing need assessment examines variables from the most recent Census to measure ways in which the housing market is not meeting the needs of current residents. The future need for housing is determined primarily by the forecasted growth in households in a community. Finally, the RHNA considers how each jurisdiction might grow in ways that will decrease the concentration of low-income households in certain communities. The need for new housing is distributed among income groups so that each community moves closer to the regional average income distribution.

In the 2021–2029 Housing Element cycle (6th cycle), the County’s RHNA obligation is a minimum of 40,647 new housing units in unincorporated area. The Housing Element of the County General Plan identifies and establishes the County’s policies with respect to meeting the housing needs for

⁵ County of Riverside. Unincorporated Areas Progress Report. Website: https://rctlma.org/Portals/0/rcd/content/progress_reports/pr_2013/Unincorporated_Areas.pdf. Accessed January 22, 2022.

⁶ Southern California Association of Governments (SCAG). 2020. Connect SoCal Plan, Demographics and Growth Forecast.

residents in unincorporated Riverside County. It establishes policies and sets forth an action plan to implement its housing goals for the 6th Cycle Housing Element update, through 2029.

Regional

Southern California Association of Governments

SCAG is the regional governing body for the majority of the Southern California region, including the counties of Orange, Los Angeles, Ventura, San Bernardino, Riverside, and Imperial. Regional associations of governments were created by the State to guide land use decisions that overlap multiple local jurisdictions and to provide policy guidance in the region. SCAG is Southern California's forum for addressing regional issues concerning transportation, the economy, community development, and the environment. As a Metropolitan Planning Organization (MPO), SCAG's main responsibilities under State and federal law are completing the Regional Transportation Plan (RTP) (now known as 2020-2045 Connect SoCal) and the RHNA. Connect SoCal involves preparation of long-range transportation plans and development and adoption of transportation improvement programs that allocate State and federal funds for highway, transit, and other surface transportation projects. While SCAG does not have formal regulatory authority and therefore cannot directly implement land use decisions, SCAG guides land use planning for the Southern California region through intergovernmental coordination and consensus building and reviews proposed development and infrastructure projects to analyze their impacts on regional planning programs.

SCAG 2008 Regional Comprehensive Plan

The 2008 SCAG Regional Comprehensive Plan (RCP) presents the region's forecasts and policies for dealing with anticipated growth including population, housing, and employment throughout Southern California. Growth projections contained in the RCP are based on a compilation of County and local projections. The RCP forecasts are used as the basis for formulation of regional plans dealing with regional air quality, housing, transportation/circulation, and other infrastructure issues.

SCAG 2020-2045 Regional Transportation Plan and Sustainable Communities Strategy (Connect SoCal)

Connect SoCal is a long-range transportation plan that is developed and updated by SCAG every 4 years. The plan provides a vision for transportation investments throughout the region. Using growth forecasts and economic trends that project out over a 20-year period, the plan considers the role of transportation in the broader context of economic, environmental, and quality of life goals for the future, identifying regional transportation strategies to address our mobility needs.

Principal goals of Connect SoCal relevant to population, housing, and employment include:

- Encourage regional economic prosperity and global competitiveness.
- Increase person and goods movement and travel choices within the transportation system.
- Support healthy and equitable communities.
- Encourage development of diverse housing types in areas that are supported by multiple transportation options.

Local

County of Riverside General Plan

The Housing Element of the General Plan outlines and establishes a list of actions to coincide with the following General Plan goals and policies to meet the needs of existing and future residents in the County.

- Goal 1** New Construction: Facilitate new housing opportunities to meet the needs of existing and future unincorporated Riverside County residents in all income categories.
- Policy H 1.1** Maintain an adequate supply of appropriately zoned land to accommodate housing needs of existing and future residents.
- Policy H 1.2** Encourage innovative housing development that promotes and facilitates development of new affordable housing.
- Policy H 1.3** Continue efforts to streamline and improve the development review process to eliminate any unnecessary delays in the development of housing.
- Policy H 1.4** Strive to remove barriers to new housing production, including advancing adaptive policies, regulations, and procedures.
- Policy H 1.5** Encourage the development of higher-density, multi-family housing in locations where adequate infrastructure and public services are planned or are available.
- Goal 2** Innovative Housing Types: Encourage construction of innovative housing types that are affordable and promote mixed-income neighborhoods.
- Policy H 2.1** Incentivize and encourage the construction of accessory dwelling units (ADUs) and other similar types of residential accommodations through various methods, including but not limited to public education, fee modification, and making necessary resources available.
- Policy H 2.2** Encourage missing middle housing types, such as duplexes, triplexes, fourplexes, courtyard buildings, bungalow courts, cottage housing, townhouses, multiplexes, and live/work buildings to provide for workforce housing compatible with single-family neighborhoods.
- Goal 3** Affordable Housing: Encourage construction, maintenance, improvement, and preservation of safe, decent, and sound affordable housing in unincorporated Riverside County.
- Policy H 3.1** Encourage housing developers to produce affordable units by providing assistance and incentives for projects that include new affordable units available to lower-moderate income households or special-needs housing.

- Policy H 3.2** The County should advocate for revisions to State laws that will make affordable housing easier to achieve, including but not limited to issues related to requiring the payment of prevailing wage, burdensome California Environmental Quality Act (CEQA) requirements adversely affecting housing production, tax code reform, and tools and funding for affordable housing while recognizing the need to maintain the integrity of existing residential communities.
- Policy H 3.3** The County should allow housing developments with at least 20 percent affordable housing and on-site inventory housing sites that have been counted in previous Housing Element cycles as a by-right use.
- Policy H 3.4** The County should continue to provide Section 8 Housing Choice Voucher assistance to eligible households and pursue funding for additional vouchers.
- Policy H 3.5** The County should prioritize opportunities for providing low and very low income housing in multi-family development projects through individual project negotiation, through the preparation of inclusionary housing requirements, or through other means, whichever may be deemed most effective.
- Policy H 3.6** The County should evaluate the availability of publicly owned land for the development of affordable housing, in cooperation with the County’s Housing Authority and coordination with affected communities and non-profit and for-profit developers.
- Policy H 3.7** The County should pursue all available federal, State, and local funds to assist in housing rehabilitation and preservation of at-risk units.
- Policy H 3.8** Promote the rehabilitation and preservation of farmworker housing.
- Policy H 3.9** The County should strive to preserve all deed-restricted affordable dwelling units in the unincorporated County that are at risk of converting to market-rate.
- Policy H 3.10** The County’s code enforcement officers should continue to require the abatement of unsafe housing conditions while giving property owners adequate time to correct deficiencies.

Elsinore Area Plan

The ELAP contains the following policies relevant to population and housing:

- Policy ELAP 5.1** Encourage consolidation of parcels to promote better land use development and project design.
- Policy ELAP 5.3** The Mixed-Use Area (MUA) Land Use Designation may be found consistent with any nonresidential zoning classification that implements the intent of the land use designation or provides for a community serving use(s).
- Policy ELAP 5.5** Development may include live-work spaces within the MUAs where appropriate.

Policy ELAP 5.6 Development should promote a reduction of Vehicle Miles Traveled (VMT) and livable and resilient neighborhoods that provide housing, goods and services, open space, and multi-model transportation options within proximity to each other.

Policy ELAP 5.9 Developments should be encouraged to design and locate convenient pedestrian and bicycle connections, bus, or shuttle connections, that increase connections to adjacent and nearby communities and cities, businesses, parks and open space areas, and new transit access opportunities.

The following policies apply to Neighborhood 2 of the Highway 74 planning area:

Policy ELAP 5.12 New developments within the neighborhood should support the neighborhood’s emerging identity.

Policy ELAP 5.13 Encourage complete streets, which include sidewalks, greenbelts, and trails to facilitate use by pedestrians and bicyclists where such facilities are well separated from parallel or cross through traffic to ensure pedestrian and cyclist safety.

Mead Valley Area Plan

The MVAP contains the following policies relevant to population and housing:

Policy MVAP 3.1 Encourage consolidation of parcels to promote better land use development and project design.

Policy MVAP 3.3 The Mixed-Use Area (MUA) Land Use Designation may be found consistent with any nonresidential zoning classification that implements the intent of the land use designation or provides for a community serving use(s).

Policy MVAP 3.5 Development may include live-work spaces within the MUAs where appropriate.

Policy MVAP 3.6 Development should promote vehicle miles traveled (VMT) and livable and resilient neighborhoods that provide housing, goods and services, open space, and multi-model transportation options within proximity to each other.

Policy MVAP 3.9 Developments should be encouraged to design and locate convenient pedestrian and bicycle connections, bus or shuttle connections, that increase connections to adjacent and nearby communities and cities, businesses, parks and open space areas, and new transit access opportunities.

The following policies apply to Neighborhood 1 of the Highway 74 planning area:

Policy MVAP 3.12 New developments within the neighborhood should support the neighborhood’s emerging identity.

Policy MVAP 3.13 Encourage “complete streets” which include street configurations that include sidewalks, greenbelts, and trails to facilitate use by pedestrians and bicyclists

where such facilities are well separated from parallel or cross through traffic to ensure pedestrian and cyclist safety.

Highway 74 Community Plan

The Highway 74 Community Plan (proposed project) sets forth the following policies relevant to population and housing:

- Encourage consolidation of parcels to promote better land use development and project design.
- The Mixed-Use Area (MUA) Land Use Designation may be found consistent with any nonresidential zoning classification that implements the intent of the land use designation or provides for a community serving use(s).
- Development may include live-work spaces within the MUAs where appropriate.
- Development should promote a reduction of Vehicle Miles Traveled (VMT) and livable and resilient neighborhoods that provide housing, goods and services, open space, and multi-model transportation options within proximity to each other.

The proposed project also includes neighborhood-specific policies relevant to population and housing, as follows:

- N 1.1** New developments within the neighborhood should support the neighborhood's emerging identity.
- N 2.1** Developments should support the neighborhood's emerging identity.

Neighborhood 3 policies encourage effective and comprehensive coordination efforts with the City of Lake Elsinore regarding planning, including circulation policies that affect commercial and industrial development/entitlement activity. These policies are not relevant to population and housing.

3.15.4 - Methodology

The analysis of the proposed project's impacts on population and housing was conducted using existing site conditions, plans/exhibits of the planning area, the General Plan, the General Plan EIR, Connect SoCal, and the CDF website.

3.15.5 - Thresholds of Significance

Section XIV of Appendix G to the State CEQA Guidelines addresses typical adverse effects related to population and housing, and includes the following threshold questions to evaluate the proposed project's impacts related to population and housing:

- Would the project induce substantial unplanned population growth in an area, either directly (for example by proposing new homes and businesses) or indirectly (for example, through the extension of infrastructure)? or

- Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

Significance thresholds are set forth in Riverside County’s Environmental Assessment Checklist are derived from Section XIV of Appendix G to the State CEQA Guidelines (listed above), and state that the proposed project would have a significant impact to population and housing if construction and/or operation of the project would:

29. Housing

- a) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere.
- b) Create a demand for additional housing, particularly housing affordable to households earning 80 percent or less of the County’s median income.
- c) 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).

3.15.6 - Project Impacts and Mitigation Measures

This section discusses potential impacts associated with the proposed project and identifies mitigation measures where necessary.

Impact POP-29(a): The proposed project would not displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere.

Impact Analysis

The proposed project comprises a series of General Plan Amendments; no specific development is proposed. Future development within the planning area could result in the elimination of existing buildings, including homes. With implementation of the proposed project, a mixture of commercial and mixed-use development would occur alongside a variety of housing opportunities. Additionally, the proposed project would expand the range of residential land uses in the planning area to include Low-Density Residential and High-Density Residential land uses.

The proposed project includes General Plan Amendment (GPA) No. 1205 to guide the development of residential neighborhoods of varying densities, commercial retail, mixed-use, light industrial, business park, public facilities, rural, open space, and recreation areas. Existing land use designations would be updated as part of the proposed project, which would alter the General Plan Foundations primarily from the Rural and Rural Community Foundations to Community Development and corresponding land use designations. The proposed project would also alter other land use designations within their current Foundation Component and provide guiding policies that support the modification of the planning area’s structure.

Table 2-3 in Chapter 2, Project Description, summarizes the changes in acreage from existing and proposed residential land use designations. Overall, the proposed project would reduce the number

of acres designated residential from 883.82 to 663.65 acres but would increase mixed-use designations, which could include residential, from 193.08 to 455.92 acres. Other changes to the Rural Foundation Component would result in a decrease of rural residential (5-acre minimum) from 305.31 to 57.23 acres and Rural Community–Very Low-Density Residential (1-acre minimum) from 527.59 to 376.07 acres.

Table 2-5 in Chapter 2, Project Description, illustrates the differences in buildout potential between the existing General Plan land use designations and the proposed project within the planning area. In summary, the proposed project would lead to an increased buildout potential of the following uses:

- Approximately 3,970 multi-family residential dwelling units.
- Approximately 2,081,150 square feet of commercial retail uses.
- Approximately 1,506,217 square feet of business park uses.
- Approximately 740,903 square feet of light industrial uses.
- Approximately 21.6 acres of public facility uses.
- Approximately 4.28 acres of open space uses.

The Highway 74 planning area policies and related land use plan are designed to support the provision of housing opportunities through development of residential neighborhoods of varying densities, neighborhood-serving commercial uses, and local employment center areas clustered along the Highway 74 corridor. In general, Neighborhoods 1 and 2 are primarily single-story homes on large lots with adjacent establishments such as markets, vehicle and tire service repair shops. Very low-density residential is located on the outskirts of Neighborhood 3. As noted, land use designations in these neighborhoods include Commercial Retail, Business Park, and Mixed-Use Areas, Light Industrial, and Very Low-Density Residential.

The proposed project would cluster development and consolidate parcels to facilitate appropriate built environments that promote economic development, consistent with General Plan criteria. Additionally, the proposed project would promote more Community Development land uses and fewer Rural, Rural Community, and Open Space land uses. Implementation of the proposed project could result in removal of some existing housing; however, it should be noted that existing zoning and land use designations could similarly allow removal of housing and the proposed project would not result in substantially different or increased impacts related to removal of housing than those identified in the General Plan EIR. The General Plan EIR stated that as with all future development accommodated by the General Plan, it is expected that existing built land uses, including residences, would generally remain and that new development would occur predominantly on vacant or sparsely developed land. Where occurring on vacant land, future development consistent with the proposed project would not displace any existing residents. A significant impact could only occur where a substantial number of existing residences would be displaced by development or redevelopment.

According to County-provided data, there are 847 dwelling units in the overall planning area.⁷ There are currently 528 dwelling units in the planning area that are subject to land use designation

⁷ County of Riverside. 2022. Highway 74 Boundary Community Profile.

changes pursuant to the proposed project. It should be noted that not all of these dwelling units would be redeveloped to non-residential uses resulting in potential displacement, since many of the land use designations simply change from one residential category to another and would not represent major changes in land uses allowed on those particular sites. In addition, buildout of the plan would occur over a 20-year planning horizon and individual sites would be redeveloped at different points in time and it is entirely speculative to assume that all existing development would be redeveloped. However, for a conservative analysis, this discussion considers the worst-case scenario where all 528 dwelling units would be demolished to accommodate redevelopment. Utilizing the unincorporated County pph ratio of 3.2 (which is actually anticipated to decrease), this would result in displacement of a maximum of approximately 1,690 residents. The proposed project would accommodate nearly 4,000 new multi-family residential units, providing increased housing opportunities in the planning area. Because none of the areas proposed for land use changes under the proposed project contain substantial numbers of existing homes whose loss would displace substantial numbers of residents at any given time and because replacement housing would occur within the planning area coinciding with any removal of existing homes, development consistent with the proposed project would not necessitate construction of replacement housing elsewhere. Accordingly, the impacts would be less than significant.

Level of Significance

Less than significant impact.

Mitigation Measures

No mitigation required.

Impact POP-29(b): The proposed project would not create a demand for additional housing, particularly housing affordable to households earning 80 percent or less of the County's median income.

Impact Analysis

The increase in employment opportunities due to changes to land use designations in the planning area could result in a demand for additional housing. New infrastructure would likely be part of implementation of the proposed project to accommodate the new development. This, in turn, could result in growth-inducing impacts that could increase demand for housing. It is expected that at least a portion of new workers could be accommodated in the planned housing. It is also reasonable to assume that some new employees would travel from surrounding areas and would not require housing within the planning area.

The land use designations proposed by the project would allow for the future construction of up to approximately 4,000 multi-family housing units. A percentage of these housing units would be expected to be affordable housing, as the County is required to include provision of affordable housing per its RHNA allocation. Based on a pph ratio of 3.20, if all approximately 4,000 dwelling units were constructed, a population increase of up to 12,800 residents could be anticipated in the planning area. This would represent a 3.3 percent increase in the existing resident population of unincorporated Riverside County and 0.12 percent increase in population of Riverside County overall. These increases are relatively small and would be offset by the residential component of the

proposed project. Accordingly, the proposed project is not anticipated to result in a substantial increased demand for housing.

Specific development projects are not proposed under the project, and future development that would occur with proposed project implementation would be based on market conditions and other future considerations. As the County receives development applications, those applications will be reviewed by the County to assess each proposed development and the site-specific environmental impacts associated with new housing through project-level CEQA analysis at such time that their design and specific locations are known. As such, impacts would be less than significant.

Level of Significance

Less than significant impact.

Mitigation Measures

No mitigation required.

Impact POP-29(c): **The proposed project would not induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure).**

Impact Analysis

The proposed mixed-use and residential land use designations, as well as lands proposed for future commercial use, would result in the potential for increased population and employment opportunities in the project area. The proposed project includes policies and programs that promote cohesive and compatible development and planned growth. It does not approve or entitle any specific development. While the physical construction of homes and/or businesses are not proposed as a component of the proposed project, the proposed land use designations would allow for future construction of new residential and commercial development as well as the extension of existing infrastructure within the planning area. Based on a pph ratio of 3.20, if all approximately 4,000 dwelling units were constructed, a population increase of up to 12,800 residents could be anticipated in the planning area. This would represent a 3.3 percent increase in the existing resident population of unincorporated Riverside County and 0.12 percent increase in population of Riverside County overall.

As previously discussed, future development that would occur following project implementation would be based on market conditions and other future considerations. At such time as a development application is submitted for review by the County, the County would assess each proposed development and the site-specific environmental impacts associated with new housing through project-level CEQA analysis when their design and specific locations are known. As noted above, the Highway 74 planning area policies and related land use plan are designed to support the provision of housing opportunities through development of residential neighborhoods of varying densities, neighborhood-serving commercial uses, and local employment center areas clustered along the Highway 74 corridor. A number of commercial uses could be redeveloped for mixed uses. Similarly, portions of the project area would be changed from residential land use to mixed-use and may therefore experience slightly increased development intensity. However, the existing

development in the planning area is generally consistent with the proposed land use designations and implementation of the proposed project would not promote unplanned growth. Impacts would be less than significant, largely similar in nature and intensity to those identified in the General Plan EIR.

Level of Significance

Less than significant impact.

Mitigation Measures

No mitigation required.

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3.16 - Public Services

3.16.1 - Introduction

This section describes existing public services and potential impacts from project implementation on the site and its surrounding area, as well as the relevant regulatory framework. Descriptions and analysis in this section are based on information provided by the County of Riverside General Plan (General Plan), the County of Riverside website, the Riverside County Fire Department (RCFD), and the Riverside County Sheriff's Department.

3.16.2 - Environmental Setting

Fire Protection and Emergency Medical Services

Riverside County (County) contracts with the California Department of Forestry and Fire Protection (CAL FIRE) for management of the RCFD. The RCFD provides fire protection and emergency services to residents of unincorporated areas of the County and to several partner cities, including the City of Lake Elsinore and the City of Perris.¹ The RCFD operates 94 fire stations across six service areas including 21 cities, although more than half of the stations are located in unincorporated areas. Additionally, the CAL FIRE Riverside Unit operates 18 city fire departments and one Community Services District (CSD) fire department within the County. The RCFD also assists various cities and communities under mutual and automatic aid agreements.²

The County aims to maintain an emergency response time of 4 minutes of travel time to fire incidents and Emergency Medical Service (EMS) calls, and a full first-alarm group within 8 minutes, for a minimum of 90 percent of incidents.³

The following RCFD stations are the closest to the planning area.

Table 3.16-1: Fire Station Summary

Station No.	Address	Distance From Plan Area
9	21565 Steele Peak Drive, Perris	0.34 mile
97	41725 Rosetta Canyon Drive, Lake Elsinore	0.21 mile
101	105 South F Street, Perris	1.22 miles
11	33020 Maiden Lane, Lake Elsinore	3.93 miles
60	28730 Vacation Drive, Canyon Lake	1.97 miles
1	210 West San Jacinto Avenue, Perris	0.93 mile

¹ Riverside County Fire Department (RCFD). 2021. Riverside County Fire Department Service Area. Website: <http://www.rvcfire.org/about-us/service-area>. Accessed November 4, 2021.

² County of Riverside. 2015. General Plan Draft Environmental Impact Report. January. Website: <https://planning.rctlma.org/Zoning-Information/General-Plan/General-Plan-Amendment-No-960-EIRNo-521-CAP-March-2014/Draft-Environmental-Impact-Report-No-521>. Accessed November 4, 2021.

³ Management Partners, Incorporated. Riverside County Fire Department Strategic Plan 2009- 2029. Website: <https://www.rvcfire.org/stationsAndFunctions/AdminSppt/StrategicPlanning/Documents/StrategicPlan2009.pdf>. Accessed November 4, 2021.

Station No.	Address	Distance From Plan Area
Source: Riverside County Fire Department (RCFD). 2021. Riverside County Fire Stations. Website: https://rvcfire.org/resources/fire-stations . Accessed January 21, 2022.		

Police Protection

The Riverside County Sheriff’s Department (Sheriff’s Department) provides police services to the planning area. The Sheriff’s Department’s headquarters is located in the City of Riverside. The Sheriff’s Department provides police services to the unincorporated areas of the County as well as the cities of Calimesa, Canyon Lake, Coachella, Eastvale, Indian Wells, Jurupa Valley, Lake Elsinore, La Quinta, Menifee, Moreno Valley, Morongo Indian Reserve, Norco, Palm Desert, Perris, Rancho Mirage, San Jacinto, Temecula, and Wildomar. The Sheriff’s Department employs approximately 4,500 people, roughly 2,300 of which are sworn personnel. There are nine Sheriff’s Department stations throughout the County, as well as five adult correction or detention centers. The Sheriff’s Department has established a staffing requirement of one sworn officer per 1,000 population.⁴

Schools

The planning area is served by the following three school districts:

Lake Elsinore Unified School District

The western portion of the planning area is served by Lake Elsinore Unified School District (LEUSD). LEUSD covers more than 144 square miles and serves K-12 students from the cities of Lake Elsinore, Canyon Lake, and Wildomar and several unincorporated County communities. The LEUSD operates 23 schools, as well as alternative education programs, and serves approximately 21,565 students in grades K-12.⁵ The planning area is within the enrollment district of Earl Warren Elementary School.

Perris Union High School District

The eastern portion of the planning area is served by Perris Union High School District. The Perris Union High School District had an enrollment of 10,853 in grades 5-12 during the 2019-2020 school year.⁶ The planning area is within the enrollment boundaries of Perris High School.

Perris Elementary School District

The eastern portion of the planning area is served by Perris Elementary School District. The District had an enrollment of 5,606 students during the 2019-2020 school year. The planning area is within the enrollment boundaries of Good Hope Elementary School and Railway Elementary School.

⁴ County of Riverside. 2014. County of Riverside Environmental Impact Report for the 2014 General Plan. March.

⁵ Lake Elsinore Unified School District (LEUSD). 2021. About Us. Website: https://www.leusd.k12.ca.us/apps/pages/index.jsp?uREC_ID=324467&type=d&pREC_ID=732453. Accessed November 4, 2021.

⁶ Education Data Partnership. 2021. Perris Union High. <http://www.ed-data.org/district/Riverside/Perris-Union-High>. Accessed November 4, 2021.

3.16.3 - Regulatory Framework

State

California Fire Code and California Building Code

The International Fire Code and the International Building Code established by the International Code Council (ICC) and amended by the State of California prescribe performance characteristics and materials to be used to achieve acceptable levels of fire protection. The County has adopted by ordinance the California Building Standard Code (CBC), 2019 edition.⁷ The Building and Safety Department is responsible for the administration and enforcement of the CBC.

Leroy F. Greene School Facilities Act of 1998

The California State Legislature enacted the Leroy F. Green School Facilities Act of 1998 (Senate Bill [SB] 50), which made significant amendments to existing State law governing school fees. SB 50 prohibits State or local agencies from imposing school impact mitigation fees, dedications, or other requirements in excess of those provided in the statute. The legislation also prohibits local agencies from using the inadequacy of school facilities as a basis for denying or conditioning approvals of any project.

California Government Code Section 65995

California Government Code Section 65995 is found in Title 7, Chapter 4.9 of the California Government Code. California Government Code Section 65995 authorizes school districts to collect impact fees from developers of new residential and commercial/industrial building space. SB 50 amended Government Code Section 65995 in 1998. Under the provisions of SB 50, schools can collect fees to offset costs associated with increasing school capacity as a result of development. The local school districts determine fees in accordance with California Government Code Section 65995, which can be adjusted every 2 years. The maximum fees authorized under SB 50 apply to zone changes, general plan amendments, zoning permits and subdivisions. The provisions of SB 50 are deemed to provide full complete mitigation of school facilities impacts, notwithstanding any contrary provisions in California Environmental Quality Act (CEQA) or other State or local laws.⁸

Quimby Act

The Quimby Act (Government Code § 66477) allows local governments to require developers to dedicate land, donate conservation easements, or pay fees to fund parkland development. The Quimby Act has a standard of 3.5 acres of parkland per 1,000 residents. The County does not have set standards regarding parklands, but the vast amount of open space, which include Joshua Tree National Park, Anza-Borrego State Park, and the Salton Sea State Recreation Area, allowed for approximately 1,161 acres of protected parkland per 1,000 residents in 2019.⁹

⁷ County of Riverside. 2022. Riverside County Building and Safety Department Building Codes. Website: <https://rctlma.org/building/Building-Permits/Building-Codes>. Accessed January 24, 2022.

⁸ California Legislative Information. 2016. Chapter 4.9. Payment of Fees, Charges, Dedications, or Other Requirements Against a Development Project [65995-65998], Section 65995. Website: https://leginfo.ca.gov/faces/codes_displaySection.xhtml?lawCode=GOV§ionNum=65995. Accessed November 4, 2021.

⁹ Impact Sciences, Inc. 2019. Connect SoCal Plan PEIR, December. Website: https://scag.ca.gov/sites/main/files/file-attachments/dpeir_connectsocial_3_16_parksandrecreation.pdf?1606003690. Accessed November 4, 2021.

Local***Riverside County Ordinances****County Ordinance No. 328*

County Ordinance No. 328 sets forth rules and regulations for the County or Riverside County Regional Park and Open-Space District owned or operated parks and open space areas.

County Ordinance No. 659

County Ordinance No. 659 requires new development to either pay fire protection Development Impact Fees or provide new facilities in lieu of the fee as approved by the RCFD.

County Ordinance No. 787

County Ordinance No. 787 sets requirements for high-occupancy structures to protect people and structures from fire risks, including requirements that buildings not impede emergency egress for fire safety personnel and that equipment and apparatus would not hinder evacuation from fire, including potential blockage of stairways or fire doors.

Riverside County General Plan*Land Use Element*

Policy LU 5.1 Ensure that development does not exceed the ability to adequately provide supporting infrastructure and services, such as libraries, recreational facilities, educational and day care centers transportation systems, and fire/police/medical services.

Policy LU 10.1 Require that new development contribute their fair share to fund infrastructure and public facilities such as police and fire facilities.

Policy LU 25.2 Provide for a balanced distribution of recreational amenities.

Policy LU 25.4 Require that new development meet or exceed the parkland requirements as established in the Quimby Act and Riverside County enabling ordinances.

Safety Element

Policy S 5.1 Develop and enforce construction and design standards that ensure that proposed development incorporates fire prevention features through the following:

- a. All proposed development and construction within Fire Hazard Severity Zones shall be reviewed by the Riverside County Fire and Building and Safety departments.
- b. All proposed development and construction shall meet minimum standards for fire safety as defined in the Riverside County Building or County Fire Codes, or by County zoning, or as dictated by the Building Official or the Transportation Land Management Agency based on building type, design, occupancy, and use.
- c. In addition to the standards and guidelines of the California Building Code and California Fire Code fire safety provisions, continue to implement additional standards for high-risk, high occupancy, dependent, and essential facilities

where appropriate under the Riverside County Fire Code (Ordinance No. 787) Protection Ordinance. These shall include assurance that structural and nonstructural architectural elements of the building will not impede emergency egress for fire safety staffing/personnel, equipment, and apparatus; nor hinder evacuation from fire, including potential blockage of stairways or fire doors.

- d. Proposed development and construction in Fire Hazard Severity Zones shall provide secondary public access, in accordance with Riverside County Ordinances.
- e. Proposed development and construction in Fire Hazard Severity Zones shall use single loaded roads to enhance fuel modification areas, unless otherwise determined by the Riverside County Fire Chief.
- f. Proposed development and construction in Fire Hazard Severity Zones shall provide a defensible space or fuel modification zones to be located, designed, and constructed that provide adequate defensibility from wildfires.

Policy S 5.6 Demonstrate that the proposed development can provide fire services that meet the minimum travel times identified in Riverside County Fire Department Fire Protection and EMS Strategic Master Plan.

Policy S 5.15 Continue to utilize the Riverside County Fire Department Fire Protection Plan and EMS Strategic Master Plan as the base document to implement the goals and objectives of the Safety Element.

Policy S 5.18 Ensure that the Fire Department has appropriate municipal staffing and fire protection planning staff that meet the needs of development pressure and adequately respond to long range fire safety planning.

Policy S 5.19 Implement a coordination program with fire protection and emergency service providers to reassess fire hazards after wildfire events and to adjust fire prevention and suppression needs, as necessary.

Elsinore Area Plan

The Elsinore Area Plan (ELAP) includes the following policy related to public services:

Policy ELAP 5.11 Encourage the connection of municipal water and wastewater services to community residents and facilities to reduce reliance on septic systems in order to limit groundwater contamination.

The following policy applies to Neighborhood 2 of the Highway 74 policy area:

Policy ELAP 5.14 Work on preserving outstanding scenic vistas and features and encouraging underground placement of electric or communication distribution lines.

Mead Valley Area Plan

The Mead Valley Area Plan (MVAP) includes the following policy related to public services:

Policy MVAP 3.11 Encourage the connection of municipal water and wastewater services to community residents and facilities to reduce reliance on septic systems in order to limit groundwater contamination.

Highway 74 Community Plan

The Highway 74 Community Plan (proposed project) sets forth the following goals and policies related to public services:

- Encourage the connection of municipal water and wastewater services to community residents and facilities to reduce reliance on septic systems in order to limit groundwater contamination.

3.16.4 - Methodology

Potential impacts on public services were evaluated, in part, through review of the relevant elements of the General Plan and information provided by RCFD and the Sheriff's Department, as well as readily available information on the school districts' and County's website.

3.16.5 - Thresholds of Significance

Section XV of Appendix G to the State CEQA Guidelines addresses typical adverse effects to public services and includes the following threshold question to evaluate a project's impacts to public services if the project would:

. . . result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered government 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 following public services:

- a) Fire protection?
- b) Police protection?
- c) Schools?
- d) Parks?
- e) Other public facilities?

Significance thresholds are set forth in Riverside County's Environmental Assessment Checklist, have been updated to reflect the 2018 updates to Section XV of Appendix G to the State CEQA Guidelines (listed above), and state that the proposed project would have a significant impact on public services if construction and/or operation of the proposed project would:

. . . result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities or the 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 following public services:

- Fire Services
- Sheriff Services
- Schools
- Libraries
- Health Services

3.16.6 - Project Impacts and Mitigation Measures

Fire Services

Impact PS-30: The proposed project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities or the 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 fire services.

Impact Analysis

According to the RCFD Strategic Plan 2009-2029, the RCFD considers National Fire Protection Association (NFPA) Standard 1710 as a guideline for fire station location methodology, which calls for an engine company within 4 minutes of travel time to fire incidents and EMS calls, and a full first-alarm group within 8 minutes, all for a minimum of 90 percent of annual incidents.¹⁰ The County requires the payment of Development Impact Fees prior to the final inspection by the Building and Safety Department for any residential dwelling. Future development within the planning area would also be subject to General Plan Policy LU 5.1, General Plan Policy S 5.1, and County Ordinance Nos. 659 and 787. Policy LU 5.1 prohibits new development from exceeding the ability to adequately provide supporting infrastructure and services, including fire protection services, and Policy S 5.1 requires proposed development to incorporate fire prevention features.

Future development would be required to demonstrate compliance with any applicable California Building and Fire Codes, which are implemented to ensure new development meets minimum standards for access, fire flow, building ignition and fire resistance, fire protection systems and equipment, defensible space, and setback requirements. Adherence to the above-mentioned existing General Plan Policies and Ordinances, as well as existing State regulations, would ensure that potential physical impacts associated with the provision of fire protection services remain less than significant on a program level.

Level of Significance

Less than significant impact.

Mitigation Measures

No mitigation required.

¹⁰ Management Partners, Incorporated. Riverside County Fire Department Strategic Plan 2009- 2029. Website: <https://www.rvcfire.org/stationsAndFunctions/AdminSppt/StrategicPlanning/Documents/StrategicPlan2009.pdf>. Accessed November 4, 2021.

Sheriff Services

Impact PS-31: **The proposed project would not 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 Sheriff Services.**

Impact Analysis

The Sheriff's Department provides law enforcement services to the planning area. The Sheriff's Department has established a goal of maintaining 1.5 sworn officers per 1,000 population, as recommended by the International City Managers' Association (Riverside County Integrated Project [RCIP]). The Sheriff's Department has established the following criteria for its staffing requirements in unincorporated areas of the County:¹¹

- One sworn officer per 1,000 population (Mitigation Measure 4.15.C for EIR No. 441 specifies the use of a 1.5-officer per 1,000 population standard for new development mitigation purposes).
- One supervisor and one support staff employee per seven officers.
- One patrol vehicle per three sworn officers.
- One school resource officer per school.

Development accommodated under the proposed project would result in an incremental increase in new residential, commercial, and industrial uses. Therefore, development and growth under the proposed project would incrementally increase demand for law enforcement services. As the demand for services increases, there may be a need to increase staffing, equipment, and facilities to maintain acceptable service ratios, response times, and other performance standards. To maintain adequate funding for law enforcement facilities, the County has implemented the Development Impact Fee Program. This fee can be used to pay for one-time capital improvements, such as the purchase of land and equipment or the construction of new facilities. The proposed project would be required to pay the established development mitigation fee prior to issuance of a certificate of occupancy for the proposed project buildings.

The proposed project does not include or approve any specific construction of new facilities and the precise size and location of future sites is too speculative to identify at this time. With project buildout, new or expanded police facilities may be proposed; however, those projects would be reviewed by the County for compliance with the policies and actions of the General Plan as well as the County Ordinances. Likewise, as the County receives development applications for subsequent development under the proposed project that includes new or expanded police facilities, those future discretionary actions would be evaluated for project-specific environmental effects at the time they are proposed. Therefore, based on the discussion above, and in view of the known size requirements of a sheriff's station and the general area within which the additional facilities

¹¹ Riverside County Integrated Project (RCIP). 2003. General Plan Final Program Environmental Impact Report. State Clearinghouse No. 2002051143. Available online at: <http://planning.rctlma.org/Portals/0/genplan/content/eir/volume1.html>. Accessed November 4, 2021.

necessarily could reasonably be placed, the physical effects on the environment from the construction of new or expanded sheriff facilities with implementation of the proposed project would be less than significant on a program level.

Level of Significance

Less than significant impact.

Mitigation Measures

No mitigation required.

Schools

Impact PS-32: **The proposed project would not 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 schools.**

Impact Analysis

Development accommodated under the proposed project’s buildout would result in an incremental increase in new residential, commercial, and industrial uses and therefore, could incrementally increase demand for school services.

To offset potential impacts to school facilities that may result from the proposed project’s buildout, as new development is proposed, all future projects would be subject to impact mitigation fees for school facilities. The California State Legislature, under SB 50, has determined that payment of school impact fees provides full and complete mitigation for impacts to school facilities. All development facilitated by the proposed project would be required to pay the school impact fees adopted by each school district, and this requirement is considered to fully mitigate the impacts of the proposed project on school facilities.

As the County proceeds with the construction of new or expanded school facilities required by development under the proposed project, those projects would be reviewed by the County for compliance with the policies and actions of the General Plan as well as the County Ordinances. Likewise, as the County receives development applications for subsequent development under the proposed project that includes new or expanded school facilities, those future discretionary actions would be evaluated for project-specific environmental effects at the time they are proposed. Therefore, the physical effects on the environment from the construction of new or expanded school facilities on a program level would be less than significant.

Level of Significance

Less than significant impact.

Mitigation Measures

No mitigation required.

Libraries

Impact PS-33: **The proposed project would not 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 libraries.**

Impact Analysis

The County operates a library system of 36 libraries, two book mobiles, and a County museum. Library management offices are located in the City of Riverside while the bookmobiles travel to serve unincorporated communities in western Riverside County. In Fiscal Year 2018/2019, the County library had approximately 3.752 million visitors and issued 43,700 library cards.¹²

Development and growth that results from the proposed project's buildout would increase demand for public services, including libraries and other public and governmental services. As the demand for services increases, there may be a need to increase staffing and equipment to maintain acceptable service ratios and other performance standards. However, all future projects would be required to comply with General Plan policies, the County Ordinances, and other local, State, or federal regulations. Further, the allocation of other municipal services is determined annually by the County Board of Supervisors based upon local needs and resources.

There could be environmental impacts associated with the construction of new or expanded municipal services facilities. However, it is not possible to identify the timing or relative specifics of these improvements is unknown at this time and it would be premature to consider these projects on a project-specific level as part of the Draft Program EIR for the proposed project, as these projects have not yet been sited or designed and other key project components that would influence potential environmental impacts have not yet been determined. Accordingly, it would be inappropriate and speculative under CEQA to conduct a project-specific analysis in this Draft Program EIR.

As the County proceeds with the construction of new or expanded library services and/or facilities identified in the proposed project, those projects will be reviewed by the County for compliance with the policies of the General Plan as well as the County Ordinances. Likewise, as the County receives development applications for subsequent development under the proposed project that includes new or expanded services, those future discretionary actions would be evaluated for project-specific environmental effects at the time they are proposed. Therefore, the physical effects on the environment from the construction of new or expanded library services would be less than significant on a program level.

¹² County of Riverside. Fiscal Year 2019/19 Recommended Budget. Website: https://rivco.org/sites/default/files/About%20the%20County/Budget%20and%20Financial%20Information/Financial%20Information/FY%2018-19/FY18-19_Adopted_Budget.pdf. Accessed November 4, 2021.

Level of Significance

Less than significant impact.

Mitigation Measures

No mitigation required.

Health Services

Impact PS-34: **The proposed project would not 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 health services.**

Impact Analysis

There are approximately 18 hospitals in the County.¹³ With the proposed project's buildout, there would be potential to draw new residents to the planning area because of new employment and housing opportunities. The proposed project would accommodate nearly 4,000 new residential units, which would result in a maximum new resident population of 12,800 if all units are built (assuming all new residents). This increase is not expected to substantially increase demands on existing health services, because overall this population growth is not substantial and would not place an undue burden on the 18 hospitals in the County. It is anticipated that most employment opportunities would be filled by employees already living within the local region, and it is further assumed that these employees would already be utilizing the existing local health services. Thus, it is not expected that a substantial quantity of people will relocate within these hospitals' general service area as a result of the proposed project. Therefore, the proposed project is anticipated to have a less than significant impact with regard to health services on a program level.

Level of Significance

Less than significant impact.

Mitigation Measures

No mitigation required.

¹³ County of Riverside. 2015. Riverside County General Plan, Chapter 6: Safety Element. Website: https://planning.rctlma.org/Portals/14/genplan/2021/elements/Ch06_Safety_092821.pdf. Accessed November 4, 2021.

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3.17 - Recreation

3.17.1 - Introduction

This section describes the existing recreation setting and framework and analyzes the potential effects to the planning area and its surroundings from implementation of the proposed project. Descriptions and analysis in this section are based, in part, on information provided by the County of Riverside (County).

3.17.2 - Environmental Setting

Parks and Recreational Facilities

The Riverside County Regional Park and Open-Space District (RivCoParks) is responsible for regional parks and recreational facilities in the County.¹ The County maintains 35 Regional Parks; other local parks fall under the jurisdiction of several different Riverside County Recreation and Parks Districts.² Local municipalities, including the City of Perris and the City of Lake Elsinore, are responsible for local parks and recreational facilities. As shown in Exhibit 3.16-1, the planning area does not contain any regional or local parks. However, the Colinas del Oro Specific Plan area, east of Highway 74 and south of Ethanac Road, contains a total of approximately 48.8 acres of parks, recreation, and open space, including 30 acres of hillside preservation and recreation area, 10.4 acres of rural mountainous area, a 5.9-acre community park, and a 1.1-acre community center plus an additional 1.4 acres of parkland in proximity to the community park. While these parklands are intended for the use of residents of Colinas del Oro, they are not restricted from outside use. In addition to Colinas del Oro, a total of 32.2 acres of parklands are located within 1 mile of the planning area boundaries, as described below.

City of Perris

Rotary Park—Perris, CA

This 8-acre park is located at 1491 A Street in Perris, approximately 3,900 feet east of Highway 74 and is within the city limits of Perris. Rotary Park is located 0.52 mile (2,733 feet) east of the planning area. Park amenities include barbecues, baseball/softball field, basketball court, group shelter, parking lot, picnic tables, playground, and volleyball court.

Mercado Park—Perris, CA

This 2.6-acre park is located at 925 S. D Street in Perris, approximately 1,760 feet south of the portion of Highway 74 that goes through the southern end of the City of Perris and is within the city limits of Perris. Mercado Park is located 0.85 mile (4,510 feet) east of the planning area. Park amenities include shade trees, benches, playground, picnic tables, and a splash pond.

¹ County of Riverside. 2018. Riverside County Regional Park and Open-Space District (RivCoParks). About Us. Website: <https://www.rivcoparks.org/about-us/>. Accessed January 12, 2022.

² County of Riverside. 2015. Riverside County General Plan, Chapter 5: Multipurpose Open Space Element. Website: https://planning.rctlma.org/Portals/14/genplan/general_Plan_2017/elements/OCT17/Ch05_MOSE_120815.pdf?ver=2017-10-11-102103-833. Accessed January 12, 2022.

City of Lake Elsinore

Rosetta Canyon Sports Park—City of Lake Elsinore, CA

This 21.6-acre park is located at 44419 Ardenwood Way, within the city limits of the City of Lake Elsinore, 575 feet southeast of the planning area. Park amenities include softball and multi-sport facilities, jogging pathways, a community garden, and a dog park.

3.17.3 - Regulatory Framework

State

Quimby Act

The Quimby Act of 1975 (California Government Code § 66477) allows a city or county to pass an ordinance that requires either the dedication of land, the payment of a fee in lieu of dedication, or a combination of both for park and recreational purposes as a condition of approval. The Quimby Act allows cities and counties to require a maximum parkland dedication standard of 3 acres of parkland per 1,000 residents for new subdivision development unless the jurisdiction can demonstrate that the amount of existing neighborhood and community parkland exceeds that limit. In accordance with California Government Code Section 66477, a jurisdiction may establish a parkland dedication standard based on its existing parkland ratio, provided required dedications do not exceed 5 acres per 1,000 residents.

County of Riverside

Ordinances

Under County Ordinance No. 460, Section 10.35, the County has adopted provisions implementing the Quimby Act by establishing a requirement for dedication of 3 acres of parkland per 1,000 population or payment of a fee in lieu of such dedication. The fee or land dedications may only be used to provide neighborhood and community parks that serve the proposed development.

County Ordinance No. 659 establishes a Development Impact Fee program to ensure that impacts caused by development would be offset through the payment of fair share fees by developers to support needed capital infrastructure and other amenities where a nexus is identified.³ The Development Impact Fee program is administered through the County Executive Office.⁴

General Plan

The County of Riverside General Plan (General Plan) Multipurpose Open Space Element sets policies to conserve, preserve, and enhance environmental resources for both ecological and recreational purposes.

The Circulation Element sets forth the following goals and policies related to recreation and recreational facilities:⁵

³ County of Riverside. 2006. Board of Supervisors. Ordinance No. 659 (As Amended Through 659.7). Website: <http://www.rivcocob.org/ords/600/659.7.pdf>. Accessed January 12, 2022.

⁴ County of Riverside. 2020. Transportation Department: Development Fees. Website: <https://rctlma.org/trans/Land-Development/Development-Fees>. Accessed January 12, 2022.

⁵ County of Riverside. 2020. Riverside County General Plan, Chapter 4: Circulation Element, Figure C-6: Riverside County Trails and Bikeway System. Website: <https://planning.rctlma.org/General-Plan-Zoning/General-Plan>. Accessed January 12, 2022.

- Policy C 15.3** Develop a trail system which connects Riverside County parks and recreation areas while providing links to open space areas, equestrian communities, local municipalities, and regional recreational facilities (including other regional trail systems), and ensure that the system contains a variety of trail loops of varying classifications and degrees of difficulty and length.
- Policy C 16.2** Develop a multipurpose trail network with support facilities which provide a linkage with regional facilities and require trailheads and staging areas that are equipped with adequate parking, equestrian trailer parking (as appropriate), bicycle parking, restrooms, informative signage, interpretive displays, maps, and rules of appropriate usage and conduct on trails accessed from such facilities.
- Policy C 16.3** Require that trail alignments either provide access to or link scenic corridors, schools, parks, bus stops, transit terminals, park and ride commuter lots, and other areas of concentrated public activity, where feasible.
- Policy C 16.4** Require that all development proposals located along a planned trail or trails provide access to, dedicate trail easements or right-of-way, and construct their fair share portion of the trails system. Evaluate the locations of existing and proposed trails within and adjacent to each development proposal and ensure that the appropriate easements are established to preserve planned trail alignments and trail heads.
- Require that all specific plans and other large-scale development proposals include trail networks as part of their circulation systems.
 - Ensure that new gated communities, and where feasible, existing gated communities, do not preclude trails accessible to the general public from traversing through their boundaries.
 - Provide buffers between streets and trails, and between adjacent residences and trails.
 - Make use of already available or already disturbed land where possible for trail alignments.
 - Require that existing and proposed trails within Riverside County connect with those in other neighboring city, County, State, and federal jurisdictional areas.

The Multipurpose Open Space Element of the General Plan sets forth the following goals and policies related to recreation and recreational facilities:⁶

- Policy OS 20.3** Discourage the absorption of dedicated park lands by non-recreational uses, public or private. Where absorption is unavoidable, replace park lands that are absorbed by other uses with similar or improved facilities and programs.

⁶ County of Riverside. 2015. Riverside County General Plan, Chapter 5: Multipurpose Open Space Element. Website: <https://planning.rctlma.org/General-Plan-Zoning/General-Plan>. Accessed January 12, 2022.

Policy OS 20.4 Provide for the needs of all people in the system of the County recreation sites and facilities, regardless of their socioeconomic status, ethnicity, physical capabilities or age.

Policy OS 20.5 Require that development of recreation facilities occurs concurrent with other development in an area.

Policy OS 20.6 Require new development to provide implementation strategies for the funding of both active and passive parks and recreational sites.

Additionally, the Healthy Communities Element sets policies that encourage communities that provide for the basic needs of individuals, which includes recreational opportunities. The Healthy Communities Element sets forth the following goals and policies related to recreation and recreational facilities:⁷

Policy HD 9.3 Require safe and appealing recreational opportunities.

Policy HC 10.1 Provide residents of all ages and income levels with convenient and safe opportunities for recreation and physical activities.

Policy HC 10.2 Increase access to open space resources by:

- a. Supporting a diversity of passive and active open spaces throughout the County of Riverside.
- b. Facilitating the location of additional transportation routes to existing recreational facilities.
- c. Locating parks in close proximity to homes and offices.
- d. Requiring that development of parks, trails, and open space facilities occur concurrently with other area development.

Policy HC 10.3 Encourage the expansion of facilities and amenities in existing parks.

Policy HC 10.4 Encourage the construction of new parks and open spaces.

Policy HC 10.5 Incorporate design features in the multiuse open space network that reflect the sense of place and unique characteristics of the community.

Policy HC 10.6 Address both actual and perceived safety concerns that create barriers to physical activity by requiring adequate lighting, street visibility, and defensible space.

Policy HC 10.7 When planning communities, encourage the location of parks near other community facilities such as schools, senior centers, recreation centers, etc.

⁷ County of Riverside. 2021. Riverside County General Plan, Chapter 10: Healthy Communities Element. Website: <https://planning.rctlma.org/General-Plan-Zoning/General-Plan>. Accessed January 12, 2022.

- Policy HC 10.8** Encourage joint-use agreements with school districts that allow school properties to be used during non-school hours.
- Policy HC 10.9** When feasible, coordinate with public entities to allow easements to be used as parks and trails.
- Policy HC 13.1** Encourage development of recreational centers to serve all phases of life (e.g., children, families, and senior citizens).
- Policy HC 13.2** Encourage the location of recreational centers in areas not subject to environmental hazards and in areas where they are easily accessible by public transportation.

Elsinore Area Plan

The Elsinore Area Plan (ELAP) includes the communities of Warm Springs and Meadowbrook, which are within the planning area, as well as the City of Lake Elsinore. The ELAP sets forth the following goals and policies related to recreation:⁸

- Policy ELAP 5.9** Developments should be encouraged to design and locate convenient pedestrian and bicycle connections, bus, or shuttle connections, that increase connections to adjacent and nearby communities and cities, businesses, parks and open space areas, and new transit access opportunities.
- Policy ELAP 10.1** Implement the Trails and Bikeway System, Figure 8, through such means as dedication or purchase, as discussed in the Non-motorized Transportation section of the General Plan Circulation Element.

The following policy applies to Neighborhood 2 of the Highway 74 planning area:

- Policy ELAP 5.13** Encourage complete streets, which include sidewalks, greenbelts, and trails to facilitate use by pedestrians and bicyclists where such facilities are well separated from parallel or cross through traffic to ensure pedestrian and cyclist safety.

Mead Valley Area Plan

The Mead Valley Area Plan (MVAP) sets forth the following goals and policies related to recreation:⁹

- MVAP 3.9** Developments should be encouraged to design and locate convenient pedestrian and bicycle connections, bus or shuttle connections, that increase connections to adjacent and nearby communities and cities, businesses, parks and open space areas, and new transit access opportunities.

⁸ County of Riverside. 2019. Elsinore Area Plan. Website: https://planning.rctlma.org/Portals/14/genplan/2019/ap/ELAP_041619.pdf. Accessed January 12, 2022.

⁹ County of Riverside. 2019. Mead Valley Area Plan. Website: https://planning.rctlma.org/Portals/14/genplan/2019/ap/MVAP_062618.pdf. Accessed January 12, 2022.

Policy MVAP 11.1 Maintain and improve the trails and bikeways system to reflect Figure 9, Trails and Bikeway System, and as discussed in the Non-motorized Transportation Multipurpose Recreational Trails section of the General Plan Circulation Element.

Policy MVAP 11.2 Install diamond-shaped warning signs indicating Warning: Trail Crossing or depicting the equivalent international graphic symbol at locations where regional or community trails cross public roads with high amounts of traffic, such as Cajalco Road.

The following policy applies to Neighborhood 1 of the Highway 74 planning area:

Policy MVAP 3.13 Encourage “complete streets” which include street configurations that include sidewalks, greenbelts, and trails to facilitate use by pedestrians and bicyclists where such facilities are well separated from parallel or cross through traffic to ensure pedestrian and cyclist safety.

Highway 74 Community Plan

The Highway 74 Community Plan (proposed project) sets forth the following policy related to recreation:

- Developments should be encouraged to design and locate convenient pedestrian and bicycle connections, bus, or shuttle connections that increase connections to adjacent and nearby communities and cities, businesses, parks and open space areas, and new transit access opportunities.

3.17.4 - Methodology

FirstCarbon Solutions (FCS) reviewed information about public service and recreation providers in the planning area. The General Plan, area plans, and agency websites were reviewed for relevant information.

3.17.5 - Thresholds of Significance

Recreation

Section XVI of Appendix G to the California Environmental Quality Act (CEQA) Guidelines addresses typical adverse effects to parks and recreation and includes the following threshold questions to evaluate a project’s impacts to recreational resources:

- a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?
- b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

Significance thresholds are set forth in Riverside County’s Environmental Assessment Checklist, are derived from Section XVI of Appendix G to the State CEQA Guidelines (listed above), and state that

the proposed project would have a significant impact to parks and recreation if construction and/or operation of the project would:

35. Parks and Recreation

- a) Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.
- b) Increase the use of existing neighborhood or regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.
- c) Be located within a Community Service Area (CSA) or recreation and park district with a Community Parks and Recreation Plan (Quimby fees).

36. Recreational Trails

- a) Include the construction or expansion of a trail system?

3.17.6 - Project Impacts and Mitigation Measures

Parks and Recreation

Impact REC-35(a): The proposed project would not include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.

Impact Analysis

Some of the development that would occur with implementation of the proposed project could include parks and recreational facilities, such as pocket parks, common open spaces, paseos, or new or extended trails. It is not anticipated that new development would include major recreational facilities such as community centers or other recreational venues. It is also not expected that neighborhood, local, or regional parks would be developed pursuant to the proposed project, as the amount of open space would decrease compared to the existing land use designations.

The proposed project would not authorize any immediate development that could affect the need for recreational facilities. Future development would be required to either provide recreational facilities and open space in accordance with the land use and density proposed or would be required to pay development impact fees pursuant to Ordinance No. 659, thereby supporting the construction of facilities identified in the County’s Public Facilities Needs List and/or the acquisition of open space and habitat. Small parks and recreational facilities that would be expected under the proposed project would not include major construction that would have substantial environmental impacts, such as air quality, greenhouse gas emissions, noise, or traffic, nor would they result in any significant operational impacts on the environment. As discrete development projects are proposed pursuant to the proposed project, site-specific CEQA review would be required to determine whether any would result in significant environmental impacts. Impacts would be less than significant.

Level of Significance

Less than significant impact.

Mitigation Measures

None required.

Impact REC-35(b): The proposed project would not increase the use of existing neighborhood or regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.

Impact Analysis

The County's adopted standard for parks and open space is 3 acres of parks and open space for every 1,000 residents. The County maintains 35 Regional Parks, encompassing roughly 23,317 acres. Based on the County's total population of 2.43 million persons in 2020 (Table 3.16-1), the County provides 9.2 acres of parks and open space per 1,000 residents, exceeding this threshold. While there are no parks within the planning area, there are 32.2 acres of existing parks within 1 mile of the planning area boundaries in addition to the nearly 50 acres available in Colinas del Oro.

Buildout of the proposed project would result in the intensification of land uses such as residential neighborhoods, commercial, retail, mixed use, light industrial, business park and public facilities and would decrease the amount of acreage designated as open space. Development of approximately 4,000 multi-family residential units that could be accommodated under the proposed project would create additional demand for neighborhood or regional parks or other recreational facilities and could result in increased use of existing parks and recreational facilities. Based on a persons per household (pph) ratio of 3.20, if all approximately 4,000 dwelling units were constructed, a population increase of up to 12,800 residents could be anticipated in the planning area. This would represent a 3.3 percent increase in the existing resident population of unincorporated Riverside County and 0.12 percent increase in population of Riverside County overall, still resulting in 9.2 acres of parks and open space per 1,000 residents. These increases would not exceed the County's standard, are small, and would not be expected to result in increased use of existing parks and recreational facilities in the County such that deterioration would occur.

Future development pursuant to the proposed project would be required to either provide recreational facilities and open space in accordance with the land use and density proposed or would be required to pay development impact fees pursuant to Ordinance No. 659, thereby supporting the construction of facilities identified in the County's Public Facilities Needs List and/or the acquisition of open space and habitat. Compliance with these ordinances would facilitate development of parks and recreational facilities, both within or outside of the planning area, which would maintain the County's current ratio of parks to population and provide additional recreational opportunities. Thus, substantial deterioration of existing parks and recreational facilities would not occur. With compliance with local regulations and ordinances, impacts would be less than significant.

Level of Significance

Less than significant impact.

Mitigation Measures

No mitigation required.

Impact REC-35(c): The proposed project would not be located within a Community Service Area (CSA) or recreation and park district with a Community Parks and Recreation Plan (Quimby fees).

Impact Analysis

According to the 2015 County of Riverside General Plan Environmental Impact Report (General Plan EIR), the planning area is not located with a CSA or a recreation and park district. Thus, there would be no impacts associated with a CSA or a Community Parks and Recreation Plan.

Level of Significance

No impact.

Mitigation Measures

No mitigation required.

Recreational Trails

Impact REC-36(a): The project would not include the construction or expansion of a trail system.

Impact Analysis

According to General Plan Figure C-6, Riverside County Trails and Bikeway System, the planning area currently has areas designated as Regional Trail: Urban/Suburban and Community Trail.¹⁰ Applicable policies would include but would not be limited to the following:

- Policy C 16.4** Require that all development proposals located along a planned trail or trails provide access to, dedicate trail easements or right-of-way, and construct their fair share portion of the trails system. Evaluate the locations of existing and proposed trails within and adjacent to each development proposal and ensure that the appropriate easements are established to preserve planned trail alignments and trail heads.
- A. Require that all specific plans and other large-scale development proposals include trail networks as part of their circulation systems.
 - B. Ensure that new gated communities, and where feasible, existing gated communities, do not preclude trails accessible to the general public from traversing through their boundaries.
 - C. Provide buffers between streets and trails, and between adjacent residences and trails.
 - D. Make use of already available or already disturbed land where possible for trail alignments.
 - E. Require that existing and proposed trails within Riverside County connect with those in other neighboring city, County, State, and federal jurisdictional areas.

Since the planning area contains trails that are included in the Trails and Bikeway System, all projects within the planning area would be expected to be consistent with Policy 16.4. No specific project extending the existing trail system is proposed at this time. As future specific development is

¹⁰ County of Riverside. 2020. Riverside County General Plan, Chapter 4: Circulation Element, Figure C-7: Riverside County Trails and Bikeway System. Website: <https://planning.rctlma.org/General-Plan-Zoning/General-Plan>. Accessed January 12, 2022.

proposed under the project, individual review will evaluate whether the project includes any recreational trail components that could result in environmental effects. All development under the proposed project would be expected to be consistent with the policies within the specific plan and General Plan to protect and enhance existing and planned recreational trails. Impacts on a program level would be less than significant.

Level of Significance

Less than significant impact.

Mitigation Measures

No mitigation required.

3.18 - Transportation and Traffic

3.18.1 - Introduction

This section describes the existing transportation setting and potential effects from project implementation on the site and its surrounding area. Descriptions and analysis in this section are based, in part, on information contained in the Vehicle Miles Traveled (VMT) Analysis prepared by Urban Crossroads and included in this Draft Program Environmental Impact Report (Draft Program EIR) as Appendix H.

3.18.2 - Environmental Setting

Roadway Network

Regional access to the planning area is provided via Interstate 15, which traverses southeast to northwest south of the planning area and intersects Highway 74. There are numerous local routes in the planning area, which are described below. Exhibit 3.18-1 illustrates the planning area roadway network.

Highway 74 is an expressway connecting the unincorporated areas of Riverside County (County) to the City of Lake Elsinore and City of Perris. As an expressway, the route runs south–west to north–east diagonally within the planning area. Highway 74 is a four-lane divided County Highway between the City of Lake Elsinore and City of Perris. Highway 74 currently provides two to three through travel lanes in each direction. Highway 74 provides a paved shoulder, a paved striped median, and a two-way left turn lane in various locations. Pedestrian facilities consisting of short, non-contiguous segments of sidewalks or paths are located near intersections and provide access to bus turnouts. The California Department of Transportation (Caltrans) indicates that Highway 74 carried 28,914 average daily trips at Ethanac Road in 2019, the most recent year counts available. Highway 74 is designated as a Riverside County Congestion Management Program (Riverside County CMP) roadway.

Interstate 15 (I-15) is built as a six-lane divided freeway within the vicinity of the planning area. I-15 provides essential inter-city and inter-regional access and is a critical part of the local road network. Within the planning area, I-15 has access from the interchange at Central Avenue.

Interstate 215 (I-215) is built as a six-lane divided freeway within the vicinity of the planning area. I-215 provides essential inter-city and inter-regional access and is a critical part of the local road network. Within the planning area, I-215 has access from the interchange at Redlands Avenue.

Dexter Avenue is designated as a Collector with a 68-foot right-of-way on the City of Lake Elsinore's General Plan Circulation Element. Dexter Avenue has one southbound through lane and one northbound through lane.

Cambern Avenue is designated as a Secondary Highway with a 90-foot right-of-way on the City of Lake Elsinore's General Plan Circulation Element. Cambern Avenue has one southbound through lane and one northbound through lane.

Conard Avenue is designated as a Secondary Highway with a 90-foot right-of-way on the City of Lake Elsinore's General Plan Circulation Element. Conard Avenue has one southbound through lane and one northbound through lane.

Rosetta Canyon Drive is designated as a Secondary Highway with a 90-foot right-of-way on the City of Lake Elsinore's General Plan Circulation Element. South of Highway 74, Rosetta Canyon Drive has two northbound through lanes.

Nichols Road is designated as a Major Highway with a 118-foot right-of-way. Nichols Road is currently an unpaved roadway that intersects with Highway 74 as El Toro Cut Off Road. Although not immediately adjacent to Highway 74, there are portions of Nichols Road near the City of Lake Elsinore and County jurisdictional boundary that are paved and publicly maintained as a two-lane roadway.

Riverside Street is designated as a Major Highway with a 118-foot right-of-way. South of Highway 74, Riverside Street has one northbound through lane and one southbound through lane with additional turn lanes accommodated at various intersections. Riverside Street has a painted median with one lane in each direction between Crumpton Road and Astrid Way.

Wasson Canyon Road is designated as a Secondary Highway with a 100-foot right-of-way. South of Highway 74, Rosetta Canyon Drive has one northbound through lane and one southbound through lane. However, Wasson Canyon Road widens to accommodate two northbound through lanes and two southbound through lanes south of Beales Street separated by a landscaped median.

Meadowbrook Avenue and Greenwald Avenue are designated as a Secondary Highway with a 100-foot right-of-way. North of Highway 74, Meadowbrook Avenue has one southbound through lane and one northbound through lane. South of Highway 74, Greenwald Avenue has one northbound through lane and one southbound through lane.

Richard Street is designated as a local street with a minimum of 60-foot right-of-way. East of Highway 74, Richard Street has one westbound through lane and one eastbound through lane.

Ethanac Road is a future Expressway connecting the unincorporated areas of Riverside County to the City of Lake Elsinore and City of Perris. As an Expressway, the route will run west to east across the planning area. Ethanac Road is currently a dirt road to the east and west of Highway 74. However, the western leg has approximately 180-feet of pavement.

Theda Street is designated as a Secondary Highway with a 100-foot right-of-way. North of Highway 74, Theda Street has one northbound through lane and one southbound through lane.

Sophie Street is designated as a Secondary Highway with a 100-foot right-of-way. South of Highway 74, Sophie Street has one northbound through lane and one southbound through lane.

Ellis Avenue is designated as a Secondary Highway with a 100-foot right-of-way. North of Highway 74, Ellis Avenue has one northbound through lane and one southbound through lane.

Transit Service

The County is currently served by the Riverside Transit Agency (RTA), a public transit agency serving various jurisdictions throughout the County. The existing bus routes provided within the County are shown on Exhibit 3.18-2. Transit service is reviewed and updated by RTA periodically to address ridership, budget, and community demand needs. Changes in land use can affect these periodic adjustments which may lead to either enhanced or reduced service where appropriate.

Travel Characteristics

Mode Share

Residents and employees in the County utilize many different forms of transportation. The proportion of travelers taking different transportation modes (e.g., driving alone, riding transit, walking) is referred to as “mode share.” The U.S. Census Bureau 2021 American Community Survey provides the most recent comparison data between commute mode share patterns and overall mode share patterns. The overall mode shares for Riverside County residents are shown in Table 3.17-1.

Table 3.18-1: Riverside County Mode Share for General Trips

Population	Total
Drove Alone	63.7%
Carpooled	8.4%
Public Transit	2.1%
Walked	2.1%
Worked at Home	21.4%
Other	2.3%

Source: U.S. Census Bureau. American Community Survey 2021.

Residents of the County primarily rely on driving both for commuting and other trips. Driving alone or carpooling accounts for approximately 72 percent of trips.

3.18.3 - Regulatory Framework

Federal

Federal rules and regulations govern many facets of the County’s traffic and circulation system including transportation planning and programming; funding; design, construction, and operation of facilities; and others. The County complies with all applicable rules and regulations of the Federal Highway Administration (FHWA), Urban Mass Transit Administration (UMTA), Federal Railroad Administration, Federal Aviation Administration (FAA), and other federal agencies. In addition, the County coordinates with federal resource agencies where appropriate in the environmental clearance process for transportation facilities.

State

Assembly Bill 1358

Assembly Bill (AB) 1358, also known as the California Complete Streets Act of 2008, requires cities and counties to include “Complete Street” policies in their general plans. These policies address the safe accommodation of all users, including bicyclists, pedestrians, motorists, public transit vehicles and riders, children, the elderly, and the disabled. These policies can apply to new streets as well as the redesign of corridors.

Senate Bill 375

Senate Bill (SB) 375 provides guidance regarding curbing emissions from cars and light trucks. There are four major components to SB 375. First, SB 375 requires regional greenhouse gas emission targets. These targets must be updated every 8 years in conjunction with the revision schedule of the housing and transportation elements of local general plans. Second, Metropolitan Planning Organizations are required to create a Sustainable Communities Strategy that provides a plan for meeting regional targets. Third, SB 375 requires housing elements and transportation plans to be synchronized on 8-year schedules. Finally, Metropolitan Planning Organizations must use transportation and air emissions modeling techniques that are consistent with the guidelines prepared by the California Transportation Commission.

Senate Bill 743

SB 743, approved in 2013, endeavors to change the way transportation impacts will be determined according to the California Environmental Quality Act (CEQA). The Governor’s Office of Planning and Research (OPR) has recommended the use of VMT as the replacement for automobile delay-based Level of Service (LOS). In December 2018, the Natural Resources Agency finalized updates to CEQA Guidelines to incorporate SB 743 (i.e., VMT).

Regional

Southern California Association of Governments Regional Transportation Plan

The Southern California Association of Governments (SCAG) adopted the 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), also known as Connect SoCal, in 2021. Connect SoCal is a long-range visioning plan that balances future mobility and housing needs with economic, environmental, and public health goals. Connect SoCal embodies a collective vision for the region’s future and is developed with 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.

Connect SoCal includes over 4,000 transportation projects—ranging from highway improvements, railroad grade separations, bicycle lanes, new transit hubs and replacement bridges—from county plans and seek to reduce traffic bottlenecks, improve the efficiency of the region’s network, and expand mobility choices. In addition, Connect SoCal is supported by a combination of transportation and land use strategies that help the region achieve State greenhouse gas (GHG) emission reduction goals and federal Clean Air Act requirements, preserve open space areas, improve public health and roadway safety, support the vital goods movement industry, and utilize resources more efficiently.

Local

County of Riverside General Plan Circulation Element

The County General Plan Circulation Element (Circulation Element) designates future road improvements and extensions, addresses non-motorized transportation alternatives, and identifies funding options. The Circulation Element also identifies transportation routes, terminals, and facilities. The intent of the Circulation Element is to:

- Identify the transportation needs and issues within the County, as well as regional relationships that affect the County's transportation system.
- Describe the proposed circulation system in terms of design elements, operating characteristics, and limits of operation, including current standards, guidelines, and accepted criteria for the location, design, and operation of the transportation system.
- Consider alternatives other than the single-occupant vehicle as essential in providing services and access to facilities.
- Establish policies that coordinate the circulation system with General Plan and area plan land use maps and provide direction for future decision-making in the realization of the Circulation Element goals.
- Develop implementation strategies and identify funding sources to provide for the timely application of the Circulation Element goals and policies.
- Provide a plan to achieve a balanced, multimodal transportation network that meets the needs of all users of the streets, roads, and highways for safe and convenient travel in a manner that is suitable to the rural, suburban, or urban context of the General Plan.

Congestion Management Program

The Riverside County CMP is updated every 5 years in accordance with Proposition 111, passed in June 1990. The CMP was established in the State of California to more directly link land use, transportation, and air quality and to prompt reasonable growth management programs that would more effectively utilize new and existing transportation funds, alleviate traffic congestion and related deficiencies, and improve air quality.

Riverside County Congestion Management Program

Riverside County Transportation Commission (RCTC) is responsible for preparing the CMP in Riverside County. The CMP is an effort to align land use, transportation, and air quality management efforts to promote reasonable growth management programs that effectively use statewide transportation funds, while ensuring that new development pays its fair share of needed transportation improvements. The focus of the CMP is the development of an Enhanced Traffic Monitoring System in which real-time traffic count data may be accessed by RCTC to evaluate the condition of the Congestion Management System (CMS), as well as to meet other monitoring requirements at the state and federal levels. RCTC's Long Range Transportation Study, approved in 2019, incorporates the state and federal CMPs into the plan, including performance standards, conformance, monitoring, deficiency plan process, and management strategies.

Per the target of LOS E adopted by RCTC, when a CMS segment falls to LOS F, a deficiency plan must be prepared by the local agency where the deficiency is located. Other agencies identified as contributors to the deficiency will also be required to coordinate with the development of the plan. The plan must contain mitigation measures, including Transportation Demand Management (TDM) strategies and transit alternatives, and a schedule of mitigating the deficiency. To ensure that the CMS is appropriately monitored to reduce the occurrence of CMP deficiencies, it is the responsibility of local agencies to consider the traffic impacts on the CMS when reviewing and approving development proposals.

Elsinore Area Plan

The Elsinore Area Plan (ELAP) contains the following policies related to transportation:

- Policy ELAP 5.2** Where feasible the development of frontage/service roads should be encouraged to increase and facilitate access from Highway 74 to residential, commercial, and industrial sites.
- Policy ELAP 5.4** Development should be coordinated with Riverside Transit Agency (RTA) to ensure bus routes are identified and bus stops are provided to adequately serve community residents.
- Policy ELAP 5.6** Development should promote a reduction of vehicle miles traveled (VMT) and livable and resilient neighborhoods that provide housing, goods and services, open space, and multi-modal transportation options within proximity to each other.
- Policy ELAP 5.8** Commercial Parking: should be screened/buffered from any public right-of-way with incorporation of landscaping, walls, berms with trees in support of the streetscape.
- Policy ELAP 5.9** Developments should be encouraged to design and locate convenient pedestrian and bicycle connections, bus, or shuttle connections, that increase connections to adjacent and nearby communities and cities, businesses, parks and open space areas, and new transit access opportunities.
- Policy ELAP 9.1** Design and develop the vehicular roadway system per Figure 7, Circulation, and in accordance with the functional classifications and standards specified in the Planned Circulation Systems section of the General Plan Circulation Element.
- Policy ELAP 9.2** Maintain Riverside County’s roadway Level of Service standards as described in the Level of Service section of the General Plan Circulation Element.
- Policy ELAP 10.1** Implement the Trails and Bikeway System, Figure 8, through such means as dedication or purchase, as discussed in the Non-motorized Transportation section of the General Plan Circulation Element.

The following policy applies to Neighborhood 2 of the Highway 74 planning area:

Policy ELAP 5.13 Encourage complete streets, which include sidewalks, greenbelts, and trails to facilitate use by pedestrians and bicyclists where such facilities are well separated from parallel or cross through traffic to ensure pedestrian and cyclist safety.

The following policy applies to Neighborhood 3 of the Highway 74 planning area:

Policy ELAP 5.15 Encourage effective and comprehensive coordination efforts with the City of Lake Elsinore regarding planning programs, including circulation policies, that affect commercial and industrial development/entitlement activity.

Mead Valley Area Plan

The Mead Valley Area Plan (MVAP) contains the following policies related to transportation:

Policy MVAP 3.2 Where feasible the development of frontage/service roads should be encouraged to increase and facilitate access from Highway 74 to residential, commercial, and industrial sites.

Policy MVAP 3.4 Development should be coordinated with Riverside Transit Agency (RTA) to ensure bus routes are identified and bus stops are provided to adequately serve community residents.

Policy MVAP 3.6 Development should promote vehicle miles traveled (VMT) and livable and resilient neighborhoods that provide housing, goods and services, open space, and multi-modal transportation options within proximity to each other.

Policy MVAP 3.8 Commercial Parking: should be screened/buffered from any public right-of-way with incorporation of landscaping, walls, berms with trees in support of the streetscape.

Policy MVAP 3.9 Developments should be encouraged to design and locate convenient pedestrian and bicycle connections, bus or shuttle connections, that increase connections to adjacent and nearby communities and cities, businesses, parks and open space areas, and new transit access opportunities.

Policy MVAP 9.1 Design and develop the vehicular roadway system per Figure 8, Circulation, and in accordance with the Functional Classifications section in the General Plan Circulation Element.

Policy MVAP 9.2 Maintain Riverside County's roadway Level of Service standards as described in the Level of Service section of the General Plan Circulation Element.

Policy MVAP 11.1 Maintain and improve the trails and bikeways system to reflect Figure 9, Trails and Bikeway System, and as discussed in the Non-motorized Transportation section of the General Plan Circulation Element.

Policy MVAP 11.2 Install diamond-shaped warning signs indicating Warning: Trail Crossing or depicting the equivalent international graphic symbol at locations where regional or community trails cross public roads with high amounts of traffic, such as Cajalco Road.

The following policy applies to Neighborhood 1 of the Highway 74 planning area:

Policy MVAP 3.13 Encourage “complete streets” which include street configurations that include sidewalks, greenbelts, and trails to facilitate use by pedestrians and bicyclists where such facilities are well separated from parallel or cross through traffic to ensure pedestrian and cyclist safety.

Highway 74 Community Plan

The Highway 74 Community Plan sets forth the following goals and policies related to transportation:

- Where feasible the development of frontage/service roads should be encouraged to increase and facilitate access from Highway 74 to residential, commercial, and industrial sites.
- Development should be coordinated with RTA to ensure bus routes are identified and bus stops are provided to adequately serve community residents.
- Development should promote a reduction of VMT and livable and resilient neighborhoods that provide housing, goods and services, open space, and multi-modal transportation options within proximity to each other.
- Developments should be encouraged to design and locate convenient pedestrian and bicycle connections, bus, or shuttle connections that increase connections to adjacent and nearby communities and cities, businesses, parks and open space areas, and new transit access opportunities.

In addition to these policies, neighborhood-specific policies relevant to transportation include:

Policy N 1.2/2.2 Encourage complete streets, which include sidewalks, greenbelts, and trails to facilitate use by pedestrians and bicyclists where such facilities are well separated from parallel or cross through traffic to ensure pedestrian and cyclist safety.

Policy N 1.3 The County should work with RTA to address any deficiencies or disconnection of transit routes through the neighborhood.

Policy N 3.1 Encourage effective and comprehensive coordination efforts with the City of Lake Elsinore regarding planning, including circulation policies, that affect commercial and industrial development/entitlement activity.

3.18.4 - Methodology

Changes to the State CEQA Guidelines were adopted in December 2018, which requires all lead agencies to adopt VMT as a replacement for automobile delay-based LOS as the new measure for identifying transportation impacts for land use projects. The County of Riverside in December of 2020 adopted a comprehensive update to its transportation analysis guidelines titled Transportation

Analysis Guidelines for LOS and VMT (County Guidelines). The methodologies described are generally consistent with the County Guidelines.

VMT is a measurement of the total amount of vehicular travel for a specific area. It is typically normalized on a per-household, per-resident, per-employee, or per-service-population (residents plus employees) basis such that it is a metric of travel efficiency (e.g., fewer vehicle trips per person or shorter distances traveled in an automobile per person means that travel is more efficient). Ultimately, VMT is a powerful performance indicator of a jurisdiction's land use plan and multimodal transportation network.

VMT generation is influenced by several factors that may or may not be affected by county goals, policies, and plans. These factors include, but are not limited to:

- The location of the county within the Inland Empire region.
- The diversity, density, and location of land uses internal and external to the county.
- Access to destinations (accessibility) and speed of travel/congestion (mobility) along automobile, bicycle, pedestrian, and transit networks.
- Convenience of travel (e.g., service frequency, Wi-Fi availability on transit, lockers/showers at the end of a bicycle trip).
- Costs of travel (e.g., gas prices, transit fares, auto/bike maintenance costs).

The VMT per-service-population data from the Riverside County Traffic Analysis Model (RIVTAM) travel demand model yield the following conclusions on the existing state of VMT generation in the County as shown in Table 3.17-2:

- The total VMT per-household (e.g., the total VMT in the County divided by the total number of households) is higher than the region.
- The total VMT on a per-household basis in the County is higher than the VMT on a per-household basis in surrounding jurisdictions, which is likely an indication that the County draws people from the surrounding region to access employment, goods, and services, attracting visitors and employees.
- When the analysis was performed, RIVTAM was the most recently updated regional model, which was validated and calibrated with local data for use in Riverside County. It is the most appropriate tool for estimating VMT in Riverside County.

VMT Thresholds

As outlined in the County Guidelines, mixed-use projects should evaluate each land use component of the proposed project separately and apply the relevant significance threshold for each land use type (i.e., residential, office, retail, etc.). Thresholds of significance based on the adopted County Guidelines are provided in Table 3.18-2.

Table 3.18-2: County VMT Thresholds

Land Use	VMT Threshold	Basis
Residential	15.19 VMT/capita	Existing countywide average VMT per capita
Office	14.24 VMT/employee	Existing countywide average Work VMT per-employee
Retail	Net Regional Change	Using the County as the basis or other area determined appropriate by the Transportation Department
Other Employment	14.24 VMT/employee	Existing countywide average Work VMT per-employee
Other Customer	Net Regional Change	Using the County as the basis
Notes: VMT = Vehicle Miles Traveled Source: County of Riverside 2020.		

Analysis Scenarios

RIVTAM is a useful tool to estimate VMT as it considers interaction between different land uses based on socioeconomic data such as population, households, and employment. RIVTAM is a travel demand forecasting model for a sub-area (Riverside County) of the SCAG regional traffic model. RIVTAM was designed to provide a greater level of detail and sensitivity in the Riverside County area as compared to the regional SCAG model. County Guidelines currently identifies RIVTAM as the appropriate tool for conducting VMT modeling for land use projects within the County.

Project VMT was calculated using the most current version of RIVTAM. Adjustments in socioeconomic data (i.e., population, households, and employment) were made to multiple Traffic Analysis Zones (TAZs) within the RIVTAM model to reflect the project’s proposed land uses. Consistent with County Guidelines the VMT analysis was conducted for the following existing and cumulative scenarios:

- Existing Conditions– RIVTAM base year (2012) traffic model conditions.
- Existing Plus Project Conditions– RIVTAM base year (2012) traffic model plus General Plan Amendment (GPA) 1205 proposed land use forecasts.
- Cumulative No Project Conditions– RIVTAM cumulative model (2040) without the proposed project land use changes (i.e., adopted land use assumptions).
- Cumulative Plus Project Conditions– RIVTAM cumulative model (2040) plus GPA 1205 proposed land use forecasts.

Project Land Use Conversion

Land use information for the proposed project was provided by the County. The land use acreages were then converted to socioeconomic data using conversion factors developed by Urban Crossroads, Inc. staff. The assumptions utilized to convert acreages into RIVTAM compatible

socioeconomic data are consistent with the conversion factors used in the Riverside County Housing Element Update—GPA 1122 along with the Elsinore and Mead Valley Area Plans.

For non-residential land uses such as the commercial retail, land use information in terms of building square footage is converted into employees, which is the non-residential input for the travel demand model. The conversion factors used by County of Riverside’s most recent General Plan Update (2015), which are contained in Appendix E-2: Socioeconomic Build-Out Assumptions and Methodology of the County’s General Plan were used to convert building square footage to employees.

For residential land uses, a conversion from dwelling units to population was used for each residential land use type. The County’s General Plan Update data was used consistent with the source used for residential development. Population for each of the residential land use types was assumed to be between 2.7 and 3.17 people per unit depending on the location within the study area. Where applicable, existing socioeconomic distributions were maintained.

3.18.5 - Thresholds of Significance

Section XVII of Appendix G to the CEQA Guidelines addresses typical adverse effects to transportation and traffic and includes the following threshold questions to evaluate the proposed project’s impacts on transportation and traffic. Would the project:

- a) Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?
- b) Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?
- c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?
- d) Result in inadequate emergency access?

Significance thresholds are set forth in Riverside County’s Environmental Assessment Checklist, are derived from Section XVII of Appendix G to the CEQA Guidelines (listed above), and state that the proposed project would have a significant impact to transportation and traffic if construction and/or operation of the proposed project would:

37. Transportation

- a) Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?
- b) Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?
- c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?
- d) Cause an effect upon, or a need for new or altered maintenance of roads?
- e) Cause an effect upon circulation during the project’s construction?

- f) Result in inadequate emergency access or access to nearby users?

38. Bike Trails

- a) Include the construction or expansion of a bike system or bike lanes?

3.18.6 - Project Impacts and Mitigation Measures

This section discusses potential impacts associated with the proposed project and provides mitigation measures where necessary.

Transportation

Impact TRANS-37(a): The proposed project would not conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities.

Impact Analysis

Specific development projects that would result from implementation of the proposed project are unknown. Future development on-site would be required to comply with all applicable Riverside County ordinances related to the circulation system, including, but not limited to, Ordinance No. 460, regulating the division of land in the County and includes design requirements relating to required access, street improvements, roadway dedications, and roadway design. Because site-specific designs showing driveway locations have not been developed, there are no specific details to review and assess impacts on pedestrian, bicycle, and transit facilities. As part of the standard development review process, the County would require all future proposed development of parcels to go through a review of pedestrian, bicycle, and transit facilities in the area surrounding the individual development project to ensure that future developments do not conflict with existing or planned facilities supporting those travel modes. All pedestrian, bicycle, and transit facilities proposed would be designed using the appropriate design standards. During the review and approval process of a planning application submittal, all future development would be required to demonstrate compliance with the Circulation Element of the General Plan and Code or Ordinances, including the identification of appropriate mitigation measures, where needed on a project-specific basis, to reduce impacts to less than significant. This analysis is based on a program level and does not approve any specific development on any specific site; accordingly, site-specific mitigation measures cannot be identified at this time. Future implementing projects' compliance with the General Plan Circulation Element and Code of Ordinances, along with identification and implementation of appropriate mitigation measures, would ensure that future implementing projects would not conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities. Impacts would be less than significant.

Level of Significance

Less than significant impact.

Mitigation Measures

None required.

Impact TRANS-37(b): The proposed project could conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b).

Impact Analysis

As described in the County Guidelines, VMT significance thresholds are based on land use type, which for purposes of the analysis are separated into efficiency or net change metrics. Efficiency metrics include either VMT per capita (residential based VMT) and VMT per-employee (employee based VMT). “Net Change” refers to the net change in regional VMT. Net change is used for elements that include a significant customer base such as retail uses.

The proposed project would affect the VMT in the County. Because the proposed project would increase population and employment, VMT would increase.

As discussed above, the County adopted thresholds of significance that evaluate the project-generated VMT and the proposed project’s effect on VMT in the baseline and cumulative conditions. If any of these thresholds is exceeded, the proposed project is considered to have significant transportation impacts.

Table 3.18-3 presents the VMT calculations for the proposed project’s residential and employment-based component as compared to the County’s adopted impact threshold for each respective land use.

Table 3.18-3: Project VMT Impact Evaluation

	Residential VMT Per Capita	Threshold Performance	Employment-based VMT per-Employee	Threshold Performance
Regional Average	15.19	—	14.24	—
Existing				
Highway 74 Plan Area	22.04	45.1%	16.71	17.3%
Riverside County	15.19	0.0%	14.24	0.0%
Existing Plus Project				
Highway 74 Plan Area	16.25	7.0%	16.74	17.6%
Riverside County	15.03	-1.1%	14.22	-0.1%
Cumulative No Project				
Highway 74 Plan Area	22.71	49.5%	17.68	24.1%
Riverside County	16.63	9.5%	15.72	10.4%
Cumulative Plus Project				
Highway 74 Plan Area	20.88	37.5%	17.40	22.2%
Riverside County	16.55	9.2%	15.46	10.7%

Source: County of Riverside 2022.

As shown in Table 3.17-3, the proposed project would result in an increase in project-generated VMT from No Project baseline conditions, which is considered a significant impact for all VMT metrics presented.

The proposed project's residential land uses would exceed the County's adopted impact threshold under all Existing Plus Project scenarios. For Existing Plus Project, approximately 7.0 percent mitigation is required to reduce project-generated VMT per capita to a level of less than significant. For Cumulative Plus Project, the proposed project would reduce VMT per capita as compared to the Cumulative No Project scenario.

Traffic generated by the proposed project's employment-based land uses (not including retail) was found to exceed the threshold under all scenarios. For Existing Plus Project, approximately 17.6 percent mitigation would be required. For Cumulative Plus Project, the proposed project was found to reduce VMT per-employee as compared to the Cumulative No Project scenario.

Local-serving retail under 50,000 square feet per store, per adopted County traffic analysis guidelines, is presumed to not have a significant impact. Regional-serving retail would need to be evaluated as detailed development proposals become available in the future. Retail buildings greater than 50,000 square feet may result in a significant VMT impact.

Projects that exceed VMT threshold(s) are required to mitigate transportation impacts to the extent feasible. VMT reduction strategies for large projects and community plans/specific plans may include altering a project's density, land use mix, site design, and availability of transit, bicycle, and pedestrian facilities. For further explanation of the County's Guidelines for specific VMT mitigation TDM strategies, see Attachment A of the VMT Analysis (Appendix H of this Draft EIR) for additional information.

Mitigation Measure (MMs) TRANS-1 through MM TRANS-5 would be required to reduce impacts related to increase in VMT. MMs TRANS-1 through MM TRANS-3 would reduce potential VMT by encouraging non-motorized transportation and increasing pedestrian and bicycle network. Research demonstrates that the promotion of additional pedestrian and bicycle facilities, especially near activity centers, would reduce additional VMT. Numerous studies have found statistically significant correlations between objective measures of sidewalk presence, extent, or quality and transport walking.¹

MM TRANS-4 would encourage the use of existing mass transit to further reduce additional VMT. MM TRANS-5 also includes project-specific mitigation that would further encourage a reduction in VMT. For example, the inclusion of local shuttle service and school carpool programs at the project level would decrease single occupancy vehicle trips. However, given the uncertainty in some components of the measures that influence VMT (such as the cost of fuel) combined with the County's inability to influence other measures that would have the largest effect on VMT (such as implementation of a VMT mitigation bank/fee or an increase in the fuel tax), the effectiveness of these mitigation measures cannot be fully quantified or guaranteed to reduce impacts. Therefore, the impact is considered significant and unavoidable. Implementation of mitigation measures would reduce this impact, but not to less than significant levels.

¹ California Climate Investments. 2019. Quantifying Reductions in Vehicle Miles Traveled from New Pedestrian Facilities. April. Website: https://ww2.arb.ca.gov/sites/default/files/auction-proceeds/pedestrian_facilities_technical_041519.pdf. Accessed January 26, 2023.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

- MM TRANS-1** Future implementing projects shall provide more options for shorter trips by locating residential uses within walking distance to retail, office, and service-oriented uses.
- MM TRANS-2** Future implementing projects shall provide pedestrian and bicycle network improvements within the development connecting complementary uses (i.e., residential, employment and retail) internally and to existing off-site facilities.
- MM TRANS-3** Where applicable, future implementing projects shall ensure that design of key intersections and roadways encourage the use of walking, biking and transit.
- MM TRANS-4** Future implementing projects shall collaborate with the RTA to determine the feasibility of providing new or re-route existing transit services to the proposed project.
- MM TRANS-5** In addition, the following TDM strategies may be applicable at the implementing project level:
- Reduce Parking Supply for Retail Uses
 - Transit Rerouting and Transit Stops
 - Implementation of Local Shuttle Service
 - Mandatory Travel Behavior Change Program, Promotions and Marketing
 - Promotions and Marketing
 - Emergency Ride Home (ERH) Program
 - School Carpool Program
 - Bike Share
 - Implement/Improve On-street Bicycle Facility
 - Traffic Calming Improvements
 - Pedestrian Network Improvements

Level of Significance After Mitigation

Significant and unavoidable impact.

Impact TRANS-37(c): **The proposed project would not substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).**

Impact Analysis

The proposed project does not approve or entitle any specific development and specific project design is unknown at this time. Development consistent with the proposed project would undergo individual design review at the time of application and additional project-specific environmental review may be required. It is not anticipated that development would substantially increase hazards due to a geometric design feature or incompatible uses because the County would require review

proposed future developments, for consistency with applicable regulations, including the policies in the General Plan, designed to ensure safety, during design review to eliminate any such hazards. The impact would be less than significant.

Level of Significance

Less than significant impact.

Mitigation Measures

None required.

Impact TRANS-37(d): The proposed project would not cause an effect upon, or a need for new or altered maintenance of roads.

Impact Analysis

The proposed project would result in development that would increase VMT along area roadways. These roadways are routinely maintained according to local and County maintenance schedules. Increased VMT would likely result in increased maintenance required for these roads, but the additional wear and tear would not be anticipated to be substantial. For instance, no roadway widening would be required; localized sidewalk and driveway apron improvements and some restriping for turn lanes may be required on a project-specific basis, but these improvements are not anticipated to be extensive enough to warrant major altered maintenance of area roadways. No new roadways are anticipated as a result of implementation of the proposed project. The impact would be less than significant.

Level of Significance

Less than significant impact.

Mitigation Measures

None required.

Impact TRANS-37(e): The proposed project could cause an effect upon circulation during the project's construction.

Impact Analysis

Future implementing projects may require temporary lane closures or detours during construction activity. However, all lane closures or detours would be coordinated with the sheriff and fire departments to ensure that access to existing businesses and through circulation are maintained as well as emergency access. The construction contractor would provide signage, cones, and/or flag persons as deemed necessary through a project-specific traffic management plan to ensure adequate emergency access. With implementation of a traffic management plan, as required by MM TRANS-6, the potential impact on circulation would be reduced to less than significant.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

MM TRANS-6 Prior to commencement of construction, the project applicant of future implementing projects shall prepare a traffic management plan that will specify traffic controls required to maintain adequate circulation and access along Highway 74. At least one lane shall remain open in each direction during construction and access to all existing businesses shall be maintained.

Level of Significance After Mitigation

Less than significant impact.

Impact TRANS-37(f): The proposed project could result in inadequate emergency access or access to nearby uses.

Impact Analysis

As noted, all future implementing development will be required to prepare a traffic management plan to demonstrate to the County and the associated sheriff and fire departments that emergency access would be maintained at all times during construction. Preparation of a traffic management plan, as required by MM TRANS-6, would reduce any impact of temporary lane closures or detours to less than significant.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

Implement MM TRANS-6.

Level of Significance After Mitigation

Less than significant impact.

Bike Trails

Impact TRANS-38(a): The proposed project would not include the construction or expansion of a bike system or bike lanes.

Impact Analysis

On a program level, no bike lanes are planned along the Highway 74 corridor. The General Plan Circulation Element does not identify planned bicycle routes along Highway 74. Development under the proposed project would not include restriping of Highway 74 to accommodate bicycle lanes or provide other connections to the County's bicycle network. There would be no impact.

Level of Significance Before Mitigation

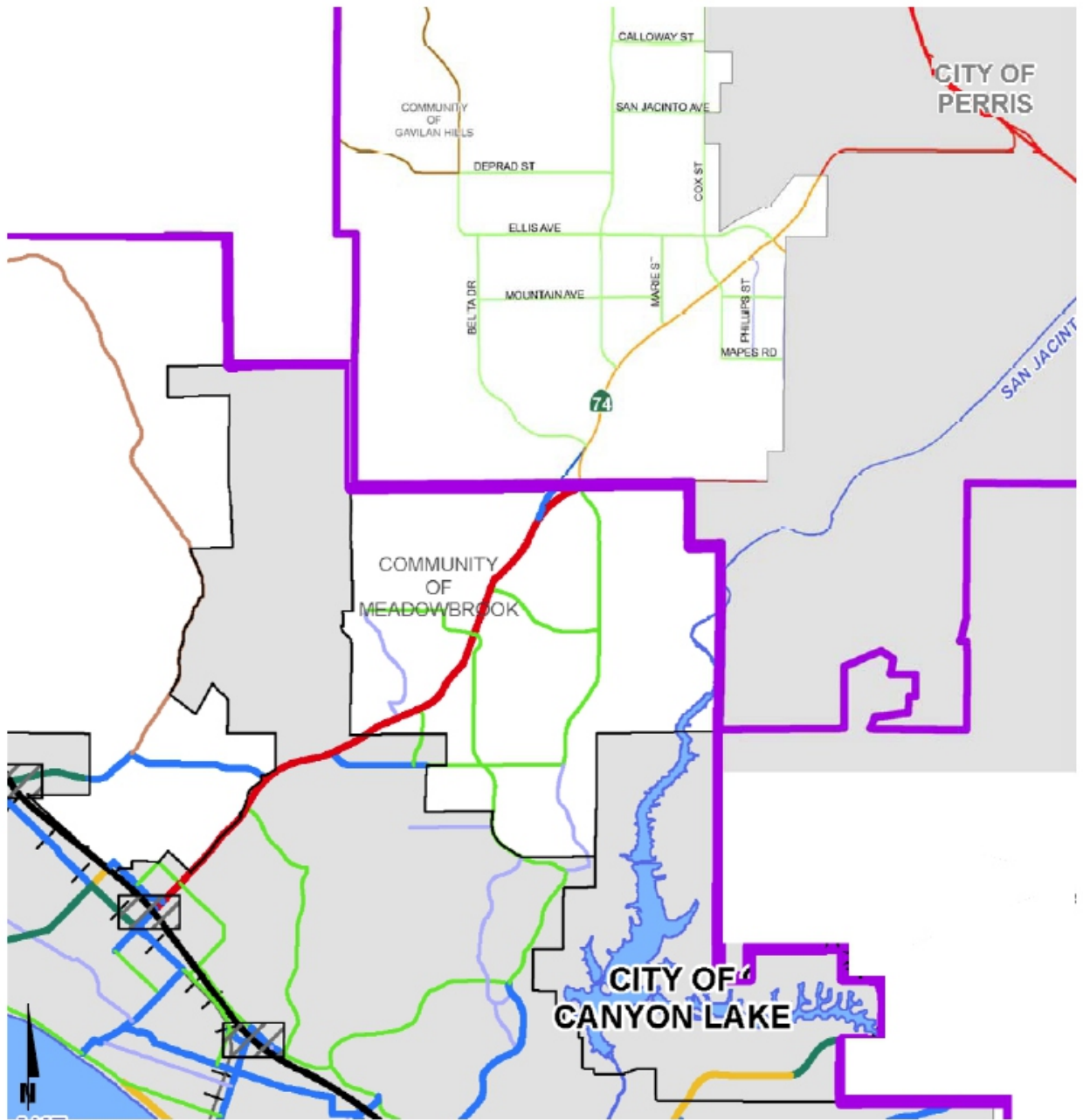
No impact.

Mitigation Measures

None required.

Level of Significance After Mitigation

No impact.



LEGEND:

Circulation Designations

- Freeway (Variable ROW)
- Expressway (128' to 220' ROW)
- Urban Arterial (152' ROW)
- Arterial (128' ROW)
- Major (118' ROW)
- Secondary (100' ROW)
- Mountain Arterial 4 Ln (110' ROW)
- Mountain Arterial 2 Ln (110' ROW)
- Collector (74' ROW)

Interchanges

- Existing Interchange
- Proposed Interchange

Railroads Amended

- Railroads Amended
- Area Plan Boundary
- City Boundary
- Waterbodies

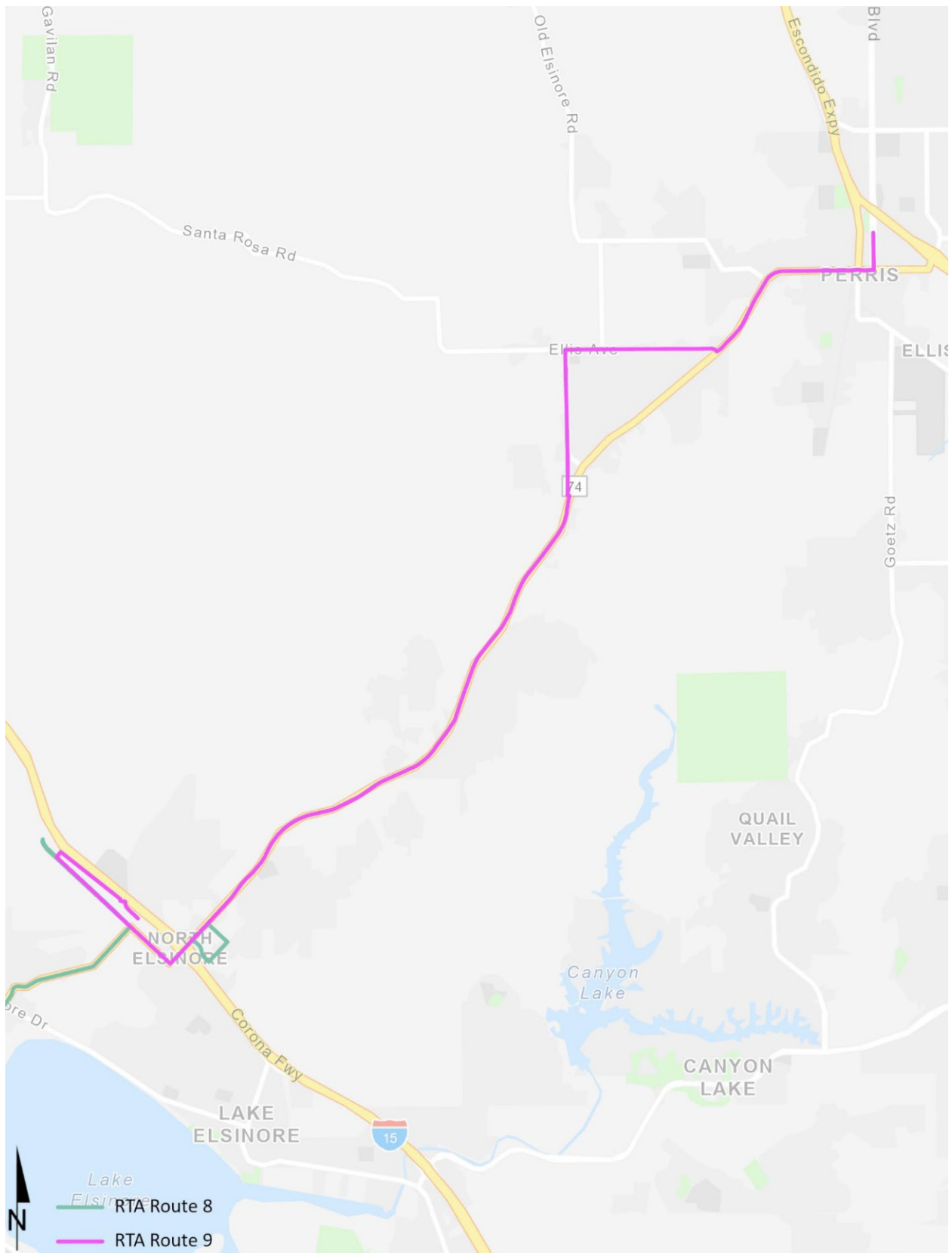
Data Source: Riverside County Transportation

Source: County of Riverside Transportation Department.



Exhibit 3.18-1
County of Riverside General Plan
Circulation Element

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Source: Riverside Transit Agency (RTA).



Exhibit 3.18-2 Existing Transit Routes

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3.19 - Tribal Cultural Resources

3.19.1 - Introduction

This section describes the tribal cultural resources existing setting in the Highway 74 Community Plan area (planning area) and County, summarizes the applicable regulatory framework, and identifies potential significant impacts regarding tribal cultural resources for development within the planning area. Setting information for this section is drawn from the County of Riverside General Plan (General Plan) and the County of Riverside General Plan Environmental Impact Report (General Plan EIR).

- **Tribal Cultural Resources:** Tribal Cultural Resources (TCRs) refer to sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American Tribe. TCRs may also be significant resources that are eligible for the California Register.
- **Burial Sites and Cemeteries:** Burial sites and cemeteries are formal or informal locations where human remains have been interred. Burial sites may be associated with precontact indigenous cultures as well as later historic periods.

The following comments related to TCRs were received in response to the Notice of Preparation (NOP):

- Comments were received from representatives of the Pechanga Tribe, who stated that the project lies within their Aboriginal territory. They stated cultural resources including petroglyphs and rock art are present near the planning area, and voiced concern about cultural resources in and near waterways. The Tribe stated it is opposed to any direct, indirect, and cumulative impacts the proposed project could have to tribal cultural resources. The Tribe requested to be included and participate in decision-making and environmental assessment. The Tribe also requested the postponement of any proposed archaeological excavation until the Tribe can meet with the County, applicant, and project Archaeologist.

Information in this section is based on information provided by the following sources and reference materials:

- A Native American Heritage Commission Sacred Lands File records search.

Appendix E contains supporting information for this section, including the Native American Heritage Commission (NAHC) Sacred Lands File Search results and copies of letters sent to Native American Tribes pursuant to Senate Bill (SB) 18 and Assembly Bill (AB) 52.

3.19.2 - Environmental Setting

Refer to Section 3.5, Cultural Resources, for a complete description of the cultural setting and existing site conditions.

3.19.3 - Regulatory Framework

State Regulations

Senate Bill 18

Senate Bill 18 (SB 18) states that prior to a local (city or county) government's adoption of any General Plan or Specific Plan, amendment to General and Specific Plans, or a designation of open space land proposed on or after March 1, 2005, the city or county shall conduct consultations with California Native American Tribes for the purpose of preserving or mitigating impacts to Cultural Places. A Cultural Place is defined as:

- Native American sanctified cemetery, place of worship, religious or ceremonial site, or sacred shrine (PRC § 5097.9), or;
- Native American historic, cultural, or sacred site, that is listed or may be eligible for listing in the California Register of Historical Resources pursuant to Section 5024.1, including any historic or prehistoric ruins, any burial ground, or any archaeological or historic site (PRC § 5097.995).

According to Government Code Section 65352.4, "consultation" is defined as:

The meaningful and timely process of seeking, discussing, and carefully considering the views of others, in a manner that is cognizant of all parties' cultural values and, where feasible, seeking agreement. Consultation between government agencies and Native American Tribes shall be conducted in a way that is mutually respectful of each party's sovereignty. Consultation shall also recognize the tribes' potential needs for confidentiality with respect to places that have traditional tribal cultural significance.

Assembly Bill 52

Assembly Bill 52 (AB 52) was signed into law on September 25, 2014, and provides that any public or private "project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment." Tribal cultural resources include "[s]ites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American Tribe that are eligible for inclusion in the California Register of Historical Resources or included in a local register of historical resources."

This law applies to any project that has a Notice of Preparation, a Notice of Negative Declaration, or Mitigated Negative Declaration pursuant to CEQA Guidelines filed on or after July 1, 2015. Under prior law, TCRs were typically addressed under the umbrella of "cultural resources," as discussed above. AB 52 formally added the category of "tribal cultural resources" to CEQA review and extended consultation and confidentiality requirements to all projects, whether they involve adoption of, or changes to, General Plans or Specific Plans.

The parties must consult in good faith, and consultation is deemed concluded when either party agrees to measures to mitigate or avoid a significant effect on a tribal cultural resource (if such a

significant effect exists) or when a party concludes that mutual agreement cannot be reached. Mitigation measures agreed upon during consultation must be recommended for inclusion in the environmental document. AB 52 also identifies mitigation measures that may be considered to avoid significant impacts if there is no agreement on appropriate mitigation. Recommended measures include:

- Preservation in place.
- Protecting the cultural character and integrity of the resource.
- Protecting the traditional use of the resource.
- Protecting the confidentiality of the resource.
- Permanent conservation easements with culturally appropriate management criteria.

Local Regulations

County of Riverside General Plan

- OS 19.2** The County of Riverside shall establish a Cultural Resources Program in consultation with Tribes and the professional cultural resources consulting community that, at a minimum would address each of the following: application of the Cultural Resources Program to projects subject to environmental review; government-to-government consultation; application processing requirements; information database(s); confidentiality of site locations; content and review of technical studies; professional consultant qualifications and requirements; site monitoring; examples of preservation and mitigation techniques and methods; curation and the descendant community consultation requirements of local, State, and federal law.
- OS 19.5** Exercise sensitivity and respect for human remains from both prehistoric and historic time periods and comply with all applicable laws concerning such remains.

Highway 74 Community Plan

The Highway 74 Community Plan does not set forth any additional goals and policies related to tribal cultural resources.

3.19.4 - Methodology

On April 10, 2017, the County of Riverside sent a request to the NAHC in an effort to determine whether any sacred sites are listed on its Sacred Lands File for the project area. A response was received on April 26, 2017, indicating that the Sacred Lands File search failed to locate the presence of Native American cultural resources in the immediate project area. The NAHC included a list of 18 tribal representatives available for consultation. To ensure that all Native American knowledge and concerns over potential TCRs that may be affected by implementation of the proposed project are addressed, the County sent letters pursuant to SB 18 to the following tribes on May 1, 2017:

- Agua Caliente Band of Cahuilla Indians
- Cabazon Band of Mission Indians
- Cahuilla Band of Indians
- Juaneño Band of Mission Indians Acjachemen Nation

- Mesa Grande Band of Mission Indians
- Morongo Band of Mission Indians
- Pala Band of Mission Indians
- Pauma and Yuima Reservation
- Pechanga Band of Mission Indians (Chair)
- Rincon Band of Mission Indians (Chair)
- Rincon Band of Mission Indians (Tribal Historic Preservation Officer)
- San Luis Rey Band of Mission Indians
- San Pasqual Band of Mission Indians
- Santa Rosa Band of Mission Indians
- Soboba Band of Mission Indians
- Sycuan Band of Kumeyaay Indians
- Torres-Martinez Desert Cahuilla Indians
- Viejas Band of Kumeyaay Indians

The Agua Caliente band responded in an email dated May 16, 2017. The email indicated that the proposed project was not located within the Tribe's Traditional Use Area and therefore they were deferring to tribes with ties to the area. Consultation was concluded on the same day.

The Pauma Band of Luiseño Indians responded in an email dated May 31, 2017. The email stated that the Tribe was unaware of any specific sites or resources along the corridor. They stated that they believe there is a high potential for cultural resources to be found. They did not request consultation but was asked to be appraised of developments along Highway 74.

The Soboba Band requested consultation in a letter dated June 19, 2017. This consultation request was addressed in conjunction with the Soboba AB 52 consultation request below.

The County sent letters pursuant to AB 52 to the following tribes on May 3, 2017:

- Cahuilla Band of Indians
- Pechanga Cultural Resources Department
- Rincon Band of Luiseño Indians
- Ramona Band of Cahuilla Indians
- Colorado River Indian Tribes
- Morongo Cultural Heritage Program
- Pala Band of Mission Indians
- Soboba Band of Indians

Consultation was requested by the Soboba Band of Indians in a letter dated July 26, 2017. A meeting was held on August 01, 2017, in which the proposed project was discussed. The Tribe provided information that the proposed project was within a Traditional Cultural Property and recommended that a record search be conducted for the project. In addition, the Tribe requested that a "blanket" condition for tribal monitoring and artifact disposition be applied to the project. The Tribe was provided the record search results on August 25, 2017. Consultation was concluded on November 14, 2017.

The Rincon Band of Luiseño Indians responded in a letter dated May 17, 2017, indicating that the Tribe had no additional information regarding TCRs but would like to participate in consultation, nonetheless.

The Pechanga band of Mission Indians requested consultation in a letter dated June 06, 2017, which was outside the period in which to request consultation. Consultation was held with the Tribe on June 25, 2018. The record search was provided to the Tribe on September 16, 2019. Comments were received from representatives of the Tribe, who stated that the project lies within their Aboriginal territory. They stated cultural resources including petroglyphs and rock art are present near the planning area, and voiced concern about cultural resources in and near waterways. The Tribe stated it is opposed to any direct, indirect, and cumulative impacts the proposed project could have to TCRs. The Tribe requested to be included and participate in decision-making and environmental assessment. The Tribe also requested the postponement of any proposed archaeological excavation until the Tribe can meet with the County, applicant, and project Archaeologist.

No responses were received from Colorado River Indian Tribes, Morongo Cultural Heritage Program, Ramona Band of Cahuilla Indians, or the Cahuilla Band of Indians.

3.19.5 - Thresholds of Significance

According to Appendix G, Environmental Checklist of the CEQA Guidelines, as well as Riverside County's environmental checklist, tribal cultural resources impacts resulting from the implementation of the proposed project would be considered significant if the project would:

39. Tribal Cultural Resources

Would the project cause a substantial adverse change in the significance of a Tribal Cultural Resource, defined in Public Resources Code section 21074 as either a site, feature, place, or 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 California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)?
- 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 Public Resources Code Section 5024.1? (In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American Tribe.)

3.19.6 - Project Impacts and Mitigation Measures

This section discusses potential impacts associated with the proposed project and provides mitigation measures where necessary.

Tribal Cultural Resources

Impact TCR-39(a): The proposed project would cause a substantial adverse change in the significance of a tribal cultural resource listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k).

Impact Analysis

An NAHC Sacred Lands File search did not identify any TCRs within the planning area, however a records search conducted at the EIC identified listed prehistoric sites that meet the definition of a tribal cultural resource within the planning area. Additionally, consultation with tribal representatives pursuant to SB 18 and AB 52 noted the high potential for resources to be located within the planning area. It is always possible that subsurface excavation activities may encounter previously undiscovered TCRs. Therefore, any unidentified resources could be adversely affected by development under the proposed project and create a potentially significant impact.

While the proposed project does not directly propose any adverse changes to any recorded TCRs, future development allowed under the plan could affect known or previously unidentified resources. In addition, the potential for additional undiscovered eligible TCRs to be present within the planning area exists, but varies by location. As future development and infrastructure projects within the planning area are considered by the County, each project will be evaluated for conformance with the General Plan, Code of Ordinances, and other applicable State regulations. Subsequent development and infrastructure projects would also be analyzed for potential environmental impacts, consistent with requirements of CEQA. The General Plan includes policies and programs intended to reduce impacts to and conserve cultural resources, which include TCRs. Policies OS-19.2, OS-19.3, and OS-19.4 help ensure protection and preservation of these resources by implementing a process where proposed developments are reviewed for the possibility of cultural resources being present. Furthermore, future implementing projects are required to implement the County conditions of approval related to discovery of unanticipated cultural resources and human remains during ground disturbance activities (See Section 3-5, Cultural Resources, for the conditions of approval). By adhering to these policies, as well as those outlined in SB 18 and AB 52, potential impacts to existing or undiscovered eligible TCRs within the planning area would be reduced to less than significant at the programmatic level, and individual projects would be evaluated on a case-by-case basis to analyze impacts.

Level of Significance

Less than significant impact.

Mitigation Measures

No mitigation required.

Impact TCR-39(b): The proposed project would cause a substantial adverse change in the significance of a tribal cultural resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1.

Impact Analysis

The County completed all tribal consultation pursuant to SB 18 and AB 52 in 2017, and has continued to consult with tribal representatives who requested consultation outside of the timeframes established by both laws. At this time, the County, in its capacity as Lead Agency, has not identified or determined any known TCRs pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. that will be adversely impacted by the General Plan Update

While it is impossible to guarantee there would not be significant project level impacts under the proposed project, by adhering to General Plan policies OS-19.2, OS-19.3, and OS-19.4, County conditions of approvals related to discovery of unanticipated cultural resources and human remains, as well as policies outlined in SB 18 and AB 52, potential impacts to existing or undiscovered eligible TCRs within the planning area would be reduced to less than significant at the programmatic level, and individual projects would be evaluated on a case-by-case basis by the County to analyze impacts.

Level of Significance

Less than significant impact.

Mitigation Measures

No mitigation required.

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3.20 - Utilities and Service Systems

3.20.1 - Introduction

This section describes the existing utilities and systems and potential effects from implementation of the proposed project on the planning area and its surrounding area. Descriptions and analysis in this section are based, in part, on information provided by the Elsinore Valley Municipal Water District (EVMWD), Eastern Municipal Water District (EMWD), Riverside County Flood Control and Water Conservation District, Riverside County Department of Waste Resources (RCDWR), the California Department of Resources Recycling and Recovery (CalRecycle), and Pacific Gas and Electric Company (PG&E), and the County of Riverside General Plan (General Plan).

3.20.2 - Environmental Setting

Potable Water

The planning area is within the service areas of both EVMWD and EMWD. EMWD provides water and wastewater services in the northeastern portion of the planning area, which corresponds with Neighborhood 1. EVMWD provides water and wastewater services in the southwestern portion of the planning area, which corresponds with Neighborhood 2 and Neighborhood 3. The boundaries of the water district service areas are shown in Exhibit 3.20-1.

Due to the policy nature of the proposed project (no “development” and no maps are being proposed), and considering the long buildout horizon, a formal Water Supply Assessment pursuant to SB 610 was not prepared, nor is one required.

Elsinore Valley Municipal Water District

Located in southwestern Riverside County and eastern Orange County, EVMWD provides water services to its Elsinore and Temescal Divisions, which comprise the cities of Lake Elsinore and Canyon Lake, portions of Wildomar and Murrieta, and unincorporated portions of Riverside County and Orange County. EVMWD is a sub-agency of the Western Municipal Water District (Western), a member agency of the Metropolitan Water District of Southern California (Metropolitan). EVMWD’s powers include provision of public water service, water supply development and planning, wastewater treatment and disposal, and recycling. EVMWD serves potable drinking water and recycled water to its customers. In 2020, EVMWD served a population of approximately 163,984 and provided potable water through 44,560 active connections. The planning area is within the Elsinore Division.¹ The Elsinore Division makes up most of the service area, with approximately 43,849 active connections, encompassing an area of 96 square miles.² EVMWD’s connections include

¹ Water Systems Consulting, Inc. 2021. Elsinore Valley Municipal Water District 2020 Urban Water Management Plan, Figure ES-1-1, EVMWD Service Area. Website: <https://www.evmwd.com/home/showpublisheddocument/2233/637571268195170000>. Accessed January 13, 2022.

² Water Systems Consulting, Inc. 2021. Elsinore Valley Municipal Water District 2020 Urban Water Management Plan. May. Website: <https://www.evmwd.com/home/showpublisheddocument/2233/637571268195170000>. Accessed January 13, 2022.

approximately 45,850 domestic water service accounts, 1,140 irrigation water service accounts, 36,970 sewer service accounts, and 150 recycled water service accounts.³

EVMWD's three primary sources of potable water supply include local groundwater pumped from EVMWD-owned wells, surface water from Canyon Lake Reservoir and treated at the Canyon Lake Water Treatment Plant, and imported water purchased from Metropolitan through Western. According to EVMWD's 2020 Urban Water Management Plan (UWMP), EVMWD plans to use these supplies to meet current and future demands under normal, single dry, and five consecutive dry years. EVMWD is also planning several local projects to increase the reliability of its local water supplies, which include adding or replacing groundwater wells, purchasing raw imported water, and pursuing an indirect potable reuse project. EVMWD relies on local groundwater basins, which is a significant source to meet current and future potable demands. Currently, EVMWD pumps water from the Elsinore Valley Subbasin and the Bedford-Coldwater Subbasin.

EVMWD serves potable drinking water and recycled water to its customers. Potable drinking water demand includes all municipal (residential, commercial, sales to other agencies) and industrial uses. Recycled water demand includes irrigation for parks, schools, golf courses, homeowners' associations, and roadway medians, as well as discharge to Lake Elsinore to maintain lake levels. EVMWD has the following water uses:

- Residential: On average, residential demand accounts for about 71 percent of total use.
- Commercial: Commercial water users provide or distribute a product or service. On average, commercial water uses account for about 20 percent of total use.
- Institutional/governmental: Institutional and governmental water use comes from users dedicated to public services, such as higher-education institutions, schools, courts, churches, hospitals, government facilities, and nonprofit research institutions. Historically, this demand accounts for about 1 percent of the total demand, but in 2020, it accounted for less than 0.5 percent, which may be the result of the COVID-19 pandemic.
- EVMWD Uses: On average, this use accounts for 0.4 percent of total use.
- Hydrant: On average, hydrant use accounts for about 0.8 percent of total water use.
- Sales/transfers/exchanges to other agencies: On average, EVMWD sells about 1.3 percent of its water to the Farm Mutual Water Company (FMWC).
- Losses: Distribution system water losses are the potable water losses from the point of water entry to the distribution system to the delivery point to the customer's system.

³ Elsinore Valley Municipal Water District (EVMWD). 2020. Agency Profile. Website: <https://www.evmwd.com/home/showpublisheddocument/958/637378307261630000#:~:text=EVMWD%20is%20a%20Metropolita%20Water,Municipal%20Water%20District%20Sub%20Agency.&text=Canyon%20Lake%20water%20is%20treated,coagulation%2C%20sedimentation%2C%20and%20disinfection.&text=Learn%20more%20at%20www.evmwd.com%2Fpfas>. Accessed January 21, 2022.

Over the last 5 years, EVMWD used an average of 23,200 acre-feet per year (AFY) of potable water. Residential demand accounts for about 71 percent of the total demand and has remained relatively constant since 2016. Table 3.20-1 shows the historical and current water use by customer class.⁴

Table 3.20-1: Elsinore Valley Municipal Water District Past and Current Water Use

Customer Class	Fiscal Year (acre-feet)				
	2016	2017	2018	2019	2020
Residential	15,425	16,130	16,964	15,769	17,162
Commercial	4,570	4,889	5,103	4,364	4,409
Institutional/Governmental	108	116	121	117	82
EVMWD	118	111	1,365	118	54
Hydrant	205	174	181	236	168
Sales, Transfers, and Exchanges to Other Agencies—Farm Mutual Water Company	282	294	319	305	332
Losses ¹	1,659	1,183	-1,590	1,488	1,446
Total Consumption	22,367	22,898	23,462	22,397	23,653

Notes:
EVMWD = Elsinore Valley Municipal Water District
¹ In 2018, there were about 2,300 acre-feet reported under the EVMWD at no charge. This is likely a system error, which caused the water loss to be negative.
Source: Water Systems Consulting, Inc. 2021. Elsinore Valley Municipal Water District 2020 Urban Water Management Plan. May. Website: <https://www.evmwd.com/home/showpublisheddocument/2233/637571268195170000>. Accessed January 13, 2022.

EVMWD’s service area population is expected to grow by an average of 1.5 percent per year. Assuming consistent per capita water use, the resulting demand projections are shown in Table 3.20-2 below. As shown in the table, projected water use by 2045 is anticipated to be 40,170 AFY. Furthermore, as shown in Table 3.20-3, total projected water supplies are anticipated to be a reasonably available volume of 44,531 AFY by year 2045.

Table 3.20-2: Elsinore Valley Municipal Water District Projected Water Use

Use Type	Projected Water Use (AFY)				
	2025	2030	2035	2040	2045
Residential	21,641	23,313	25,115	27,056	29,147
Commercial	5,560	5,989	6,452	6,951	7,488
Institutional/Governmental	103	111	119	129	138
EVMWD	65	70	75	81	87

⁴ Water Systems Consulting, Inc. 2021. Elsinore Valley Municipal Water District 2020 Urban Water Management Plan. May. Website: <https://www.evmwd.com/home/showpublisheddocument/2233/637571268195170000>. Accessed January 13, 2022.

Use Type	Projected Water Use (AFY)				
	2025	2030	2035	2040	2045
Hydrant	212	228	246	265	285
Sales/Transfers/Exchanges to Other Agencies—Farm Mutual Water Company	418	451	486	523	564
Losses	1,827	1,968	2,120	2,284	2,461
Total	29,825	32,130	34,613	37,288	40,170

Notes:
 AFY = acre-feet per year
 EVMWD = Elsinore Valley Municipal Water District
 Source: Water Systems Consulting, Inc. 2021. Elsinore Valley Municipal Water District 2020 Urban Water Management Plan. May. Website: <https://www.evmwd.com/home/showpublisheddocument/2233/637571268195170000>. Accessed January 13, 2022.

Table 3.20-3: Normal Year (Potable System Only) Water Supply and Demand Comparison, AFY

	Projected Water Supply (AFY)				
	2025	2030	2035	2040	2045
Supply Totals	38,111	41,811	42,561	43,501	44,531
Demand Totals	29,825	32,130	34,613	37,288	40,170
Difference	8,286	9,681	7,948	6,213	4,361

Notes:
 AFY = acre-feet per year
 Source: Water Systems Consulting, Inc. 2021. Elsinore Valley Municipal Water District 2020 Urban Water Management Plan, Table 7-5. Normal Year (Potable System Only) Water Supply and Demand Comparison, AFY. May. Website: <https://www.evmwd.com/home/showpublisheddocument/2233/637571268195170000>. Accessed January 13, 2022.

Recycled Water

EVMWD has a recycled water network that delivers non-potable, tertiary recycled water to customers in four service areas. Three of the service areas are supplied by EVMWD, and one recycled water service area is supplied from the Santa Rosa Water Reclamation Facility (WRF) owned and operated by Santa Rosa Regional Resources Authority (SRRRA). Wastewater flows are projected to increase commensurate with increases in potable water demand. Therefore, EVMWD’s production of recycled water is expected to increase in the future, providing a supply that can be delivered to current and future customers and further augment levels in Lake Elsinore.

Eastern Municipal Water District

EMWD provides both retail and wholesale water service. EMWD provides potable water, recycled water, and wastewater services to an area of approximately 555 square miles in western Riverside County to nearly 1 million people throughout its service area. EMWD’s connections include approximately 156,000 domestic water service accounts, 115 agriculture accounts, 246,000 sewer

service accounts, and 626 recycled water service accounts.⁵ The service area includes seven incorporated cities in addition to unincorporated areas of Riverside County. Additionally, EMWD is a wholesale provider to several agencies, including the City of Perris Water System, which borders the planning area.⁶

Approximately half of EMWD's retail demands are supplied using local sources, while the balance is served by imported water purchased from Metropolitan. EMWD also purchases imported water from Metropolitan to supplement the local supplies of its wholesale customers. Imported water is delivered to EMWD either as potable water treated by Metropolitan's two large filtration plants, or as raw water that EMWD can either treat at one of its two local filtration plants or deliver as raw water for non-potable uses.

The Henry J. Mills Water Treatment Plant treats water from Northern California and provides it to EMWD through two connection points located in the northeast portion of EMWD's service area. The Robert F. Skinner Water Treatment Plant treats a blend of Colorado River water and water from Northern California and provides it to EMWD through a connection point in the southwest portion of EMWD's service area.

Local supplies include recycled water, potable groundwater, and desalinated groundwater. EMWD generally uses 100 percent of its recycled water to irrigate landscape and agricultural fields and provide water for industrial customers. EMWD has groundwater wells in two groundwater management areas and works with other stakeholders to protect the quality and integrity of the groundwater basins. Through the implementation of local supply projects and increased water use efficiency, EMWD has been able to maintain a balance of local and imported water even as new connections have been added.⁷

In 2020, EMWD had 155,561 municipal water connections and supplied 84,673 acre-feet of water. Additionally, EMWD sells recycled water to EVMWD.

EMWD has four sources of water supply: imported water from Metropolitan, as well as local supplies such as local 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.

As shown in Table 3.20-4, projected water use by 2045 is anticipated to be 187,100 AFY. As shown in Table 3.20-5, EMWD will have sufficient supplies to meet demands from 2020 to 2045 under normal year conditions.

⁵ Eastern Municipal Water District (EMWD). 2021. Eastern Municipal Water District Agency Profile. Website: https://www.emwd.org/sites/main/files/file-attachments/emwdagencyprofile_english.pdf. Accessed January 21, 2022.

⁶ City of Perris. 1994. City of Perris Water District Plan. Website: <https://www.cityofperris.org/home/showpublisheddocument/1001/637206348190230000>. Accessed January 13, 2021.

⁷ Eastern Municipal Water District (EMWD). 2021. 2020 Urban Water Management Plan. July. Website: https://www.emwd.org/sites/main/files/file-attachments/urbanwatermanagementplan_0.pdf?1625160721. Accessed January 12, 2022.

Table 3.20-4: Eastern Municipal Water District Actual and Projected Water Demand

Use Type	Actual Demand	Projected Demand				
	2020	2025	2030	2035	2040	2045
Single-family	52,162	66,900	71,700	76,700	80,500	84,000
Multi-family	6,535	8,500	9,100	9,700	10,200	10,600
Commercial	4,267	6,100	6,500	7,000	7,300	7,600
Industrial	571	600	600	700	700	700
Institutional/Governmental	1,629	2,700	2,900	3,100	3,200	3,400
Landscape	8,155	8,400	7,600	6,800	6,200	5,500
Agricultural irrigation (Drinking water)	446	1,500	1,500	1,500	1,500	1,500
Agricultural irrigation (Raw water)	1,114	500	500	500	500	500
Other	1,287	0	0	0	0	0
Non-Revenue (System losses and unbilled, authorized consumption)	8,507	7,400	7,900	8,400	8,800	9,200
Total Potable and Raw Water Demand	84,673	102,600	108,300	114,400	118,900	123,000
Recycled Water Demand	31,243	43,330	49,020	54,500	59,800	64,100
Total Water Use	115,916	145,930	157,320	168,900	178,700	187,100

Source: Eastern Municipal Water District (EMWD). 2021. 2020 Urban Water Management Plan. July. Website: https://www.emwd.org/sites/main/files/file-attachments/urbanwatermanagementplan_0.pdf?1625160721. Accessed January 12, 2022.

Table 3.20-5: Normal Year Retail Water Supply and Demand Comparison, AFY

	Projected Water Supply (AFY)				
	2025	2030	2035	2040	2045
Supply Totals	145,930	157,320	168,900	178,700	187,100
Demand Totals	145,930	157,320	168,900	178,700	187,100
Difference	0	0	0	0	0

Notes:
AFY = acre-feet per year
Source: Eastern Municipal Water District (EMWD). 2021. 2020 Urban Water Management Plan. July. Website: https://www.emwd.org/sites/main/files/file-attachments/urbanwatermanagementplan_0.pdf?1625160721. Accessed January 12, 2022.

Recycled Water

Recycled water is extensively used in EMWD’s service area to meet non-potable demands. EMWD maintains a regional recycled water system that provides tertiary-treated recycled water to

customers for agricultural, landscape irrigation, environmental, and industrial use. EMWD's recycled water system consists of four Regional Water Reclamation Facilities (RWRFs) that treat municipal sewage and produce water for recycling. The four RWRFs, the San Jacinto Valley RWRf, the Moreno Valley RWRf, the Temecula Valley RWRf, and the Perris Valley RWRf, are spread throughout EMWD's service area. A network of pipelines connects the four RWRFs, as well as several distribution storage ponds, to manage the delivery of recycled water.

The supply of recycled water will continue to increase with EMWD's population size (though it is also impacted by conservation measures). Recycled water is currently used for both municipal and agricultural purposes. Municipal customers use recycled water for landscape irrigation and industrial process water. Agricultural customers use recycled water for irrigation of crops. A portion of agricultural demand for recycled water is provided in-lieu of using groundwater. Due in part to drier conditions and higher demands, EMWD has been able to meet its goal of eliminating discharges and using almost all of the recycled water available within EMWD. Some of the recycled water use offsets demands of existing potable customers.⁸

To ensure that recycled water continues to be used to the fullest extent possible, EMWD uses five methods to expand the use of recycled water within its service area. These methods are:⁹

- 1. Mandatory Recycled Water Use Ordinance:** EMWD has adopted an ordinance requiring new and existing customers to use recycled water for appropriate permitted uses when it is available. This ordinance provides a basis for denying potable water service and providing recycled water for permitted uses.
- 2. Rate Incentives:** Recycled water is currently priced below the cost of potable water for both municipal and agricultural use.
- 3. Water Supply Assessments:** EMWD's Water Supply Assessments require all major new developments to use recycled water as a condition of service where it is available and permitted.
- 4. Public Education:** EMWD actively promotes the use of recycled water with its water education program. EMWD also places prominent signage at public recycled water use sites promoting the benefits of water recycling.
- 5. Facilities Financing:** EMWD will work with private parties to arrange or provide financing for construction of facilities needed to convert potable demands to recycled water.

Wastewater

Similar to water supply, the planning area is within the wastewater treatment service areas of both EVMWD and EMWD. EMWD provides wastewater services in the northeastern portion of the planning area, which corresponds with Neighborhood 1. EVMWD provides wastewater services in

⁸ Eastern Municipal Water District (EMWD). 2021. 2020 Urban Water Management Plan. July. Website: https://www.emwd.org/sites/main/files/file-attachments/urbanwatermanagementplan_0.pdf?1625160721. Accessed January 12, 2022.

⁹ Ibid.

the southwestern portion of the planning area, which corresponds with Neighborhood 2 and Neighborhood 3. The boundaries of the water district service areas are shown in Exhibit 3.18-1.

Elsinore Valley Municipal Water District

EVMWD currently operates three WRFs: Regional WRF, Horsethief Canyon WRF, and Railroad Canyon WRF. In addition, wastewater flow in the southern part of EVMWD's service area is treated at the Santa Rosa WRF, which is owned and operated by SRRRA. Approximately 90 percent of the wastewater from EVMWD service area is collected and treated in EVMWD facilities. The other 10 percent is sent to the Santa Rosa WRF. These four reclamation facilities serve four major service areas within EVMWD's wastewater collection system. Each service area consists of gravity collectors, trunk lines, lift stations, and force mains, which convey flow to the treatment plants. Effluent from all of these WRFs meets Title 22 disinfected tertiary standards and can be used for non-potable water supply to EVMWD's recycled water system.

In 2020, EVMWD collected and treated approximately 7,930 AFY of wastewater and sent 1,082 AFY to the Santa Rosa WRF for treatment. Of the 7,930 AFY of collected wastewater, EVMWD recycled about 1,086 acre-feet.¹⁰

Regional WRF

This facility currently has an 8 million gallons per day (mgd) average design flow capacity. The design of the 4.0-mgd expansion is nearly complete and expected to include a membrane bioreactor process for secondary/tertiary treatment. The biological processes at the existing Regional WRF and proposed expansion are designed to remove nutrients (nitrogen and phosphorus) to meet the stringent requirements of the National Pollutant Discharge Elimination System (NPDES) permit. The effluent from the Regional WRF is discharged to Temescal Wash and Lake Elsinore under California Order No. R8-2013-0019, NPDES No. CA8000027. EVMWD is permitted to discharge up to 8 mgd: up to 7.5 mgd into Lake Elsinore for lake stabilization and 0.5 mgd to Temescal Wash for wetland enhancement. A small portion of the Regional WRF recycled water is used for irrigation at the Regional WRF facility and a few office buildings.

Horsethief Canyon WRF

This facility currently has a 0.5 mgd average design flow capacity and is operated under Waste Discharge Requirement (WDR) Order No. 96-63. The effluent from Horsethief Canyon WRF receives tertiary treatment and meets Title 22 requirements for recycled water use. The recycled water is used for landscape irrigation in the Horsethief Canyon recycled water service area. During low demand periods, excess recycled water is percolated into a pond. Upgrades are in progress to provide nitrification and denitrification at this plant to remove nitrogen to meet potential new permit requirements. The Horsethief WRF is a peaking plant that balances supply with demand. Excess effluent from the Horsethief WRF that cannot be used for recycled water irrigation is sent to local percolation ponds for disposal.

¹⁰ Water Systems Consulting, Inc. 2021. Elsinore Valley Municipal Water District 2020 Urban Water Management Plan. May. Website: <https://www.evmwd.com/home/showpublisheddocument/2233/637571268195170000>. Accessed January 13, 2022.

Railroad Canyon WRF

This facility currently has a 1.3 mgd average design flow capacity and is operated under WDR Order No. 96-34. The recycled water is used for landscape and golf course irrigation in the Railroad Canyon recycled water service area. Excess recycled water during low demand months is discharged into the sewer to be conveyed to the Regional WRF. EVMWD can also supplement the recycled water ponds with potable water to meet recycled water need during high demand periods.

Table 3.20-6: Elsinore Valley Municipal Water District Regional Water Reclamation Facility Treatment Capacity

Facility Name	Treatment Capacity (mgd)
Regional	8.0
Horsethief Canyon	0.5
Railroad Canyon	1.3
Santa Rosa	5.0
Notes: mgd = million gallons per day Source: Water Systems Consulting, Inc. 2021. Elsinore Valley Municipal Water District 2020 Urban Water Management Plan. May. Website: https://www.evmwd.com/home/showpublisheddocument/2233/637571268195170000 . Accessed January 13, 2022.	

Eastern Municipal Water District

EMWD provides wastewater collection, treatment, and recycled water services throughout its service area, which consists of 555 square miles in western Riverside County. EMWD treated an average of 47 mgd of wastewater in fiscal year 2020. The wastewater system includes 1,884 miles of collection pipelines and four operating facilities. Additionally, the recycled water system has 242 miles of pipeline, 24 active pumping facilities, and more than 7,500 acre-feet of seasonal storage.¹¹

EMWD’s service area includes the northeastern portion of the planning area located north of Ethanac Road, corresponding with Neighborhood 1 of the planning area. EMWD is responsible for all wastewater collection and treatment in its service area. It has four operational RWRFs located throughout EMWD. Interconnections between the local collection systems serving each treatment plant allow for operational flexibility, improved reliability, and expanded deliveries of recycled water. All of EMWD’s RWRFs produce tertiary effluent, suitable for all permitted uses, including irrigation of food crops and full-body contact. The four RWRFs have a combined current capacity of 75 mgd, as summarized in Table 3.20-7 below.

¹¹ Eastern Municipal Water District (EMWD). 2021. Eastern Municipal Water District Agency Profile. Website: https://www.emwd.org/sites/main/files/file-attachments/emwdagencyprofile_english.pdf. Accessed January 21, 2022.

Table 3.20-7: Eastern Municipal Water District Regional Water Reclamation Facility Treatment Capacity

Facility Name	Current Treatment Capacity (mgd)	Ultimate Capacity (mgd)
Hemet/San Jacinto	14	27
Moreno Valley	16	41
Temecula Valley	23	28
Perris Valley	22	100
TOTAL	75	196

Notes:
mgd = million gallons per day
Sources: Eastern Municipal Water District (EMWD). 2021. 2020 Urban Water Management Plan. July. Website: https://www.emwd.org/sites/main/files/file-attachments/urbanwatermanagementplan_0.pdf?1625160721. Accessed January 12, 2022.
Eastern Municipal Water District (EMWD). 2021. Eastern Municipal Water District Agency Profile. Website: https://www.emwd.org/sites/main/files/file-attachments/emwdagencyprofile_english.pdf. Accessed January 21, 2022

Solid Waste

The RCDWR is responsible for the efficient and effective landfill disposal of nonhazardous County waste. To accomplish this, the RCDWR operates six active landfills and administers a contract agreement for waste disposal at the private El Sobrante Landfill. RCWMD also oversees several transfer station leases, as well as a number of recycling and other special waste diversion programs. All of the active landfills currently located in Riverside County are rated as Class III landfills according to Title 27 of the California Code of Regulations. Such landfills only accept nonhazardous, municipal solid wastes. Franchise solid waste collection companies are granted permits to collect commercial and residential waste throughout unincorporated Riverside County under Riverside County's general operating authority.

The proposed project is within the service area of WM (formerly Waste Management) of the Inland Empire. Services include collection of solid waste and recycling from residences and businesses, and collection of construction and demolition waste. WM of the Inland Empire serves over 220,000 residents and disposes of over 17,000 tons of waste on a weekly basis in the Inland Empire.¹²

Landfill

The nearest landfill to the planning area is the El Sobrante Landfill, located at 10910 Dawson Canyon Road in Corona, 11 miles to the northwest of the planning area. The El Sobrante Landfill is a state-of-the-art waste disposal facility that protects the environment and minimizes the impact to the local landscape. This landfill has a capacity to process up to 70,000 tons of waste per week.¹³

¹² WM. 2022. Waste Management Inland Empire. Website: <https://www.wm.com/location/california/inland-empire/areas.jsp>. Accessed January 18, 2022.

¹³ WM. 2022. El Sobrante. <https://www.wm.com/location/california/inland-empire/el-sobrante/el-sobrante.jsp>. Accessed January 18, 2022.

According to latest capacity information provided by CalRecycle, the El Sobrante Landfill has a maximum total permitted disposal of 400 tons per day and a maximum permitted capacity of 6,229,670 cubic yards.¹⁴ There is a remaining estimated capacity of 3,834,470 cubic yards.

The estimated closure date for the landfill is August 2047. In 2018, the El Sobrante Landfill underwent an environmental review in order to revise their Solid Water Facility Permit (SWFP). This revision was to address the following: (1) reduction and reconfiguration of the overall limit on-site and off-site grading; (2) relocation/reconfiguration of stormwater retention ponds; and (3) construction of a new maintenance shop.

Storm Drainage

The regional flood management authority for western Riverside County is the Riverside County Flood Control and Water Conservation District (Flood Control District). This is a special district and, as such, its jurisdiction does not extend over the entire County but only the western 40 percent. The responsibility for drainage in the eastern part of the County is borne by a combination of the County Transportation Department, the Coachella Valley Water District, and various cities and local entities. The Flood Control District provides a number of services, including identification of flood hazards and problems; regulation of floodplains, regulation of drainage and development; County watercourse and drainage planning; education for flood prevention and safety; construction of flood control structures and facilities; flood warning and early detection; and maintenance and operation of County flood control structures. The Watershed Protection Division assumes the lead role in coordinating and implementing the District, Cities, and the County of Riverside NPDES Municipal Separate Storm Sewer System (MS4) permit compliance programs.¹⁵ The Flood Control District is divided into seven geographical Zones with each Zone being taxed separately. Monies raised in one Zone must be spent in only that Zone. Each Zone is represented by three Zone Commissioners appointed by the Flood Control District's Board to advise the Supervisors and District staff. According to the Flood Control District's zone boundary map, the western portion of the Highway 74 Community Plan area is located in Zone 3, and the eastern portion of the planning area is located in Zone 4.¹⁶

Energy

Southern California Edison (SCE) provides electricity, and Southern California Gas Company (SoCalGas) provides natural gas service to the planning area. Below is a discussion of each energy source.

Electricity

SCE provides electrical service to customers within a 50,000-square-mile area covering nearly 14 million people in 11 counties in the southern half of California, including western Riverside County. It

¹⁴ California Department of Resources Recycling and Recovery (CalRecycle). 2016. SWIS Facility/Site Activity Details El Sobrante Landfill (33-AA-0217). Website: <https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/2256?siteID=2402>. Accessed February 14, 2022.

¹⁵ Riverside County Flood Control and Water Conservation District (Flood Control District). 2022. District Overview. Website: <https://rcflood.org/About-the-District/District-Overview>. Accessed January 18, 2022.

¹⁶ Riverside County Flood Control and Water Conservation District (Flood Control District). 2022. District Zones. Website: <https://rcflood.org/About-the-District/District-Zones-2021>. Accessed January 18, 2022.

provides electricity to users via 16 utility interconnections and nearly 5,000 different transmission and distribution circuits.

Natural Gas

SoCalGas provides natural gas service to the project area. SoCalGas is the nation's largest natural gas distribution utility and provides energy to 21.8 million consumers through 5.9 million meters in more than 500 communities. The company's service territory encompasses approximately 24,000 square miles throughout Central and Southern California. SoCalGas is a subsidiary of Sempra Energy.¹⁷

3.20.3 - Regulatory Framework

Federal

National Pollutant Discharge Elimination System

In California, the regulation, protection, and administration of water quality are carried out by the California State Water Resources Control Board (State Water Board) and 9 California Regional Water Quality Control Boards (RWQCBs). The State Water Board and the 9 RWQCBs are responsible for the protection and, where possible, the enhancement of the quality of California's waters. In compliance with Section 303 of the Clean Water Act and the Porter-Cologne Water Quality Control Act, each RWQCB is required to adopt a Water Quality Control Plan or Basin Plan that recognizes and reflects regional differences in existing water quality, the beneficial uses of the region's ground and surface water, local water quality conditions and problems, and Total Maximum Daily Loads (TMDL). The planning area is located within the Santa Ana Region,¹⁸ which is addressed in the Water Quality Control Plan (Basin Plan) for the Santa Ana River Basin (Region 8), dated January 24, 1995, updated in February 2008, June 2011, February 2016, and June 2019.¹⁹ The Basin Plan is designed to preserve and enhance water quality and protect the beneficial uses of its regional waters. The Santa Ana RWQCB has the authority to implement water quality protection standards through the issuance of permits to waters within its jurisdiction.

States are required to develop a TMDL to address each pollutant-causing impairment. A TMDL defines how much of a pollutant a water body can tolerate and still meet water quality standards. Each TMDL must account for all sources of the pollutant, including discharges from wastewater treatment facilities; runoff from homes, forested lands, agriculture, and streets or highways; contaminated soils/sediments, legacy contaminants such as dichlorodiphenyltrichloroethane (DDT) and polychlorinated biphenyls (PCBs), on-site disposal systems (septic systems) and deposits from the air. Federal regulations require that the TMDL, at a minimum, account for contributions from point sources (permitted discharges) and contributions from non-point sources, including natural background. In addition to accounting for past and current activities, TMDLs may consider projected growth that could increase pollutant levels. TMDLs allocate allowable pollutant loads for each

¹⁷ Southern California Gas Company (SoCalGas). 2020. Company Profile. Website: <https://www.socalgas.com/about-us/company-profile>. Accessed January 18, 2022.

¹⁸ California State Water Resources Control Board (State Water Board). Santa Ana Regional Water Quality Control Board (Santa Ana RWQCB). Santa Ana Region 8. Website: https://www.waterboards.ca.gov/waterboards_map.html. Accessed January 19, 2022.

¹⁹ California State Water Resources Control Board (State Water Board). Santa Ana River Basin Plan. Website: https://www.waterboards.ca.gov/santaana/water_issues/programs/basin_plan/. Accessed January 19, 2022.

source, and identify management measures that, when implemented, will assure that water quality standards are attained.

The Santa Ana RWQCB administers the NPDES permit requirements for the project area, including the planning area. In 1990, the United States Environmental Protection Agency (EPA) established Phase I of the NPDES stormwater program to address discharges from construction activities disturbing 5 acres or more of land. In 1992, the State adopted a related NPDES General Permit for Storm Water Discharges Associated with Construction Activities (Construction Activities General Permit) for projects greater than 5 acres in size. The permit required applicable projects have a Stormwater Pollution Prevention Plan (SWPPP). The SWPPP specifies Best Management Practices (BMPs) that would prevent construction pollutants from contacting stormwater with the intent of keeping all products of erosion from moving off-site into receiving waters; eliminates or reduces non-stormwater discharges to storm sewer systems and waters of the State; and provides a monitoring program for the routine inspection of all BMPs.

In 1999, the State adopted the NPDES General Permit for Storm Water Discharges Associated with Construction Activities (Construction Activities General Permit) (State Water Board Order No 99-08-DWQ, NPDES CAS000002) which requires the development and implementation of a SWPPP for applicable projects, where the threshold was reduced from 5 acres or greater of soil disturbance, set by the 1992 General Construction Permit, to 1 acre or greater of soil disturbance. The SWPPP is required to achieve two major objectives: to help identify the sources of sediment and other pollutants that affect the quality of stormwater discharges; and, to describe and ensure the implementation of BMPs to reduce or eliminate sediment and other pollutants in stormwater and non-stormwater discharges. The State Water Board has jurisdiction throughout California. It was created by the State Legislature in 1967, and it protects water quality by setting Statewide policy, coordinating and supporting the Regional Water Board efforts, and reviewing petitions that contest Regional Board actions. There are nine RWQCBs that exercise rulemaking and regulatory activities by basins.

In California, the General Permit (Order No. 2009-0009-DWQ) was issued by the State Water Board and went into effect on July 1, 2010.²⁰ This order regulates stormwater runoff and urban runoff, which includes stormwater and authorized non-stormwater discharges from traditional construction activities such as residential, commercial, and industrial development, as well as linear underground/overhead construction projects. Order No. 2009-0009-DWQ authorizes the discharge of stormwater runoff from construction projects that may result in land disturbance of 1 acre or more (or less than one acre, if it is part of a larger common plan of development or sale, which is one acre or more). Unlike some of its predecessors, this General Construction Permit classifies construction sites under three Risk Levels. Risk Level 1 sites are subject to requirements similar to those established in Order No. 99-08-DWQ. Risk Level 2 sites are subject to Numeric Action Levels (NALs) for pH and turbidity, in addition to Risk Level 1 requirements. Risk Level 3 sites are subject to Numeric Effluent Limits (NELs), in addition to Risk Level 1 and 2 requirements. Project Risk Levels are determined by the proposed project's sediment discharge risk and its receiving water risk. The

²⁰ California State Water Resources Control Board (State Water Board). 2020. Construction Stormwater General Permits. Website: https://www.waterboards.ca.gov/water_issues/programs/stormwater/constpermits.html. Accessed January 19, 2022.

discharger shall develop a SWPPP and a construction site monitoring program prior to the commencement of any of the construction activities, to be implemented until project completion.

State

California Urban Water Management Planning Act

The Urban Water Management Planning Act (California Water Code Sections 10610-10656) requires that all public and private urban water suppliers that directly or indirectly provide water for municipal purposes to more than 3,000 customers or supplying more than 3,000 acre-feet of water annually to prepare Urban Water Management Plans (UWMPs) and update them every 5 years. The act requires that UWMPs include a description of water management tools and options used by that urban water supplier to maximize resources and minimize the need to import water from other regions. Specifically, UWMPs must:

- Provide current and projected population, climate, and other demographic factors affecting the supplier's water management planning.
- Identify and quantify, to the extent practicable, the existing and planned sources of water available to the supplier.
- Describe the reliability of the water supply and vulnerability to seasonal or climatic shortage.
- Describe plans to supplement or replace that source with alternative sources or water demand management measures.
- Describe the opportunities for exchanges or transfers of water on a short-term or long-term basis (associated with systems that use surface water).
- Quantify past and current water use.
- Provide a description of the supplier's water demand management measures, including schedule of implementation, program to measure effectiveness of measures, and anticipated water demand reductions associated with the measures.
- Assess water supply reliability.

California Integrated Waste Management Act

To minimize the amount of solid waste that must be disposed of by transformation and land disposal, the State Legislature passed Assembly Bill (AB) 939, the California Integrated Waste Management Act of 1989, effective January 1990. The legislation required each local jurisdiction in the State to set diversion requirements of 25 percent by 1995 and 50 percent by 2000; established a comprehensive statewide system of permitting, inspections, enforcement, and maintenance for solid waste facilities; and authorized local jurisdictions to impose fees based on the types or amounts of solid waste generated. In 2007, Senate Bill (SB) 1016, Wiggins, Chapter 343, Statutes of 2008, introduced a new per capita disposal and goal measurement system that moves the emphasis from an estimated diversion measurement number to using an actual disposal measurement number as a per capita disposal rate factor. As such, the new disposal-based indicator (pounds per person per year) uses only two factors: a jurisdiction's population (or in some cases employment) and its disposal as reported by disposal facilities.

California Public Utilities Commission

The California Public Utilities Commission (CPUC) regulates privately owned telecommunication, electric, natural gas, water, railroad, rail transit, and passenger transportation companies. It is the responsibility of the CPUC to (1) assure California utility customers safe, reliable utility service at reasonable rates; (2) protect utility customers from fraud; and (3) promote a healthy California economy. The Public Utilities Code, adopted by the legislature, defines the jurisdiction of the CPUC.

Title 24, Energy Efficiency Standards

Title 24, which was promulgated by the California Energy Commission in 1978 in response to a legislative mandate to create uniform building codes to reduce California’s energy consumption, provides energy efficiency standards for residential and nonresidential buildings.

California Code of Regulations Title 24 Part 11 code is a comprehensive and uniform regulatory code for all residential, commercial, and school buildings that went in effect January 1, 2011. The code is updated on a regular basis, with the most recent update consisting of the 2019 California Green Building Standards Code (CALGreen) that became effective January 1, 2020.²¹ Local jurisdictions are permitted to adopt more stringent requirements, as State law provides methods for local enhancements. State building code provides the minimum standard that buildings need to meet in order to be certified for occupancy, which is generally enforced by the local building official.

Senate Bill 610

Under SB 610, water supply assessments must be furnished to local governments for inclusion in any environmental documentation for certain projects (as defined in Water Code 10912 (a)) subject to California Environmental Quality Act (CEQA). As detailed in Water Code 10912 (a) a “project” means any of the following:

1. Proposed residential development of more than 500 dwelling units.
2. A proposed shopping center or business establishment employing more than 1,000 persons or having more than 500,000 square feet of floor space.
3. A proposed commercial office building employing more than 1,000 persons or having more than 250,000 square feet of floor space.
4. A proposed hotel or motel, or both, having more than 500 rooms.
5. A proposed industrial, manufacturing, or processing plant, or industrial park planned to house more than 1,000 persons, occupying more than 40 acres of land, or having more than 650,000 square feet of floor area.
6. A mixed-use project that includes one or more of the projects specified in this subdivision.
7. A project that would demand an amount of water equivalent to, or greater than, the amount of water required by a 500-dwelling-unit project.

²¹ State of California. 2020. California Green Building Standards Code (CALGreen). Website: <https://www.dgs.ca.gov/BSC/Resources/Page-Content/Building-Standards-Commission-Resources-List-Folder/CALGreen>. Accessed December 21, 2021.

Assembly Bill 341

AB 341 requires all businesses and organizations in California that generate 4 cubic yards or more of waste per week and multi-family units of five or more, to recycle. A business shall take at least one of the following actions in order to reuse, recycle, compost, or otherwise divert commercial solid waste from disposal:

- Source separate recyclable and/or compostable material from solid waste and donate or self-haul the material to recycling facilities.
- Subscribe to a recycling service with their waste hauler.
- Provide recycling service to their tenants (if commercial or multi-family complex).
- Demonstrate compliance with the requirements of California Code of Regulations Title 14.

Local**County of Riverside General Plan**

Below are policies from the Land Use Element (LU), the Multipurpose Open Space (OS) Element, and the Safety (S) Element of the General Plan that relate to utilities and service systems.

- Policy OS 1.1** Balance consideration of water supply requirements between urban, agricultural, and environmental needs so that sufficient supply is available to meet each of these different demands.
- Policy OS 2.2** Encourage the installation of water-conserving systems such as dry wells and graywater systems, where feasible, especially in new developments. The installation of cisterns or infiltrators shall also be encouraged to capture rainwater from roofs for irrigation in the dry season and flood control during heavy storms.
- Policy OS 2.3** Seek opportunities to coordinate water efficiency policies and programs with water service providers.
- Policy LU 5.1** Ensure that development does not exceed the ability to adequately provide supporting infrastructure and services, such as libraries, recreational facilities, educational and day care centers, transportation systems, and fire/police/medical services.
- Policy LU 5.2** Monitor the capacities of infrastructure and services in coordination with service providers, utilities, and outside agencies and jurisdictions to ensure that growth does not exceed acceptable levels of service.
- Policy LU 5.3** Review all projects for consistency with individual Urban Water Management Plans.
- Policy S 4.10** Require all proposed projects anywhere in the County to address and mitigate any adverse impacts that it may have on the carrying capacity of local and regional storm drain systems.

- Policy S 4.18** Require that the design and upgrade of street storm drains be based on the depth of inundation, relative risk to public health and safety, the potential for hindrance of emergency access and regress from excessive flood depth, and the threat of contamination of the storm drain system with sewage effluent. In general, the 10-year flood flows shall be contained within the top of curbs and the 100-year flood flows within the street right-of-way.
- Ordinance No. 592** Regulating Sewer Use, Sewer Construction and Industrial Wastewater Discharges in County Service Areas: This ordinance sets various standards for sewer use, construction and industrial wastewater discharges within Riverside County to protect both water quality and the infrastructure conveying and treating these wastewaters. As a result, Ordinance No. 592 protects water supplies, water and wastewater facilities and water quality for both surface water and groundwater.
- Ordinance No. 859** Establishing Water-Efficient Landscaping Standards: This ordinance establishes provisions for water management practices and water waste prevention and creates a structure for planning, designing, installing, maintaining and managing water-efficient landscapes in new rehabilitated projects. It was adopted to implement the requirements of the 2006 California Water Conservation in Landscaping Act and California Code of Regulations Title 23, Division 2, Chapter 2.7. It generally requires new development landscaping to not exceed a maximum water demand of 70 percent (or lower as may be required by State legislation). It also includes provisions to eliminate water waste from overspray and runoff and raise public awareness of the need to conserve water through education and motivation. Increasing water efficiency works toward reducing greenhouse gas (GHG) emissions by reducing electricity associated with water use and, thus, the associated GHG emissions.

Elsinore Area Plan

The Elsinore Area Plan (ELAP) sets forth the following goals and policies related to utilities:

- Policy ELAP 5.10** Work on reducing illegal dumping, including hazardous waste, and increase access to affordable composting and recycling facilities; encourage the appropriate permitting of waste sites and reclamation of cleanup sites.
- Policy ELAP 5.11** Encourage the connection of municipal water and wastewater services to community residents and facilities to reduce reliance on septic systems in order to limit groundwater contamination.

The following policy applies to Neighborhood 2 of the Highway 74 planning area:

- Policy ELAP 5.14** Work on preserving outstanding scenic vistas and features and encouraging underground placement of electric or communication distribution lines.

Mead Valley Area Plan

The Mead Valley Area Plan (MVAP) sets forth the following goals and policies related to utilities:

- Policy MVAP 5.10** Encourage the siting of hazardous waste and hazardous materials facilities, including solid waste and recycling facilities pursuant to policy HC 15.5 to reduce illegal dumping, reduce waste, and increase access to affordable composting and recycling facilities.
- ELAP 5.11** Encourage the connection of municipal water and wastewater services to community residents and facilities to reduce reliance on septic systems in order to limit groundwater contamination.

Highway 74 Community Plan

The Highway 74 Community Plan sets forth the following goals and policies related to utilities:

- Goal 10** Work on reducing illegal dumping, including hazardous waste, and increase access to affordable composting and recycling facilities; encourage the appropriate permitting of waste sites and reclamation of cleanup sites.
- Goal 11** Encourage the connection of municipal water and wastewater services to community residents and facilities to reduce reliance on septic systems in order to limit groundwater contamination.

3.20.4 - Methodology

Utility system impacts were evaluated using the General Plan and information provided by EVMWD, EMWD, RCDWR, WM, the Flood Control District, SCE, and SoCalGas. Agency websites were reviewed for relevant information about facilities and services provided.

3.20.5 - Thresholds of Significance

Section XIX of Appendix G to the State CEQA Guidelines addresses typical adverse effects on utilities and service systems and includes the following threshold questions to evaluate a project's impacts on 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, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?
- Would the project have insufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?
- Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

- 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 fail to comply with federal, State, and local management and reduction statutes and regulations related to solid waste?

The following thresholds are derived from Riverside County’s Environmental Assessment Checklist, as modified by the 2018 updates to Appendix G to the State CEQA Guidelines, in order to evaluate the significance of the proposed project’s impacts on utilities and service systems. The proposed project would result in a significant impact to utilities and service systems if the project or any project-related component would:

Would the project:

40. Water

- a) Require or result in the relocation or construction of new or expanded water, wastewater treatment, or stormwater drainage systems, whereby the construction or relocation would cause significant environmental effects?
- b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?

41. Sewer

- a) Require or result in the construction of new wastewater treatment facilities, including septic systems, or expansion of existing facilities, whereby the construction or relocation would cause significant environmental effects?
- b) Result in a determination by the wastewater treatment provider that serves or may service the project that it has adequate capacity to serve the project’s projected demand in addition to the provider’s existing commitments?

42. Solid Waste

- a) 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?
- b) Comply with federal, State, and local management and reduction statutes and regulations related to solid wastes including the CIWMP (County Integrated Waste Management Plan)?

43. Utilities

Would the project impact the following facilities requiring or resulting in the construction of new facilities or the expansion of existing facilities, whereby the construction or relocation would cause significant environmental effects?

- a) Electricity?
- b) Natural gas?
- c) Communications systems?
- d) Street lighting?
- e) Maintenance of public facilities, including roads?
- f) Other governmental services?

3.20.6 - Project Impacts and Mitigation Measures

Water

Impact USS-40(a): The proposed project would not require or result in the relocation or construction of new or expanded water, wastewater treatment, or stormwater drainage systems, whereby the construction or relocation would cause significant environmental effects.

Impact Analysis

Water

EMWD provides water to the western portion of the planning area (Neighborhood 1). EVMWD provides water to the eastern portion of the planning area (Neighborhoods 2 and 3). Buildout of the proposed project could lead to an increase of the following uses:

- Approximately 3,970 multi-family residential dwelling units.
- Approximately 2,081,150 square feet of commercial retail uses.
- Approximately 1,506,217 square feet of business park uses.
- Approximately 740,903 square feet of light industrial uses.
- Approximately 21.6 acres of public facility uses.
- Approximately 4.28 acres of open space uses.

Implementation of the proposed project would lead to a decrease of 383 single-family detached residential units (<5 dwelling units per acre [DU/acre]). However, the proposed project would alter the buildout potential in the planning area as compared to the existing General Plan land use designations, resulting in an increase in new residential, commercial, industrial, and public facility uses. As such, the proposed project would increase water demand, based on the water demand factors for the identified land uses. Since Neighborhood 1 is served by EMWD and Neighborhoods 2 and 3 are served by EVMWD, water demands of the Neighborhoods 2 and 3 and Neighborhood 1 are calculated separately as shown in Table 3.20-8 and Table 3.20-9, respectively.

Table 3.20-8: Water Demand Calculations for Neighborhoods 2 and 3 (served by Elsinore Valley Municipal Water District)

Change in Use (acre)	Water Duty Factor (gpd/acre) ^{1,2}	Change in Water Demand (gpd)
Increase in approximately 28.7 acres of Business Park uses	1,200 gpd/acre	34,440 gpd
Increase in approximately 50.9 acres of Commercial Retail uses	2,500 gpd/acre	127,250 gpd
Increase in approximately 1.2 acres of Light Industrial uses	800 gpd/acre	960 gpd

Change in Use (acre)	Water Duty Factor (gpd/acre) ^{1,2}	Change in Water Demand (gpd)
Increase in approximately 21.4 acres of Public Facilities uses	1,700 gpd/acre	36,380 gpd
Increase in approximately 0.2 acres of Very High Density Residential uses	3,500 gpd/acre	700 gpd
Increase in approximately 44.6 acres of Low Density Residential uses	660 gpd/acre	29,436 gpd
Increase in approximately 169.2 acres of Mixed-Use Area uses	2,300 gpd/acre	389,160 gpd
Subtotal of increases		+618,326 gpd
Decrease in approximately 1.5 acres of Open Space -Recreation uses	2,300 gpd/acre	-3,450 gpd
Decrease in approximately 23.9 acres Rural Mountainous uses	250 gpd/acre	-5,975 gpd
Decrease in approximately 296.8 acres of Very Low Density Residential uses	800 gpd/acre	-237,440 gpd
Subtotal of decreases		-246,865 gpd
NET TOTAL		+371,461 gpd
NET TOTAL IN AFY		+415.1 AFY
Notes:		
AFY = acre-feet per year		
gpd = gallons per day		
gpd/acre = gallons per day/per acre		
¹ Source: Elsinore Valley Municipal Water District (EVMWD). 2016. 2016 Water System Master Plan. August.		
² All EVMWD Water duty factors are in gpd/acre only.		

Table 3.20-9: Water Demand Calculations for Neighborhood 1 (served by Eastern Municipal Water District)

Change in Use (acre)	du/ac	Water Duty Factor (gpd/acre or gpd/du) ¹	Change in Water Demand (gpd)
Increase in approximately 124.9 acres of Business Park uses	–	550 gpd/acre	+68,695 gpd
Increase in approximately 112.4 acres of Commercial Retail uses	–	2,200 gpd/acre	+247,280 gpd
Increase in approximately 54.7 acres of Light Industrial uses	–	550 gpd/acre	+30,085 gpd
Increase in approximately 17.1 acres of Highest Density Residential uses	30 du/acre	290 gpd/du	+148,770 gpd
Increase in approximately 3.9 acres of High Density Residential uses	11 du/acre	310 gpd/du	+13,299 gpd
Increase in approximately 67.8 acres of Low Density Residential	1.5 du/acre	660 gpd/du	+67,122 gpd
Increase in approximately 91.8 acres of Mixed-Use Area uses (50% of HDR and 50% of CR)	11 du/acre	310 gpd/du 2,200 gpd/acre	+257,499 gpd
Subtotal of increases			+832,750 gpd

Change in Use (acre)	du/ac	Water Duty Factor (gpd/acre or gpd/du) ¹	Change in Water Demand (gpd)
Decrease in approximately 16.6 acres of Rural Mountains uses	0.05 du/acre	1,320 gpd/du	-1,095.6 gpd
Decrease in approximately 247.5 acres of Residential Rural uses	0.15 du/acre	1,320 gpd/du	-49,005 gpd
Decrease in approximately 138.2 acres Very Low Density Residential uses	0.75 du/acre	660 gpd/du	-68,409 gpd
Decrease in approximately 53.3 acres of Medium Density Residential uses	3.5 du/acre	440 gpd/du	-82,082gpd
Subtotal of decreases			-200,591.6 gpd
NET TOTAL			+612,158.4 gpd
NET TOTAL IN AFY			+685.7 AFY
Notes: AFY = acre-feet per year gpd = gallons per day gpd/acre = gallons per day/per acre			
¹ Source: West Yost Associates. 2016. Eastern Municipal Water District 2015 Water Facilities Master Plan Update, Volume 1 Master Plan Supplement Planning and Sizing Criteria, Chapter 5. September.			

As shown in Table 3.18-3, EVMWD has a water supply surplus of at least 4,361 AFY to meet future demands through 2045. As shown in Table 3.18-8, proposed future buildout of Neighborhoods 2 and 3, which are served by EVMWD, would require a total of approximately 415.1 AFY of water. Therefore, EVMWD is projected to have sufficient water supplies to meet the future demands in the service area, including the proposed project’s demands, through the year 2045.

As shown in Table 3.18-5, EMWD has the capacity to meet future demands but does not have a surplus of water supply. As shown in Table 3.18-9, the proposed future buildout of Neighborhood 1, which is served by EMWD, would require a total of approximately 685.7 AFY of water. As noted in EMWD’s 2020 UWMP, EMWD plans to increase regional supply reliability through a number of measures: increasing local supplies by increasing local groundwater banking through the Enhanced Recharge and Recovery Program; expanding the desalter program with the Perris II Desalter; and full utilization of recycled water through implementation of indirect potable reuse. In addition to the development of local resources, EMWD promotes the efficient use of water and also promotes reductions in water demands on retail water use through the implementation of local ordinances, conservation programs, and an innovative tiered pricing structure. Reducing demands allows existing and proposed water supplies to stretch farther and reduces the potential for water supply shortages.

County water agencies generally operate using a “will serve” capacity by planning and constructing infrastructure and hiring staff based on demand projections for their service areas. At the time of application, future projects would be reviewed by the County for compliance with the policies and actions of the General Plan as well as the County Code of Ordinances. Compliance with County and State-required water management and conservation regulations would assist in reducing the amount of water supplies required by future development. For example, General Plan Policy OS 2.2 encourages the installation of water-conserving systems, such as dry wells and graywater systems, in

new developments. The County’s pre-application review procedure (as stipulated by Ordinance 348, Section 18.2.B, Pre-Application Review) and development review process would ensure consistency with these County General Plan policies. Ordinance No. 859 requires new development projects to install water-efficient landscapes, thus limiting water applications and minimizing water runoff and water erosion in landscaped areas. In addition, General Plan Environmental Impact Report (EIR) Mitigation Measure 4.17.1D requires compliance with federal, State, and local standards for water conservation within residential, commercial or industrial projects. Prior to approval of any development within the County, a future applicant will be required to submit evidence to Riverside County that all applicable water conservation measures have been met, and that a “can and will serve” letter has been issued by the water purveyor to serve the project as proposed.

Therefore, with the County and water agencies review of each future development project, including proof of issuance of a “can and will serve” letter, and compliance with federal, State, and local water conservation standards, water supplies would be adequate to accommodate buildout of the proposed project without the need for new or expanded water facilities. Impacts from the construction of new or expanded water facilities with implementation and buildout of the proposed project would be less than significant.

Wastewater Treatment

EMWD provides wastewater services to Neighborhood 1, and EVMWD provides wastewater services to Neighborhoods 2 and 3. Buildout of Neighborhood 1 would result in an estimated wastewater generation of 428,510.9 gpd, and buildout of Neighborhoods 2 and 3 would result in an estimated wastewater generation of 260,022.7 gpd.²²

As previously discussed, EMWD has a capacity to treat up to 75 mgd, and EVMWD has a capacity of 9.7 mgd. This increase in wastewater generation represents 0.5 percent of EMWD’s wastewater treatment capacity and 2.7 percent of EVMWD’s wastewater treatment capacity. The planning area currently contains a well-developed regional wastewater system that has sufficient capacity to accommodate the proposed land use changes. Nonetheless, the adequacy of wastewater facilities to serve specific development proposals would be determined through the County’s development review process where necessary infrastructure improvements would be required as conditions of approval.

Future development would also be subject to Ordinance No. 592, which sets various standards for sewer use, construction, and industrial wastewater discharges to protect both water quality and the infrastructure conveying and treating wastewater. Therefore, wastewater treatment systems would be adequate to accommodate buildout of the proposed project without the need for new or expanded wastewater treatment facilities. Impacts from the construction of new or expanded wastewater facilities with implementation and buildout of the proposed project would be less than significant.

Stormwater Drainage

The proposed project would alter buildout potential in the planning area as compared to the existing General Plan land use designations, as discussed above. As such, the proposed project could increase

²² Based on the standard calculation of 70 percent of water demand.

the quantity of impervious surfaces. The planning area currently contains a well-developed regional water, sewer, and storm network that generally has sufficient capacity to accommodate the proposed land use changes. New utility infrastructure improvements may be required to provide services to projects that occur under the proposed project.

Development within the planning area would be required to comply with the California Regional Water Quality Control Board. As such, each proposed development within the planning area would be required to demonstrate that it would adequately treat any site runoff to ensure the proper quality of the runoff leaving the site; would not increase the quantity, duration, or peak flow of runoff from a site; and would employ proper construction management techniques through the construction process to ensure adequate sediment and erosion control (addressed through the State's NPDES requirements). As discussed in more detail in Section 10, Hydrology and Water Quality, the proposed project would not substantially alter existing drainage patterns within the planning area. Additionally, the County Code of Ordinances contains regulations that minimize impervious surfaces, minimize impacts to stormwater runoff, and follow Low Impact Development (LID) requirements. Further, General Plan Policy OS 3.7 would further reduce impacts from surface runoff. Furthermore, development within the watersheds or drainage areas tributary to the planning area that are within the County are also required to adhere to the grading plan check process, and to comply with NPDES requirements and employ source-control BMPs to reduce water quality impacts, and to comply with SWPPP and Water Quality Management Plan (WQMP) requirements, as discussed in Section 10, Hydrology and Water Quality.

Accordingly, new development within the plan area would not increase flows substantially within the existing drainage system. New drainage infrastructure that would serve future implementing development would be limited to infrastructure necessary to serve future implementing development, and would be appropriately sized and modeled through the existing drainage system to ensure proper sizing to handle stormwater flows. As such, the proposed project would not result in an increased need for off-site stormwater drainage facilities, and impacts would be less than significant.

Level of Significance

Less than significant impact.

Mitigation Measures

No mitigation required.

Impact USS-40(b): The proposed project would have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years.

Impact Analysis

As discussed above, the planning area is located within both the EMWD and the EVMWD service areas. As discussed in Impact USS-40a, the proposed project would alter the buildout potential in the planning area as compared to existing General Plan land use designations. EVMWD would have sufficient water supplies to accommodate the increased water demand associated with the

proposed project. EMWD plans to increase regional supply reliability through a number of measures, including increased local groundwater banking, the promotion of efficient water use, and reduction of demands on retail water use through the implementation of local ordinances, conservation programs, and an innovative tiered pricing structure. Reducing demands allows existing and proposed water supplies to stretch farther and reduces the potential for water supply shortages.

Compliance with County and State-required water management and conservation regulations would assist in reducing the amount of water supplies required by future development. For example, General Plan Policy OS 2.2 encourages the installation of water-conserving systems, such as dry wells and graywater systems, in new developments. The County's pre-application review procedure (as stipulated by Ordinance 348, Section 18.2.B, Pre-Application Review) and development review process would ensure consistency with these County General Plan policies. Ordinance No. 859 requires new development projects to install water-efficient landscapes, thus limiting water applications and minimizing water runoff and water erosion in landscaped areas.

Therefore, with the County and water agencies review of each future development project, including issuance of "can and will serve" letters, and compliance with federal, State, and local water conservation standards, both EMWD and EVMWD would be able to serve development associated with the proposed project and reasonably foreseeable future development during normal, dry, and multiple dry years. Therefore, impacts would be less than significant.

Level of Significance

Less than significant impact.

Mitigation Measures

No mitigation required.

Sewer

Impact USS-41(a): **The proposed project would not require or result in the construction of new wastewater treatment facilities, including septic systems, or expansion of existing facilities, whereby the construction or relocation would cause significant environmental effects.**

Impact Analysis

The planning area is located within both the EMWD and the EVMWD service areas. Future development that occurs in the planning area would connect to the existing municipal wastewater facilities. As discussed in Impact USS-40a, buildout of the proposed project would generate an estimated 428,510.9 gpd of wastewater in Neighborhood 1 and 260,002.7 gpd of wastewater in Neighborhoods 2 and 3. This increase in wastewater generation represents 0.5 percent of EMWD's wastewater treatment capacity and 2.7 percent of EVMWD's wastewater treatment capacity. The adequacy of wastewater facilities to serve specific development proposals would be determined through the County's development review process where necessary infrastructure improvements would be required as conditions of approval. Future development would also be subject to Ordinance No. 592, which sets various standards for sewer use, construction, and industrial

wastewater discharges to protect both water quality and the infrastructure conveying and treating wastewater.

Therefore, wastewater treatment systems would be adequate to accommodate buildout of the proposed project without the need for new or expanded wastewater treatment facilities. Impacts from the construction of new or expanded wastewater facilities with implementation and buildout of the proposed project would be less than significant.

Level of Significance

Less than significant impact.

Mitigation Measures

No mitigation required.

Impact USS-41(b): The proposed project would not result in a determination by the wastewater treatment provider that serves or may service the project that it has adequate capacity to serve the project’s projected demand in addition to the provider’s existing commitments.

Impact Analysis

As discussed in Impact USS-40a, the proposed project would not result in a determination by the wastewater treatment provider that serves or may serve the proposed project that it has adequate capacity to serve the project’s projected demand in addition to the provider’s existing commitments. Impacts from the construction of new or expanded wastewater facilities with implementation and buildout of the proposed project would be less than significant.

Level of Significance

Less than significant impact.

Mitigation Measures

No mitigation required.

Solid Waste

Impact USS-42(a): The proposed project would not 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.

Impact Analysis

Future development accommodated by the proposed project would generate solid waste that would be disposed of in the El Sobrante Landfill. The El Sobrante Landfill has a remaining estimated capacity of 3,834,470 cubic yards. For comparison, Riverside County EIR No. 441 Table 4.15-C (Generation of Solid Waste at General Plan Buildout) uses the following solid waste generation factors by land use type:

- Residential: 0.41 tons per dwelling unit per year.

- Commercial: 2.4 tons per 1,000 square feet per year.²³
- Industrial: 10.8 tons per 1,000 square feet per year.²⁴
- Public/Quasi-Public: 10.8 tons per 1,000 square feet per year.

Using these solid waste generation factors, the following total amounts of solid waste generation is estimated for each component of the proposed project:

- Residential: approximately 1,627.7 tons of solid waste annually (3,970 units X 0.41).
- Commercial: approximately 8,609.7 tons of solid waste annually (3,587,367/1,000 square feet X 2.4).
- Industrial: approximately 8,001.8 tons of solid waste annually (740,903/1,000 square feet X 10.8).
- Public Facilities/Open Space: approximately 12,175.2 tons of solid waste annually (1,127,333/1,000 square feet X 10.8).

Buildout of the proposed project is estimated to generate a total of 30,414.4 tons of debris. Waste generation would occur incrementally over the duration of buildout.

As part of its long-range planning and management activities, the RCDWR ensures that, at any given time, the County has a minimum of 15 years of capacity for future landfill disposal. This 15-year disposal capacity projection is prepared yearly as part of the annual reporting requirements for the Countywide Integrated Waste Management Plan. The most recent 15 year projection submitted to the State Integrated Waste Management Board indicates that no additional capacity is needed to dispose of countywide waste through 2024, with a remaining disposal capacity of 28,561,626 tons in the year 2024.

While there is adequate permitted landfill capacity to accommodate future growth, the proposed project includes a policy to reduce impacts on solid waste services. The policy (Policy No. 10) is related to reducing illegal dumping, including hazardous waste, and increase access to affordable composting and recycling facilities; encourage the appropriate permitting of waste sites and reclamation of cleanup sites. Future development anticipated with the proposed project would also be subject to the RCDWR Design Guidelines for Refuse and Recyclables Collection and Loading Areas, as well as standard-practice Conditions of Approval, including the issuance of a clearance letter by RCDWR. The clearance letter outlines project-specific requirements to ensure that individual project developers provide adequate areas for collecting and loading recyclable materials, such as “paper products, glass and green wastes.”

No building permits would be issued unless/until RCDWR verifies compliance with the clearance letter conditions. Furthermore, all future development involving commercial uses generating more than 4 yards per week of solid waste and multi-family complexes with five units or more would be required to have a recycling program in place consistent with the mandatory commercial and multi-

²³ Includes land uses: commercial-retail (40%), commercial-tourist, commercial-office and business park.

²⁴ Includes the following land uses: light industrial and heavy industrial.

family recycling requirements of AB 341. These requirements would apply to all future development activities in the planning area and would reduce the demand on landfills serving the community.

In addition, future development would be subject to solid waste-related General Plan EIR Mitigation Measure 4.15.3B (requirement to achieve and maintain a 50 percent reduction in solid waste disposal through source reduction, reuse, recycling and composting per State regulations), Mitigation Measure 4.15.3E (requirement for all future commercial, industrial and multi-family residential development to provide adequate areas for the collection and loading of recyclable materials per AB 1327), and Mitigation Measure 4.15.3F (requirement for all development projects to coordinate with appropriate [Riverside] County departments and/or agencies to ensure that there is adequate waste disposal capacity to meet the waste disposal requirements of the proposed project). Future implementing development projects on the currently vacant sites would also discourage illegal dumping on these vacant sites.

Accordingly, future development consistent with the proposed project would not adversely impact existing landfill capacity and future project would be required to comply with applicable State and County standards as discussed above to avoid potential impacts relative to solid waste. Impacts with regard to solid waste would be less than significant.

Level of Significance

Less than significant impact.

Mitigation Measures

No mitigation required.

Impact USS-42(b): The proposed project would comply with federal, State, and local management and reduction statutes and regulations related to solid wastes including the CIWMP (County Integrated Waste Management Plan).

Impact Analysis

The proposed project would project would comply with federal, State, and local statutes and regulations related to solid wastes including the County Integrated Waste Management Plan (CIWMP). The CIWMP was prepared in accordance with the California Integrated Waste Management Act of 1989, Chapter 1095 (AB 939). AB 939 requires that local jurisdictions divert at least 50 percent of all solid waste generated by January 1, 2000. The proposed project is not anticipated to conflict with the Riverside County policies, other mandatory policies such as AB 341, or the CIWMP because buildout of the proposed project would comply with requirements regarding solid waste disposal, and future projects would be served by a solid waste disposal provider. Thus, the proposed project would have a less than significant impact.

Level of Significance

Less than significant impact.

Mitigation Measures

No mitigation required.

Utilities

Impact USS-43:	<p>The proposed project would not impact the following facilities requiring or resulting in the construction of new facilities or the expansion of existing facilities, whereby the construction or relocation would cause significant environmental effects.</p> <ul style="list-style-type: none"> a.) Electricity? b.) Natural gas? c.) Communications systems? d.) Street lighting? e.) Maintenance of public facilities, including roads? f.) Other governmental services?
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Impact Analysis

Electricity and Natural Gas

The planning area is currently served with electricity service provided by SCE and natural gas service provided by SoCalGas. Using consumption figures provided by SCE, SoCalGas, and the U.S. Energy Information Administration, the proposed project’s estimated building electricity and natural gas consumption at its full buildout potential is summarized in Table 3.18-10 below. Values in the table only account for new development contemplated by the proposed project and not existing energy consumption within the planning area.

Table 3.20-10: Energy Consumption Estimate

Use	Energy Source	Annual Consumption Rate	Count	Estimated Annual Consumption
Non-residential ¹	Electricity	15.7 kWh/square foot	4,328,291.6 square feet	67,954,178.12 kWh
	Natural Gas	58.3 cubic feet/square foot		252,339,400.28 cubic feet
Residential	Electricity	5,961 kWh/dwelling unit	3,970 dwelling units	23,665,170 kWh
	Natural Gas	45,000 cubic feet/dwelling unit		178,650,000 cubic feet
Total	Electricity	—	—	91,619,348.12 kWh
	Natural Gas	—	—	430,989,400.28 cubic feet

Notes:
kWh = kilowatt-hour
¹ This includes the proposed increase in commercial, business, light industrial, and public facility square footage associated with buildout of the planning area.

As shown in the table, the full buildout of the proposed project would demand approximately 91.6 million kilowatt-hour (kWh) of electricity and 431 million cubic feet of natural gas. All new residential and nonresidential development within the planning area would be subject to the latest adopted

edition of the Title 24 energy efficiency standards, which are among the most stringent in the U.S. As such, implementation of the proposed project would not result in the unnecessary, wasteful, or inefficient use of energy. Additionally, a thorough discussion of energy impacts and mitigation measures is provided in Section 3.6, Energy, impacts related to electricity and natural gas would be less than significant.

Communications, Street Lighting, Maintenance Of Public Facilities, Including Roads, and Other Governmental Services

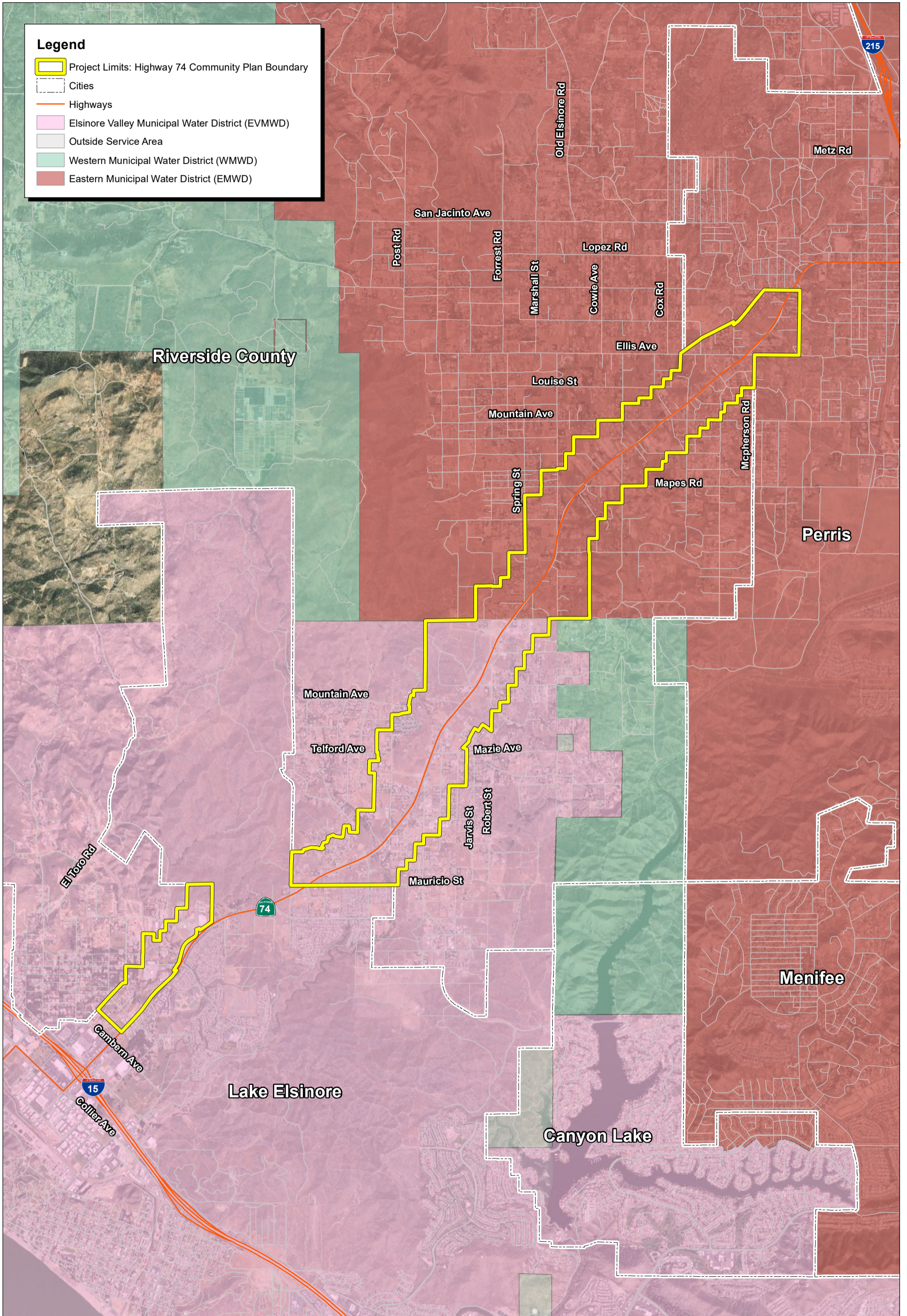
The adequacy of utilities to serve specific development proposals would be determined through the County's development review process where any necessary infrastructure improvements would be required as conditions of approval. Applicants associated with future development in the planning area would be required to coordinate with individual utility service providers. In addition, project-specific utility impacts would be evaluated through the CEQA process, and any necessary mitigation measures and/or conditions of approval would be identified on a project level. Therefore, impacts regarding utilities associated with implementation of the proposed project would be less than significant.

Level of Significance

Less than significant impact.

Mitigation Measures

No mitigation required.



Source: ESRI Aerial Imagery, Riverside County GIS Data, CASC Engineering & Consulting, 09/2021, Elsinore Valley Municipal Water District.



Exhibit 3.20-1
Water District Service Areas

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3.21 - Wildfire

3.21.1 - Introduction

This section describes potential wildfire impacts within the vicinity of the Highway 74 Community Plan planning area that could pose a significant threat to human health or the environment. Section 3.19.6, Project Impacts and Mitigation Measures, identifies potential impacts and mitigation measures related to wildfire for future development in accordance with the thresholds of significance.

3.21.2 - Environmental Setting

According to the County of Riverside General Plan (General Plan) Safety Element, much of the County is at risk from wildland fire. Wildland fire is a severe and growing problem, especially during the months of August, September, and October. The County's hillside terrain is at particular risk. Human-created factors can increase the risks of fire and damages from fire. However, the potential impacts of some hazards can be mitigated by special building techniques, public education, and promotion of practices that contribute to improved public safety.¹

According to the General Plan, there have been many large fires greater than 500 acres in unincorporated Riverside County since 2008. As shown in the General Plan, the planning area has historically been threatened by several wildfires, including a large fire in 1944 affecting an area south of Ethanac Road and north of Beryl Street and a 1977 fire affecting the area between Riverside Street and Earl Warren Elementary School.² Wildfires are of particular concern in the wildfire-urban interface. In the wildland-urban interface, efforts to prevent ignitions and limit wildfire losses hinge on hardening structures and creating defensible space through a multi-faceted approach, which includes engineering, enforcement, education, emergency response, and economic incentive. As shown in the General Plan, a large portion of the planning area is mapped within the wildland-urban interface.³

Fire hazard severity zones are delineated at a State level, via the State Responsibility Area (SRA), and at a local level, via the Local Responsibility Area (LRA). As shown in Exhibit 3.19-1, much of the planning area is designated as Moderate, High, and Very High Fire Hazard Severity zones.

According to the Riverside County Fire Department (RCFD) Strategic Plan, fire stations near the planning area include the following:⁴

- Fire Station No. 1—2010 West San Jacinto Avenue, Perris
- Fire Station No. 4—17650 Cajalco Road, Perris
- Fire Station No. 9—21565 Steele Peak Road, Perris

¹ County of Riverside. 2021. Riverside County, Chapter 6: Safety Element. Website: https://planning.rctlma.org/Portals/14/genplan/2021/elements/Ch06_Safety_092821.pdf. Accessed September 13, 2021.

² County of Riverside. 2021. Riverside County General Plan, Chapter 6: Safety Element, Figure 9: Historic Wildfire Areas. September.

³ County of Riverside. 2021. Riverside County General Plan, Chapter 6: Safety Element, Figure 8: Wildland-Urban Interface. September.

⁴ Riverside County Fire Department (RCFD). 2009. Strategic Plan 2009 – 2029. Website: <http://www.rvcfire.org/stationsAndFunctions/AdminSppt/StrategicPlanning/Pages/default.aspx>. Accessed October 18, 2021.

- Fire Station No. 10—410 West Graham Avenue., Lake Elsinore
- Fire Station No. 11—33020 Maiden Lane, Lake Elsinore
- Fire Station No. 51—32353 Ortega Highway, Lake Elsinore
- Fire Station No. 59—21510 Pinewood Street, Perris
- Fire Station No. 74—35420 Calle Grande, Lake Elsinore
- Fire Station No. 85—29405 Grand Avenue, Lake Elsinore
- Fire Station No. 90—333 Placentia Avenue, Perris
- Fire Station No. 94—22770 Railroad Canyon Road, Lake Elsinore

3.21.3 - Regulatory Framework

State

California Public Resources Code

The California Public Resources Code includes fire safety regulations that restrict the use of equipment that may produce a spark, flame, or fire; require the use of spark arrestors⁵ on construction equipment that use an internal combustion engine; specify requirements for the safe use of gasoline-powered tools in fire hazard areas; and specify fire suppression equipment that must be provided on-site for various types of work in fire-prone areas.

These regulations include the following:

- Earthmoving and portable equipment with internal combustion engines must be equipped with a spark arrestor to reduce the potential for igniting a wildland fire (Public Resources Code [PRC] § 4442);
- Appropriate fire suppression equipment must be maintained during the highest fire danger period—from April 1 to December 1 (PRC § 4428);
- On days when a burning permit is required, flammable materials must be removed to a distance of 10 feet from any equipment that could produce a spark, fire, or flame, and the construction contractor must maintain the appropriate fire suppression equipment (PRC § 4427); and
- On days when a burning permit is required, portable tools powered by gasoline-fueled internal combustion engines must not be used within 25 feet of any flammable materials (PRC § 4431).

California Code of Regulations, Title 8

The California Division of Occupational Safety and Health (Cal/OSHA) assumes primary responsibility for developing and enforcing workplace safety regulations. These regulations concern the use of hazardous materials in the workplace, as well as preparation of emergency action and fire prevention plans.

⁵ A spark arrestor is a device that prohibits exhaust gases from an internal combustion engine from passing through the impeller blades where they could cause a spark. A carbon trap is commonly used to retain carbon particles from the exhaust.

Local

Riverside County General Plan

The County addresses fire hazards in the General Plan, Chapter 6: Safety Element. The Safety Element outlines policies to eliminate earthquake-induced fire as a threat and to develop an integrated approach to minimizing the threat of wildland fires. This section sets forth the following goals and policies related to wildfire and wildfire hazards that are relevant to the proposed project or to buildout of the proposed project:⁶

Building Code and Performance Standards

Policy S 4.1 All development and construction within Fire Hazard Severity Zones shall be reviewed by the Riverside County Fire Department and Building and Safety Department for consistency with the following requirements before the issuance of any building permits:

- a) All proposed development and construction shall meet minimum state, county, and local standards and other legal requirements for fire safety, as defined in the Riverside County Building or Fire Codes, or by County zoning, or as dictated by the Building Official or the Transportation Land Management Agency, based on building type, design, occupancy, and use.
- b) In addition to the standards and guidelines of the California Building Code, California Fire Code, the Riverside County Code of Ordinances, Title 14 of the California Code of Regulations, and other appropriate fire safety provisions, developments shall incorporate additional standards for high-risk, high-occupancy, and dependent facilities where appropriate under the Riverside County Fire Code (Ordinance No. 787) Ordinance. These shall include assurance that structural and nonstructural architectural elements of the building will not impede emergency egress for fire safety staffing/personnel, equipment, and apparatus; nor hinder evacuation from fire, including potential blockage of stairways or fire doors.
- c) Proposed development and construction in Fire Hazard Severity Zones shall provide secondary public access, in accordance with Riverside County ordinances, where required. There shall be multiple points of ingress and egress that allow for emergency response vehicle access. Points of access shall also include visible street addresses and signs and sufficient water supplies, infrastructure for structural fire suppression, and other applicable local and state requirements.
- d) Proposed development and construction in Fire Hazard Severity Zones shall use single loaded roads to enhance fuel modification areas, unless otherwise determined by the Riverside County Fire Chief.
- e) Proposed development and construction in Fire Hazard Severity Zones shall provide a defensible space or fuel modification zones to be located, designed, constructed, and maintained to provide adequate defensibility from wildfires.

⁶ County of Riverside. 2021. Riverside County General Plan, Chapter 6: Safety Element. Website: https://planning.rctlma.org/Portals/14/genplan/2021/elements/Ch06_Safety_092821.pdf. Accessed January 12, 2022.

- f) Prior to the approval of all parcel maps and tentative maps, the County shall require, as a condition of approval and as feasible and appropriate, the developer meet or exceed the State Responsibility Area Fire Safe Regulations and the Fire Hazard Reduction Around Buildings and Structures Regulations, particularly those regarding road standards for ingress, egress, and fire equipment access (see Gov. Code, Section 66474.02.)
- g) Proposed development and construction of more than four residential units or more than 10,000 square feet of nonresidential space located in Very High Fire Hazard Severity Zones, or other appropriate zones as determined by the Riverside County Fire Department, shall submit and implement a fire protection plan as feasible and appropriate. This plan shall include provisions for roadways and access, firefighting infrastructure, signage, vegetation management, construction materials, and evacuations.

- Policy S 4.2** Require continued long-term operation and maintenance of fuel breaks, brush management, controlled burning, revegetation, and fire roads by Riverside County and private landowners.
- Policy S 4.3** Monitor fire-prevention measures (e.g., fuel reduction) through a site-specific fire-prevention plan to reduce long-term fire risks in Very High Fire Hazard Severity Zones.
- Policy S 4.4** Discourage development and activities in areas with limited water and access roads, unless adequate measures are implemented.
- Policy S 4.5** Require proposed development in High or Very High Fire Hazard Severity Zones be located where fire and emergency services are available or will be constructed as part of the proposed development activities, to the extent such locations are available. These services should meet the minimum response times as established by the Riverside County Fire Department.
- Policy S 4.6** Request that conceptual landscaping plans for development in Fire Hazard Severity Zones be reviewed by TLMA and Fire Department prior to the issuance of development permits. The conceptual landscaping plan of the proposed development should, at a minimum, include:
- a) Plant palette suitable for high fire hazard areas to reduce the risk of fire hazards.
 - b) Retention of existing natural vegetation to the maximum extent feasible.
 - c) Removal of on-site combustible plants.
- Policy S 4.7** Site design for development in Fire Hazard Severity Zones should be required to account for topographical conditions and reduce the increased risk for sites located near ridgelines, plateau escarpments, saddles, hillsides, peaks, or other areas where the terrain or topography affect its susceptibility to wildfires by:

- a) Providing fuel modification zones with removal of combustible vegetation while minimizing visual impacts and limiting soil erosion.
- b) Replacing combustible vegetation with fire resistant vegetation to stabilize slopes.
- c) Submitting topographic map with site-specific slope analysis.
- d) Submitting erosion and sedimentation control plans.
- e) Providing a setback from the edge of the fuel modification zones as deemed appropriate by the Fire Department.
- f) Minimizing disturbance of 25 percent or greater natural slopes.
- g) Or enacting other efforts as appropriate to provide comparable protection.

Policy S 4.8 Locate new critical public facilities outside of High or Very High Fire Hazard Severity Zones or other areas facing elevated risk of wildfire events. Critical facilities include emergency shelters, emergency command and communication facilities, and hospital and healthcare centers. If no feasible alternative site exists, ensure that these facilities incorporate all necessary protections to allow them to continue to serve community needs during and after disaster events.

Policy S 4.9 Site all new public facilities in areas outside of identified fire hazard severity zones and wildland-urban interface or fire threat areas, as feasible.

Policy S 4.10 Establish neighborhood and building design standards that minimize fire hazards in high fire hazard severity zones, as feasible.

Policy S 4.11 Collaborate with local governments to establish fire fuel management practices in local and regional parks and open spaces., as feasible.

Policy S 4.12 Identify existing public and private roadways in fire hazard areas not in compliance with contemporary fire-safe standards, including road standards, vegetation clearance, and other requirements of Sections 1273 and 1274 of the California Code of Regulations to the extent resources are available. Work at retrofitting County-owned roadways as needed to meet current standards and require private property owners to do the same, to the extent feasible and given the absence of other site constraints.

Riverside County Fire Department Fire Protection and Emergency Medical Services Strategic Master Plan

The RCFD Strategic Master Plan sets goals and priorities for the future.⁷ According to the Master Plan, the RCFD provides services from 93 fire stations throughout the service area. The RCFD has a goal of responding to 90 percent of incidents within 8 minutes.

⁷ Riverside County Fire Department (RCFD). 2009. Strategic Plan 2009–2029. Website: <http://www.rvcfire.org/stationsAndFunctions/AdminSppt/StrategicPlanning/Pages/default.aspx>. Accessed October 18, 2021.

2018 County of Riverside Local Hazard Mitigation Plan

The County of Riverside Emergency Management Department’s Local Hazard Mitigation Plan is designed to reduce risks, including but not limited to wildland fires.⁸ The plan identified wildland fires as one of the primary threats in Riverside County due to the presence of large amounts of timber and brush. The plan identified fire as the number one greatest threat to both the City of Lake Elsinore and the City of Perris.

Riverside County Emergency Operations Plan

The Riverside County Emergency Operations Plan (EOP) is designed as a reference tool for coordinating emergencies, whether it be a localized event or a catastrophic disaster. The EOP serves as the foundation for response and recovery operations for the County as it establishes roles and responsibilities, assigns tasks, and specifies policies and general procedures. The plan includes critical elements of the Standardized Emergency Management System, the National Incident Management System, the Incident Command System, and the National Response Framework. The EOP assists with facilitating an effective response to any emergency by providing a platform that encourages collaboration between the County of Riverside Operational Area (OA) Emergency Operations Center (EOC), first responders, and support agencies.⁹

Ordinance No. 695

Riverside County Ordinance No. 695 applies to the abatement of hazardous vegetation on unimproved property.¹⁰ Ordinance No. 695 requires owners and occupants of land in unincorporated Riverside County to abate dry grass, Russian thistle, trees, or flammable vegetation that constitutes a fire hazard that could endanger or damage neighboring property.

Ordinance No. 787

Riverside County Ordinance No. 787 (as amended through 787.7) is based on the California Building Code and outlines fire protection standards for the safety, health, and welfare of the citizens of the County. Items regulated by Ordinance No. 787 include, but are not limited to, storage of hazardous materials, water supply, and brush clearance.

Elsinore Area Plan

The Elsinore Area Plan (ELAP) contains the following policy relevant to wildfire hazards:

ELAP 19.1 All proposed development located within High or Very High Fire Hazard Severity Zones shall protect life and property from wildfire hazards through adherence to policies identified in the Fire Hazards (Building Code and Performance Standards), Wind-Related Hazards and General and Long-Range Fire Safety Planning sections of the General Plan Safety Element.

⁸ County of Riverside. 2018. Emergency Management Department. Multi-Jurisdictional Local Hazard Mitigation Plan, July 2018. Website: <https://rivcoemd.org/LHMP>. Accessed October 27, 2021.

⁹ County of Riverside. 2019. Emergency Management Department. Riverside County Emergency Operations Plan. Website: <http://riversidecountyca.iqm2.com/Citizens/FileOpen.aspx?Type=4&ID=23364>. Accessed August 17, 2021.

¹⁰ County of Riverside. 2009. Ordinance No. 695 (as amended through 695.4) an ordinance of the County of Riverside amending Ordinance No. 695 requiring the abatement of hazardous vegetation. Website: <https://www.rvcfire.org/stationsAndFunctions/HazardReduction/Documents/695.pdf>. Accessed October 18, 2021.

Mead Valley Area Plan

The Mead Valley Area Plan (MVAP) contains the following policy relevant to wildfire hazards:

- MVAP 19.1** All proposed development located within High or Very High Fire Hazard Severity Zones shall protect life and property from wildfire hazards through adherence to policies identified in the Fire Hazards (Building Code and Performance Standards), Wind-Related Hazards and General and Long-Range Fire Safety Planning sections of the General Plan Safety Element.

Highway 74 Community Plan

The Highway 74 Community Plan does not set forth any additional goals or policies related to wildfire.

3.21.4 - Methodology

Descriptions and analysis in this section are based in part on a search of public records and databases, information provided by the General Plan related to wildfire, and other relevant materials.

3.21.5 - Thresholds of Significance

Section XX of Appendix G to the California Environmental Quality Act (CEQA) Guidelines identifies the following threshold questions for evaluating impacts due to wildfire:

If located in or near State Responsibility Areas or lands classified as very high fire hazard severity zones, would the project:

- a) Substantially impair an adopted emergency response plan or emergency evacuation plan?
- b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risk, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?
- c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines, or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?
- d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

The following thresholds are derived from the County's Environmental Assessment Checklist, and are supplemented by the thresholds listed in Appendix G to the State CEQA Guidelines, in order to evaluate the significance of the proposed project's impacts due to wildfires.

44. Wildfire Impacts

If located in or near a State Responsibility Area (SRA), lands classified as very high fire hazard severity zone, or other hazardous fire areas that may be designated by the Fire Chief, would the project:

- a) Substantially impair an adopted emergency response plan or emergency evacuation plan?
- b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?
- c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines, or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?
- d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?
- e) Expose people or structures either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?

3.21.6 - Project Impacts and Mitigation Measures

This section discusses potential impacts associated with the development of the proposed project and provides mitigation measures where appropriate.

Wildfire Impacts

Impact WILD-44(a): The proposed project would not substantially impair an adopted emergency response plan or emergency evacuation plan.

Impact Analysis

The proposed project would be consistent with the local emergency response plans as well as the General Plan Safety Element. The proposed project includes a series of General Plan Amendments and does not propose any physical elements that would block or change identified evacuation routes or evacuation plan features. The General Plan Safety Element provides information, policies, and programs directed toward reducing the potential for human injury and loss of life and minimizing property damage and economic and social disruption due to natural and human-made hazards. For example, General Plan Policy S 4.1 requires fire department review to ensure development and construction meets certain standards prior to issuance of a building permit. General Plan Policy S 4.2 through Policy S 4.12 require additional measures such as fuel breaks and vegetation management, appropriate siting, adequate emergency services, landscaping to reduce hazards, certain building and design standards, fuel management practices, roadway compliance, and site design that accounts for terrain that could affect susceptibility to wildfires.

Any construction activities associated with future buildout of the proposed project would be required to comply with the California Fire Code’s specifications for access and building materials such as tile or other fire-resistant roofing. As part of the County’s discretionary review process, the County would review the future projects’ application materials to ensure that appropriate emergency ingress and egress would be available to and from the project site and that circulation on the project site was adequate for emergency vehicles. The proposed project would not interfere with any emergency evacuation plan or hinder evacuation along Highway 74 or otherwise conflict with an emergency response plan. Therefore, impacts would be less than significant.

Level of Significance

Less than significant impact.

Mitigation Measures

No mitigation required.

Impact WILD-44(b): The proposed project would not, due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire.

Impact Analysis

Fire hazard severity zones are delineated at a State level, via the SRA, and at a local level, via the LRA. As shown in Exhibit 3.19-1, much of the planning area is designated as Moderate, High, and Very High Fire Hazard Severity zones.¹¹ Much of the County is at risk from wildland fire. The County’s hillside terrain, which occurs in and around the planning area, is at particular risk. Human-created factors can increase the risks of fire and damages from fire.

While the proposed project would allow future development adjacent to and within fire hazard zones, the County’s Building and Safety Department has developed a number of protocols and regulations in order to protect development and reduce fire hazard impacts within these areas. The County’s Local Hazard Mitigation Plan provides a variety of mitigation strategies to reduce the risks associated with wildland fires. These strategies include wildfire preparedness, prevention, and design features, such as the creation of wildfire protection zones that reduce the risks to citizens and firefighters from fire dangers; maintenance of fire roads throughout the County to provide Fire Department access; fuel reduction projects throughout the County; construction and design standards that include fire prevention features; long-range fire safe planning through code adoption/policies consistent with the Safety Element; maintenance of roads and trees for fire suppression; and more.¹² Additional regulations include Riverside County Ordinance No. 787, which adopts the Uniform Fire Code that requires future development to adhere to standards developed to reduce loss of life and property due to fire risk, and Riverside County Ordinance No. 695, which requires the abatement of hazardous vegetation. Structures constructed as part of buildout of the proposed project would be required to comply with the California Fire Code’s requirements for

¹¹ California Department of Forestry and Fire Protection (CAL FIRE). 2020. Fire Hazard Severity Zones Maps. Western Riverside County: Fire Hazard Severity Zones in SRA. Website: <https://osfm.fire.ca.gov/divisions/wildfire-planning-engineering/wildland-hazards-building-codes/fire-hazard-severity-zones-maps/>. Accessed October 27, 2021.

¹² County of Riverside. 2018. Emergency Management Department. Multi-Jurisdictional Local Hazard Mitigation Plan, July 2018. Website: <https://rivcoemd.org/LHMP>. Accessed January 12, 2022.

emergency access and types of building materials. The proposed project would also comply with the General Plan requirements.

Furthermore, all future discretionary development applications are sent to the RCFD's Office of the County Fire Marshal for review and comment on each individual development's site-specific project design and for recommendations on fire safety and emergency access.¹³ Each site-specific project design would be modified as needed prior to approval to ensure compliance with RCFD requirements to ensure that future development would not exacerbate wildfire risks due to slope, prevailing winds, or other factors and, thereby, would not expose future occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. The proposed project would allow development clustering to retain slopes in natural open space whenever possible. As shown in Chapter 2 Table 2-3, the proposed project would re-designate land uses, resulting in an overall reduction of Very Low Density Residential uses and an increase of Medium Density Residential, High Density Residential, and Very High Density Residential uses as compared to the existing land use designations. Studies suggest that fire spread and structure loss is more likely to occur in low- to intermediate-density development located among flammable vegetation; therefore clustering and an increase of density would likely reduce fire risk.¹⁴ Therefore, impacts would be less than significant.

Level of Significance

Less than significant impact.

Mitigation Measures

None required.

Impact WILD-44(c): The proposed project would not require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines, or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment.

Impact Analysis

The planning area is mostly developed with existing roads, power lines, utilities, and other infrastructure. Additionally, undeveloped hillside areas that are at risk of fire exist within the planning area. The proposed project would alter development types in the planning area but would not be anticipated to result in a significant increase in the installation or maintenance of new infrastructure. The planning area currently contains a well-developed regional water, sewer, and storm network that, in general, has sufficient capacity to accommodate the proposed land uses and densities without exacerbating fire risk.

Any construction activities associated with future buildout of the proposed project, including new infrastructure improvements, would be required to comply with the California Fire Code's specifications for access and building materials, such as tile or other fire-resistant roofing, and would

¹³ Riverside County Fire. 2021. Office of the County Fire Marshal. Website: <https://www.rvcfire.org/our-departments/fire-marshal>. Accessed December 20, 2022.

¹⁴ Syphard, A.D., Keeley, J.E., Massada, A.B. et al. 2012. Housing Arrangement and Location Determine the Likelihood of Housing Loss Due to Wildfire. March 28. Website: <https://doi.org/10.1371/journal.pone.0033954>. Accessed December 20, 2022.

be required to comply with required fire protection measures in the General Plan, the ELAP, the MVAP, the Local Hazard Mitigation Plan, and the County’s EOP. Specifically, the Local Hazard Mitigation Plan would require infrastructure improvements to include fire prevention features and fuel reduction, long-range fire safe planning through code adoption/policies consistent with the Safety Element of the General Plan, maintenance of fire roads throughout the County to provide Fire Department access, and maintenance of roads and trees for fire suppression. Furthermore, all future discretionary development applications are sent to the RCFD Office of the County Fire Marshal for review and comment on each individual development’s site-specific project design and for recommendations on fire safety and emergency access. Therefore, while project specific infrastructure may be required, its implementation or maintenance would not be expected to exacerbate fire risk due to compliance with existing fire risk reduction regulations and impacts would be less than significant.

Level of Significance

Less than significant impact.

Mitigation Measures

No mitigation required.

Impact WILD-44(d): 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.

Impact Analysis

As discussed above, all future discretionary development applications would be sent to the RCFD Office of the County Fire Marshal for review and comment on each individual development’s site-specific project design and for recommendations on fire safety and emergency access. Each site-specific project design would be modified as needed prior to approval to ensure compliance with Fire Department requirements.

Additionally, compliance with General Plan Policy LU 12.1, described below, would apply the following policies to areas where development is allowed and that contain natural slopes, canyons, or other significant elevation changes, regardless of land use designation:

- Require that hillside development minimize alteration of the natural landforms and natural vegetation.
- Allow development clustering to retain slopes in natural open space whenever possible.
- Require that areas with slope be developed in a manner to minimize the hazards from erosion and slope failures.
- Restrict development on visually significant ridgelines, canyon edges, and hilltops through sensitive siting and appropriate landscaping to ensure development is visually unobtrusive.
- Require hillside adaptive construction techniques, such as post and beam construction, and special foundations for development when the need is identified in a soils and geology report which has been accepted by the County of Riverside.

- In areas at risk of flooding, limit grading, cut, and fill to the amount necessary to provide stable areas for structural foundations, street right-of-way, parking facilities, and other intended uses.

Implementation of this policy would help to ensure slope stability and reduce risk of flooding both during project operation and post-wildfire. Furthermore, future development in the project area would be required to implement the 2015 County of Riverside General Plan Environmental Impact Report (General Plan EIR) Mitigation Measures related to flood risk. Specifically, implementation of Mitigation Measures 4.9.1A, 4.9.1B, 4.9.1C, 4.9.1D, 4.9.2A, 4.9.2B, 4.9.2C, and 4.9.2D would ensure that future development projects in the project area would not expose people or structures to significant flood risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes. Impacts would be less than significant.

Level of Significance

Less than significant impact.

Mitigation Measures

No mitigation required.

Impact WILD-44(e): 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.

Impact Analysis

As discussed above, the County’s Building and Safety Department has developed a number of protocols and regulations in order to protect development and reduce fire hazard impacts within these areas. Compliance with Riverside County Ordinance No. 787 and No. 695, as well as General Plan Policies S 4.1 through S 4.12, the RCFD Strategic Master Plan, Local Hazard Mitigation Plan, EOP, and the relevant ELAP and MVAP policies would reduce potentially significant impact related to exposure of people or structures to risk of loss, injury, or death involving wildland fires to a less than significant level.

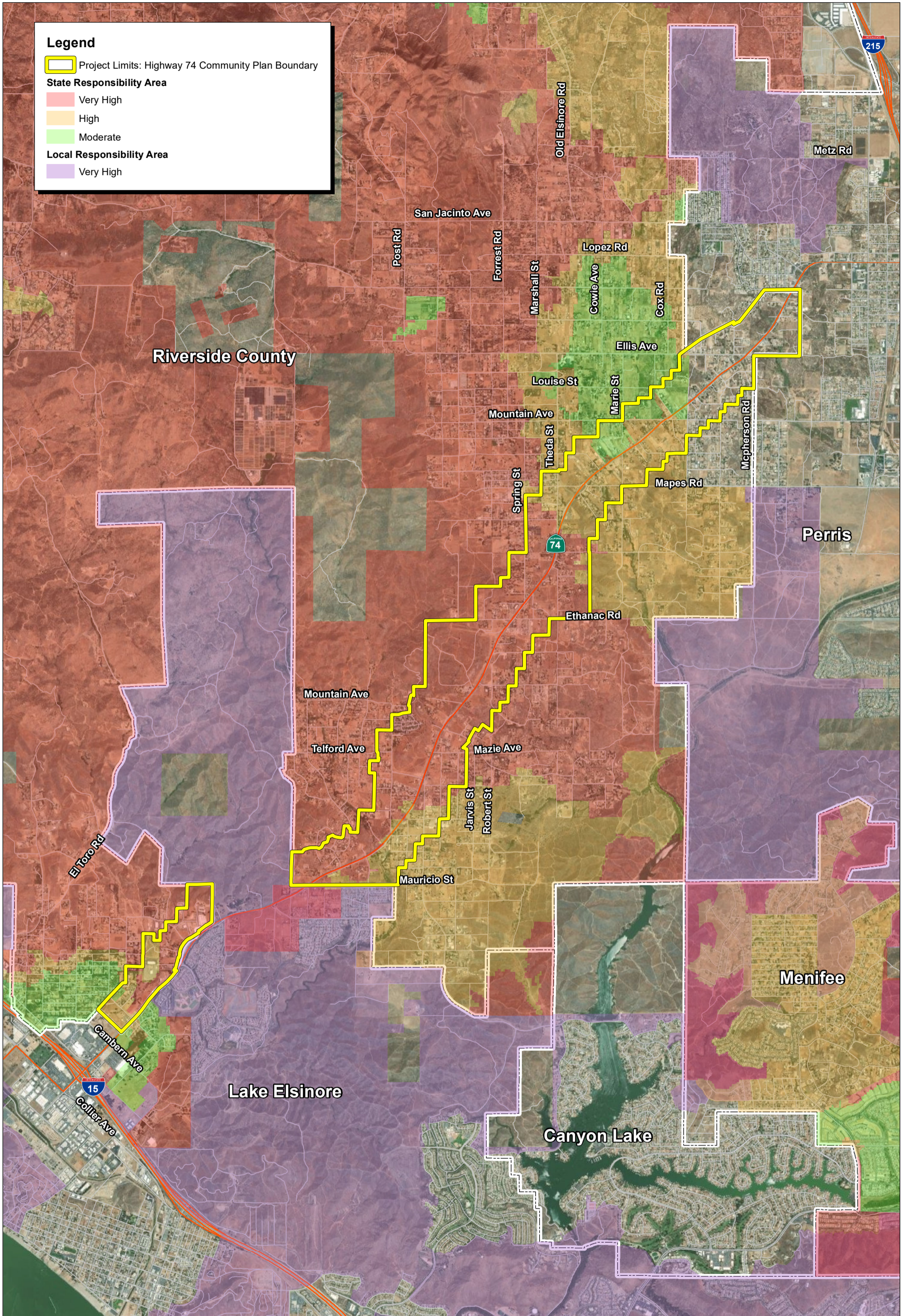
All discretionary development applications are sent to the RCFD for review and comment on each individual development’s site-specific project design and for recommendations on fire safety and emergency access. As needed, future project designs would be modified prior to approval to ensure compliance with RCFD requirements, which would ensure that impacts related to risk of loss, injury, or death due to wildland fire are less than significant.

Level of Significance

Less than significant impact.

Mitigation Measures

No mitigation required.



Source: ESRI Aerial Imagery, Riverside County GIS Data.



Exhibit 3.21-1
State and Local Responsibility Areas

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CHAPTER 4: CUMULATIVE EFFECTS

4.1 - Introduction

California Environmental Quality Act (CEQA) Guidelines Section 15130 requires the consideration of cumulative impacts within an Environmental Impact Report (EIR) when a project’s incremental effects are cumulatively considerable. Cumulatively considerable means that “. . . the incremental effects of an individual project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.” In identifying projects that may contribute to cumulative impacts, the CEQA Guidelines allow the use of a list of past, present, and reasonably anticipated future projects, producing related or cumulative impacts, including those which are outside of the control of the lead agency.

In accordance with State CEQA Guidelines Section 15130(b), “. . . the discussion of cumulative impacts shall reflect the severity of the impacts and their likelihood of occurrence, the discussion need not provide as great [a level of] detail as is provided for the effects attributable to the project alone.” The discussion should be guided by standards of practicality and reasonableness, and it should focus on the cumulative impact to which the identified other projects contribute rather than on the attributes of other projects that do not contribute to the cumulative impact.

The proposed project’s cumulative impacts were considered in conjunction with other proposed and approved projects in the City of Perris, City of Lake Elsinore, and the County of Riverside along Highway 74. Table 4-1 provides a list of the projects considered in the cumulative analysis. Exhibit 4-1 shows the general location of these projects.

Table 4-1: Cumulative Projects

No.	Project	Characteristics	Project Development			
			Units	Square Footage	Location	Status
County of Riverside						
1	Temescal Valley Commerce Center	Industrial Development	–	181,495 square feet	east of Interstate 15 (I-15), south of State Route (SR) 91, and northwest of Highway 74	Planned
2	Motorcross Park	Recreational Motorcross Facility	–	90.56 acres	21220 Ethanac Road	Approved in November 2021
3	Industrial Park	Industrial	–	7.14 acres	North of Highway 74 and east of Crumpton Road	Planned

No.	Project	Characteristics	Project Development			
			Units	Square Footage	Location	Status
4	Warehouse/ Distribution/ Manufacturing Development	Industrial	–	347,872 square feet	North of Oleander Avenue, east of Decker Road, and south of Rowland Lane	Approved in September 2021
5	Highway 74 Multimodal Transit Plan	Multimodal Transit Plan identifying transportation improvements	–	–	Along Highway 74 between City of Perris and City of Lake Elsinore	Planned
6	Ethanac Expressway Corridor	Arterial route connecting I-15 to I-215	–	–	Between I-15 and I-215	Planned
7	Valley-Ivyglen Subtransmission Project	Subtransmission Line	–	–	Along some parts of I-15, Highway 74, and throughout Lake Elsinore, Menifee, Perris, and unincorporated Riverside County	Under Construction
City of Perris						
8	O'Reilly Auto Parts	Retail Development	–	7,735 square feet	South of 4 th Street between G Street and Wilkerson Avenue	Approved
9	Industrial Warehouse	Industrial Development	–	2.3 million square feet	Redlands Avenue and Ellis Avenue	Approved
10	Sterling Villas Senior Multi-family Project	Residential	429 units	–	Murrieta Road and Nuevo Road	Approved
11	Pacific Avenue Single-family Residential Development	Residential	131 units	–	Orange Street and Medical Center Drive	Under Construction

No.	Project	Characteristics	Project Development			
			Units	Square Footage	Location	Status
12	Green Valley Single-family and Multi-family Development	Residential	623 single-family units 842 multi-family units	–	Ethanac Road and Goetz Road	Under Construction
City of Lake Elsinore						
13	Lake and Mountain Commercial Center	Commercial Retail Center	–	32,695 square feet	Northwest corner of Mountain Street and Lake Street	Approved January 2022
14	Lakeview Plaza	Neighborhood Retail Center	–	43,120 square feet	northeast of Lakeshore Drive, northwest of Manning Street, and southwest of Ryan Avenue	Approved June 2021; Construction to begin in early 2022
15	Riverside/Lincoln Commercial Project	Commercial Development	–	6.36 acres	southwest corner of Lincoln Street and Riverside Drive	Approved January 2021
16	I-15 Railroad Canyon Road Interchange Project	Roadway Improvement	–	–	I-15 Railroad Canyon Road	Under Construction

Sources:

1. County of Riverside. 2022. Major Planning Efforts in Process. Website: <https://planning.rctlma.org/Home/Major-Planning-Efforts-In-Process>. Accessed February 22, 2022.
2. Riverside County Transportation Commission. 2022. Interstate 15 Railroad Canyon Road Interchange Project. Website: <https://www.rctc.org/projects/i15-railroad-canyon-interchange-project/>. Accessed February 22, 2022.
3. City of Lake Elsinore. 2022. CEQA Documents Available for Public Review. Website: <http://www.lake-elsinore.org/city-hall/city-departments/community-development/planning/ceqa-documents-available-for-public-review>. Accessed February 22, 2022.
4. City of Perris. 2021. Planning Commission – Current Projects. Website: <https://www.cityofperris.org/government/planning-commission/current-projects>. Accessed February 22, 2022.

4.2 - Cumulative Impact Analysis

The cumulative impact analysis below is guided by the requirements of State CEQA Guidelines Section 15130. Key principles established by this section include:

- A cumulative impact only occurs from impacts caused by the proposed project and other projects. An EIR should not discuss impacts that do not result from the proposed project.
- When the combined cumulative impact from the increment associated with the proposed project and other projects is not significant, an EIR need only briefly explain why the impact is not significant; detailed explanation is not required.
- An EIR may determine that a project’s contribution to a cumulative effect impact would be rendered less than cumulatively considerable if a project is required to implement or fund its fair share of mitigation intended to alleviate the cumulative impact.

The cumulative impact analysis follows these principles as the basis for determining the significance of the proposed project’s cumulative contribution to various impacts.

4.2.1 - Aesthetics, Light, and Glare

The geographic scope of the cumulative aesthetics, light, and glare analysis is the planning area and the immediately surrounding area from which the planning area is publicly visible.

Much of the planning area is characterized by hilly terrain and boulder clusters that can be considered scenic resources. Scenic backdrops include hillsides and ridges that rise above urban or rural areas or highways. The Santa Ana Mountains are the primary backdrop to the southwestern portion of the planning area. Scenic vistas are points, accessible to the general public that provide a view of the countryside. Highway 74 is a State-designated Scenic Highway. Cumulative development would be required to comply with the overall land use vision, design review regulations and policies in local and regional planning documents to ensure that aesthetic impacts are less than significant. Similarly, potential cumulative aesthetic impacts to eligible scenic highways would be reduced to below a level of significance through participation in the State Scenic Highway program and local ordinances and policies. Additionally, cumulative projects within the City of Perris, City of Lake Elsinore, and the County of Riverside would be required to comply with similar development guidelines and would be reviewed by the applicable City or the County to ensure consistency with architectural standards, viewshed policies, and lighting requirements. For these reasons, cumulative impacts to aesthetics, State Scenic Highways, or nighttime lighting and daytime glare would be less than significant. Moreover, the proposed project’s incremental contribution to less than significant cumulative impacts would not be significant.

The proposed project, in conjunction with the projects listed in Table 4-1 and shown in Exhibit 4-1, would result in changes related to views of scenic vistas, views from Highway 74, visual character, and light and glare. However, as discussed below, the incremental changes that would occur relative to the existing conditions would not be cumulatively considerable, because of the extent and nature of existing development in the planning area.

As detailed in Section 3.1, Aesthetics, Light, and Glare, the proposed project would not substantially alter the existing visual character of the planning area. The proposed project includes a General Plan Amendment (GPA No. 1205) and Zone Consistency Program that would establish consistency with existing development within the planning area and surroundings and, therefore, would not significantly alter the viewshed from the planning area. The proposed project would emphasize

cohesive development designs that would connect the existing scattered commercial and industrial uses within the planning area.

Furthermore, buildout of the proposed project has the potential to result in an alteration of the visual character within the plan boundaries. However, this change in and of itself is not considered significant unless the quality of scenic resources would be substantially diminished. The proposed project is a policy document that supplements the local General Plan with goals, policies and programs that are specific and unique to the community or area that it covers. Therefore, the proposed project is designed to guide development that would enhance the aesthetic value of the planning area. Any future project design that is proposed within the planning area boundaries would be subject to applicable environmental analysis, review, and approval, including review related to design standards and guidelines, thereby ensuring that future development would be visually compatible with surrounding land uses. In regard to light and glare, the proposed project would not substantially alter existing conditions and would not present substantial new sources of light and glare, since the proposed project, the General Plan, and applicable zoning restrictions have established standards for new sources of light and glare that are intended to prevent adverse impacts to daytime or nighttime views. As such, no substantial increase in light and glare levels are anticipated as a result of the proposed project.

Therefore, the proposed project, in conjunction with other planned and approved projects, would not have a cumulatively significant impact relating to aesthetics, light, and glare.

4.2.2 - Agriculture and Forest Resources

The geographic scope of the cumulative agriculture and forest resources analysis is western Riverside County. As described in Section 3.2, Agriculture and Forestry Resources, the planning area does not contain lands designated as Prime Farmland, or Unique Farmland, or Farmland of Statewide Importance. The planning area has very few areas designated for agriculture and there are no areas currently used for traditional agricultural such as row crops. For these reasons, cumulative impacts to agriculture and forest resources would be less than significant.

Moreover, the proposed project's incremental contribution to less than significant cumulative impacts would not be significant. Based on the section analysis, the proposed project would not directly result in potential impacts to agricultural resources. Therefore, implementation of the proposed project in conjunction with the projects listed in Table 4-1 and shown in Exhibit 4-1 would not result in any impacts to agricultural or forestry resources and the project would not contribute to a cumulatively considerable impact to these resources.

4.2.3 - Air Quality

Criteria Pollutants

The geographic scope of the cumulative air quality emissions analysis is the South Coast Air Basin (SoCAB). Air quality is impacted by topography, dominant air flows, atmospheric inversions, location, and season; therefore, using the SoCAB represents the area most likely to be impacted by air emissions. For the issue of odors, the cumulative study area includes the planning area and lands in close proximity, as odors diminish rapidly with distance from the source.

All of the projects listed in Table 4-1 and shown in Exhibit 4-1 would result in new air emissions during construction and/or during project operations. The SoCAB is currently in nonattainment of the State standards for Ozone, PM₁₀, and PM_{2.5}, and the federal standards for Ozone and PM_{2.5}. Therefore, there is an existing cumulatively significant air quality impact with respect to these pollutants.

As discussed in Section 3-3, Air Quality, Impact AIR-6a, the proposed project would generate regional or localized construction or operational emissions that would exceed South Coast Air Quality Management District (SCAQMD) thresholds of significance, and would therefore have a potentially significant cumulative impact on air quality in the region. CEQA Guidelines Section 15206(b) states that a proposed project is of statewide, regional, or area-wide significance if the project is a residential development or more than 500 dwelling units or a commercial office building of 250,000 square feet or more or that employs 1,000 or more employees. Based on this criteria, the proposed project is of statewide, regional, or area-wide significance. Additionally, the proposed project has the potential to significantly alter the demographic projections beyond what is accounted for in the current Air Quality Management Plan (AQMP). Since the proposed project would include a GPA, the proposed project would not be consistent with the growth assumptions within the current AQMP.

The implementation of the proposed project would represent a substantial increase in emissions compared to existing conditions. Implementation of Mitigation Measures (MM) AIR-6a-1 through MM AIR-6a-15 would be required to reduce regional and localized emissions to the extent feasible. However, the estimated construction emissions and long-term emissions generated under full buildout of the proposed project would exceed the SCAQMD's regional significance thresholds and would cumulatively contribute to the nonattainment designations in the SoCAB. In addition, implementation of the proposed project would contribute to exceedances of the current population and employment estimates for the planning area. Therefore, the proposed project would be considered inconsistent with the AQMP, resulting in a significant impact in this regard.

Components of and improvements proposed under the proposed project would contribute to minimize criteria air pollutant emissions from transportation and energy use. However, given the potential increase in growth and associated increase in criteria air pollutant emissions, the project would continue to be inconsistent with the assumptions in the AQMP. Existing Riverside County General Plan policies and mitigation measures required as a part of the most recent General Plan Update EIR would help minimize construction emissions from projects in the planning area. To further reduce the impacts of future development projects envisioned under the proposed project, MM AIR-6a-1 through MM AIR-6a-7 are required. These mitigation measures will reduce emissions of volatile organic compounds (VOCs), nitrogen oxide (NO_x), PM₁₀, and PM_{2.5} to the extent feasible; however, due to the size of the proposed project and the potential for overlapping construction activities, future development projects could still potentially exceed the SCAQMD regional thresholds, even with the implementation of mitigation. Therefore, project-related construction activities would result in significant regional air quality impacts. Additionally, due to the magnitude of the proposed growth, operation of the land uses accommodated under the proposed project at buildout would generate air pollutant emissions that exceed SCAQMD's regional significance thresholds for VOC, NO_x, CO, PM₁₀, and PM_{2.5} at full buildout. Emissions of VOC and NO_x that exceed the SCAQMD regional threshold would cumulatively contribute to the O₃ nonattainment designation

of the SoCAB. Emissions of NO_x that exceed SCAQMD's regional significance thresholds would cumulatively contribute to the O₃ and particulate matter nonattainment designations of the SoCAB. Emissions of direct PM₁₀ and PM_{2.5} would contribute to the PM_{2.5} nonattainment designations. Therefore, the project would result in a potentially significant impact because it would significantly contribute to the nonattainment designations of the SoCAB. No mitigation measures are available that would reduce cumulative impacts below SCAQMD's thresholds. Therefore, despite adherence to the applicable mitigation measures, Impact AIR-6b would remain significant and unavoidable. As such, the proposed project, in conjunction with other projects, would have a significant and unavoidable impact with respect to SCAQMD regional thresholds during construction and operation. The proposed project's contribution would be cumulatively considerable.

As discussed in Section 3-3, Air Quality, Impact AIR-6c, construction and operation of future developments envisioned under the proposed project could expose sensitive receptors to significant quantities of criteria and toxic air contaminants even with the implementation of mitigation. Compliance with existing regulatory programs, existing General Plan policies and mitigation measures, and MM AIR-6a-1 through MM AIR-6a-16 will serve to reduce the impacts of the proposed project to the extent feasible. However, even with the implementation of mitigation, the impacts of the proposed project remain significant and unavoidable. As such, the proposed project, in conjunction with other projects, would have a significant and unavoidable impact with respect to exposing sensitive receptors to criteria and toxic air contaminants. The proposed project's contribution would be cumulatively considerable.

Impacts related to odor or other emissions would be less than significant.

4.2.4 - Biological Resources

The geographic scope of the cumulative biological resources analysis is the region surrounding the proposed project's planning area, which is mostly built out and is considered an urban environment. As described in Section 3.3, Biological Resources, the habitat types present within the planning area includes coastal sage scrub habitat, developed/disturbed land, grassland, and riparian communities.

The planning area lies within the boundaries of the Multiple Species Habitat Conservation Plan (MSHCP). Therefore, any development within the planning area would be required to demonstrate consistency with the MSHCP, including compliance with applicable MSHCP requirements. Future projects would be required to submit an MSHCP Consistency Analysis report to the County in order to document the project's consistency with the goals, objectives, and requirements of the MSHCP. The project applicants for all development projects implemented pursuant to the proposed project would be required to coordinate with the County and the Western Riverside County Regional Riverside Conservation Authority to submit all applicable forms, fees, and/or technical reports. Development activities associated with other cumulative projects in the region, including those projects listed in Table 4-1 and shown in Exhibit 4-1, are located on sites with similar biological attributes and, therefore, may impact biological resources including special-status plant and wildlife species if present. Future development from the proposed project and cumulative projects are required to comply with all applicable federal, State, and local regulations related to biological resources. Standard pre-construction surveys and, if necessary, avoidance or relocation procedures

would be required for any project with the potential to affect biological resources. For these reasons, cumulative impacts to biological resources would be less than significant.

Moreover, the proposed project's incremental contribution to less than significant cumulative impacts would not be significant. In addition, to avoid impacts to State- or federally listed and non-listed species, implementation of MM BIO-7b would require future projects to prepare biological studies to evaluate and mitigate potential impacts to sensitive biological resources. Further, MM BIO-7f-1 and MM BIO-7f-2 would be implemented to reduce potential impacts to riparian habitat, natural communities, and State- or federally protected waters or wetlands to less than significant levels. Therefore, as the proposed project and future projects implemented in accordance with the Highway 74 Community Plan would be required to implement MM BIO-7b, MM BIO-7f-1, and MM BIO-7f-2, the proposed project would not directly result in potential impacts to biological resources and would not contribute to a cumulatively considerable impact to these resources.

Because of the urban, built-up nature of the planning area and the surrounding region, the proposed project and other cumulative projects within the City of Perris, City of Lake Elsinore, and the County of Riverside would be required to comply with similar development guidelines and would be reviewed by the applicable City or the County to ensure consistency with applicable federal, State, and local regulations and provisions of adopted conservation plans. Therefore, the proposed project, in conjunction with other cumulative projects, would not have cumulatively considerable impacts on biological resources. As a result, there is no potential for any other significant individual or cumulative biological resource impacts.

4.2.5 - Cultural Resources

Cultural resource impacts tend to be localized because the integrity of any given resource depends on what occurs only in the immediate vicinity around that resource, such as disruption of soils. For this reason, the geographic scope of the cumulative cultural resource analysis is the areas within 500 feet of the proposed project's boundaries.

The planning area and areas within 500 feet of its boundaries are mostly built out and considered an urban environment. As described in Section 3.4, Cultural Resources, a records search of the Eastern Information Center (EIC) indicated that 213 cultural resources have been recorded within a 1-mile search radius. Of these, 66 are located within the boundaries of the planning area. Of the area-specific survey reports, 106 are on file with the EIC that address areas within the 1-mile search radius, 17 of which address portions of the planning area, indicating that segments have been previously evaluated. Known historic buildings, districts, and resource sites are located throughout the planning area. Additional undesignated sites and potentially unidentified sites exist within the planning area as well. Additionally, known archaeological resource sites are located within the planning area, and it is expected that additional undiscovered sites may exist in the planning area as well. Based on a review of information available at the EIC, only a small portion of the planning area has been previously surveyed for archaeological resources. While the proposed project does not directly propose any adverse changes to any historical resources, future development allowed under the proposed project could affect known resources, or previously unidentified or undesignated resources.

Cumulative projects would be required to comply with applicable policies and programs and adhere to the rules and regulations in the Municipal Code that protect cultural resources. Cumulative projects would also be required to comply federal, State, and local policies that protect cultural resources, including Section 15064.5 of the State CEQA Guidelines, and Sections 5024.1 and 5097 of the Public Resources Code. Accordingly, because cumulative development would be required to comply with long-term planning documents, and regulatory agency guidance establishing policies (including, but not limited to, evaluation requirements and inadvertent discovery procedures) that reduce impacts to potential cultural resources, cumulative impacts would be less than significant.

While the proposed project does not directly propose any adverse changes to any cultural resources, future development allowed under the plan could affect known or previously unidentified resources. Potential cumulative impacts would be mitigated at an individual project level by adherence to applicable local State and federal laws and regulations, as well as City and County laws, regulations, and conditions of approval as discussed in Section 3.5. Therefore, the proposed project would not directly result in potential impacts to cultural resources and would not contribute to a cumulatively considerable impact to these resources.

Nonetheless, construction activities associated with the proposed project, as well as other cumulative projects in the vicinity, including those projects listed in Table 4-1 and shown in Exhibit 4-1, would result in ground-disturbing activities that may encounter previously undiscovered cultural resources. The implementation of the aforementioned conditions of approval would ensure undiscovered cultural resources are not adversely affected by cumulative project-related construction activities, which would prevent the destruction or degradation of potentially significant cultural resources within the geographic scope. Therefore, the proposed project, in conjunction with other planned and approved projects, would not have a cumulatively significant impact related to cultural resources .

4.2.6 - Energy

The geographic scope of the cumulative energy analysis is the Pacific Gas and Electric Company (PG&E) service area. PG&E serves 5.3 million electrical customers in 47 counties of California and 4.4 million natural gas customers in 39 counties of California. All cumulative projects would be required to comply with city ordinances and County policies that address energy conservation and energy efficiency, such as complying with the latest California Energy Code and Title 24 standards. Accordingly, potential cumulative impacts would be less than significant. Moreover, the proposed project would not have a significant incremental contribution to cumulative impacts.

The proposed project would require an estimated 13.7 million kWh of electricity and 168.0 million British Thermal Unit (BTU) of natural gas on an annual basis. Development associated with the proposed project, as well as development associated with the cumulative projects identified in Table 4-1, would be designed in accordance with Title 24, California's Energy Efficiency Standards for Residential and Nonresidential Buildings. These standards include minimum energy efficiency requirements related to building envelope, mechanical systems (e.g., HVAC and water heating systems), indoor and outdoor lighting, and illuminated signs. The incorporation of the Title 24 standards into the proposed project and cumulative projects would ensure that implementation of these projects would not result in the inefficient, unnecessary, or wasteful consumption of energy.

Therefore, the proposed project, in conjunction with other planned and approved projects, would not have a cumulatively significant impact related to energy consumption.

4.2.7 - Geology and Soils

Adverse effects associated with geologic, soil, and seismic hazards tend to be localized, and the area near the proposed project boundaries would be the area most affected by project activities (generally within a 0.25-mile radius). Therefore, the geographic scope of the cumulative geology, soils, and seismicity analysis is the 0.25-mile vicinity of the proposed project.

The planning area associated with the proposed project is located within a seismically active region. Therefore, future development within the planning area would comply with State and local policies and regulations and adopt and enforce current building codes to minimize potential impacts related to seismic and geologic hazards. Other cumulative projects, such as those listed in Table 4-1 and shown in Exhibit 4-1, would be exposed to similar seismic hazards and, therefore, would implement site-specific recommendations for soil engineering and construction practices. Accordingly, potential cumulative impacts would be less than significant. Moreover, the proposed project would not directly result in potential impacts to geology and soils and would not contribute to a cumulatively considerable impact to these resources.

Regarding unstable soils, portions of the planning area are mapped as having a very low to moderate susceptibility to liquefaction and few areas could be susceptible to landslides, collapse, rockfall hazards, soils hazards, and slope hazards. With adherence to existing programs and policies that would reduce risk associated with these seismic hazards, as well as implementing MM GEO-12a which would require all seismic and geological hazards to be addressed through the preparation of site-specific geotechnical reports for all future development under the proposed project, potential impacts would be reduced to less than significant. For instance, each site-specific geotechnical report would include recommendations for each future development project to incorporate into construction and design plans to avoid and mitigate potential significant impacts related to seismic, soils, or other geological hazards that may arise. Other cumulative projects would be required to implement similar measures to ensure structural and foundational soundness. As such, the proposed project, in conjunction with other planned and approved projects, would not have a cumulatively significant impact associated with geological hazards.

4.2.8 - Greenhouse Gas Emissions

As described in Section 3.7, Greenhouse Gas Emissions, greenhouse gas (GHG) emissions related to implementation of the proposed project are not confined to a particular air basin but are dispersed worldwide. Therefore, the analysis under Impacts GHG-1 and GHG-2 also address cumulative impacts.

Furthermore, all cumulative projects would be required to comply with City of Perris, City of Lake Elsinore, or County of Riverside ordinances, respective General Plan policies, and adopted Climate Action Plans to reduce GHG emissions. These plans and policies have been developed to ensure that a project's GHG emission would be less than significant. Cumulative projects will also be required to comply with existing federal, State, and local regulations and policies to reduce community-wide

GHG emissions. Lastly, cumulative projects would be required to comply with the requirements of CEQA and obtain all necessary clearances and permits. Accordingly, potential cumulative impacts would be less than significant.

Moreover, the proposed project would not have a cumulatively considerable impact to GHG emissions because it would not emit construction and operational GHG emissions at levels that would exceed the SCAQMD thresholds. In jurisdictions where a qualified GHG emission reduction strategy has been reviewed under CEQA and adopted by decision-makers, compliance with the GHG emission reduction strategy would reduce a project's contribution to cumulative and project-level GHG emission impacts to a less than significant level. The County of Riverside Clean Air Plan (CAP) was prepared in conformance with State CEQA Guidelines Section 15183.5 and is considered a qualified reduction strategy. To ensure consistency with the County of Riverside CAP and that the GHG emissions of future development projects envisioned under the proposed project are less than significant, MM GHG-20a is required for future development projects in the planning area.

With implementation of MM GHG-20a, the proposed project would be consistent with County of Riverside CAP, and therefore the proposed project and future development projects in the planning area that comply with MM GHG-20a would have cumulative and project-level GHG emissions that are less than significant. With implementation of MM GHG-20a, the proposed project would also develop land uses consistent with the goals of the County of Riverside General Plan and CAP, and the SCAG 2020-2045 RTP/SCS. As such, the proposed project, in conjunction with other planned and approved projects, would not have a cumulatively significant impact related to GHG emissions.

4.2.9 - Hazards and Hazardous Materials

Adverse effects associated with hazards and hazardous materials tend to be localized, and the area near the proposed project boundaries would be the area most affected by project activities (generally within a 0.25-mile radius). Therefore, the geographic scope of the cumulative hazards and hazardous materials analysis is the 0.25-mile vicinity of the proposed project. Hazards and hazardous materials are extensively regulated at the federal, State, and local levels.

As detailed in Section 3.9, Hazards and Hazardous Materials, there are eight sites that present existing problematic hazards in the planning area, including active underground storage tanks (USTs) and Leak Underground Storage Tank (LUST) sites, solid waste and recycling facilities, Emergency Response Notification System (ERNS) database records. Of the potential hazardous materials sites, there are no active LUST cleanup sites in the planning area. Section 3.9 notes that although the proposed project would not directly result in potential hazardous impacts as it does not authorize any immediate development, future development that occurs as a result of the proposed project's buildout may be required to comply with additional investigation as required by local and State regulations, including but not limited to a Phase I Environmental Site Assessment (Phase I ESA), as well as soil, groundwater, or soil gas sampling. Compliance with all applicable regulations would be required. Other cumulative projects, such as those listed in Table 4-1 and shown in Exhibit 4-1, would be required to comply with applicable federal, State, and local statutes and regulations related to the transportation, storage, use, and disposal of hazardous materials during construction activities and at operation. Accordingly, potential cumulative impacts would be less than significant.

Moreover, the proposed project would not have a cumulatively considerable contribution to cumulative impacts.

Therefore, the proposed project would not directly result in potential impacts related to hazards and hazardous materials. Potential impacts would be reduced to below a level of significance, as discussed in Section 3.9, because construction must comply with the California Code of Regulations and other regulations to prevent hazardous materials spills and protect public safety. Development consistent with the proposed project will be required to implement all applicable policies during the design review process. As the County receives development applications for subsequent development, those applications will be reviewed for compliance with local, State, and federal regulations. Therefore, the proposed project, in conjunction with other planned and approved projects, would not have cumulatively considerable impacts on hazards and hazardous materials.

4.2.10 - Hydrology and Water Quality

Assuming the implementation of federal, State, and local guidance for water quality and control of stormwaters, the geographic scope of the cumulative hydrology and water quality analysis is the vicinity of the proposed project and other development projects resulting from full buildout of the Riverside County General Plan and the general plans of local jurisdictions that are located within the Santa Jacinto Waster Shed. As detailed in Section 3.10, Hydrology and Water Quality, the Santa Ana Regional Water Quality Control Board (Santa Ana RWQCB) is responsible for protecting water quality in the region and administers the National Pollutant Discharge Elimination System (NPDES) stormwater permitting program for construction activities. Construction activities disturbing 1 acre or more of land are subject to the permitting requirements of the NPDES General Permit for Discharges of Stormwater Runoff Associated with Construction Activity (General Construction Permit). The General Construction Permit requires the preparation and implementation of a Storm Water Pollution Prevention Plan (SWPPP) or Water Quality Management Plan (WQMP), which must also be completed before construction begins. Implementation of the SWPPP starts with the commencement of construction and continues through the completion of the project. Additionally, future development projects would be required to comply with the Clean Water Act (CWA), requirements of the Municipal Code, and General Plan policies and actions related to water quality. Additionally, other cumulative projects, such as those listed in Table 4-1 and shown in Exhibit 4-1 are required to implement similar construction and operational water quality control and treatment facilities that would detain runoff and treat it prior to discharge, including obtaining a General Construction Permit. Cumulative projects would also be required to comply with applicable City and County codes, ordinances, and policies related to preventing pollutants from being conveyed off-site. Accordingly, cumulative impacts related to hydrology and water quality would be less than significant.

Moreover, the proposed project, in conjunction with other planned and approved projects, would not create cumulatively considerable downstream water quality and hydrology impacts. Similarly, other cumulative projects would be required to follow applicable City and County codes, ordinances, and policies related to drainage to prevent erosion, siltation, flooding from surface runoff, and risk of pollutants from runoff or project inundation. Therefore, the proposed project, in conjunction with

other planned and approved projects, would not have cumulatively considerable impacts on hydrology and water quality.

Potable water used in the County is collected from the San Jacinto River Watershed and roughly one-third of the County's water demand is met by groundwater, whose unpredictability and variability means that significant impacts associated with the proposed project's operation over time cannot be ruled out. However, the adverse effects associated with potential demands on groundwater and effects on groundwater recharge would be avoided, reduced, or minimized with adherence to and compliance with federal, State, and local regulations and General Plan policies. Thus, the proposed project, in conjunction with other planned and approved projects, would not interfere substantially with groundwater supply, recharge, or groundwater management to create cumulatively considerable groundwater impacts.

Additionally, the proposed project, in conjunction with other planned and approved projects, would slow, reduce, and meter the volume of runoff leaving project sites and ensure that downstream storm drainage facilities are not inundated with stormwater runoff that could create cumulatively considerable drainage impacts.

4.2.11 - Land Use and Planning

The geographic scope of the cumulative land use analysis is the Riverside County Sphere of Influence, which includes areas within the City of Perris and City of Lake Elsinore city limits. Land use decisions are made at the County and City level; therefore, the County and cities' Spheres of Influence are an appropriate geographic scope. Development within the County is governed by the County of Riverside General Plan and Municipal Code, which ensure logical and orderly development and require discretionary review to ensure that projects do not result in land use impacts caused by inconsistency with the General Plan and other regulations. Development projects in the Riverside County Sphere of Influence would continue to be required to demonstrate consistency with all applicable County General Plan and Municipal Code regulations. This would ensure that these projects comply with applicable planning regulations. The projects listed in Table 4-1 and shown in Exhibit 4-1 that have been previously approved by the County, the City of Perris, and the City of Lake Elsinore have been deemed consistent with all applicable planning documents. For pending projects, the County, the City of Perris, or the City of Lake Elsinore would be required to issue findings demonstrating consistency with the applicable planning documents when they are approved. Accordingly, cumulative impacts related to land use would be less than significant.

Moreover, the proposed project's contribution to cumulative impacts would not be cumulatively considerable. As detailed in Section 3.11, Land Use, the proposed project was reviewed for consistency with the County of Riverside General Plan, Elsinore Area Plan (ELAP), Mead Valley Area Plan (MVAP), and the County's Zoning Ordinance. The proposed project was found to be consistent with policies outlined in the County General Plan, ELAP, MVAP and consistent with applicable regulations of the County's Zoning Ordinance.

Therefore, the proposed project, in conjunction with other planned and approved projects, would not have a cumulatively significant impact related to land use.

4.2.12 - Mineral Resources

The geographic scope of the cumulative mineral resources analysis is the vicinity of the proposed project. As described in Section 3.12, Mineral Resources, the planning area does not currently contain any known mineral resources but is within the MRZ-3 designation. Areas with the MRZ-3 designation are described as areas where the available geologic information indicates that mineral deposits are likely to exist; however, the significance of the deposit is undetermined. Development activities associated with other cumulative projects in the region, including those projects listed in Table 4-1 and shown in Exhibit 4-1, may be located on sites with similar mineral zoning designations and would adhere to policies contained in the General Plan to reduce potential significant impacts related to mineral resources. Accordingly, cumulative impacts would be less than significant.

Based on the section analysis, the proposed project would not directly result in potential impacts to mineral resources. Therefore, implementation of the proposed project would not result in any impacts to mineral resources and would not contribute to a cumulatively considerable impact. As a result, the proposed project, in conjunction with other cumulative projects, would not have cumulatively considerable impacts on mineral resources.

4.2.13 - Noise

The geographic scope of the cumulative noise analysis is the ambient noise environment in the vicinity of the proposed project, including surrounding sensitive receptors. Noise impacts tend to be localized; therefore, the analysis in Section 3.13, Noise, includes a cumulative analysis of existing, proposed, and anticipated future noise levels near the planning area.

There are no site-specific development plans, however future project development in the planning area could result in a relatively high single event noise exposure potential causing an intermittent noise nuisance that could result in annoyance or sleep disturbances at nearby sensitive receptors. Therefore, mitigation is required to reduce this potential impact. Implementation of mitigation requiring use of best management noise reduction techniques and practices and other site-specific noise reduction measures would ensure that construction noise would not result in sleep disturbances at nearby off-site sensitive receptors or expose persons to excessive noise levels. Cumulative development would be required to comply with the design review regulations directing the siting, design, and insulation of new development and all applicable noise policies in local and regional plans, including the County General Plan and the City of Perris and City of Lake Elsinore's Municipal Code, to ensure that noise impacts are less than significant. In addition, construction noise and vibration are typically localized and temporary in nature. For these reasons, cumulative impacts to noise would be less than significant.

Moreover, the proposed project's incremental contribution to less than significant cumulative impacts would not be significant. Operational noise generated by the proposed project include noise from parking lot activities and from new exterior mechanical equipment sources, such as mechanical ventilation systems. As detailed in Section 3.13, Noise, the proposed project would not generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the planning area in excess of standards established in the local general plan or noise ordinance. As such, the impact of noise produced by parking lot activities and stationary equipment within the planning area to off-site

sensitive receptors would be reduced with implementation of MM NOI-27a-2, Operational Noise Reduction Plan to reduce levels of operational noise to a less than significant level. Therefore, the proposed project would not contribute to a cumulatively significant impact related to noise generated from parking lot activities and stationary equipment.

Construction and operational noise associated with buildout of the proposed project may cause a temporary substantial increase in noise levels at nearby receptors. The proposed project would implement MM NOI-27a-1, which would require implementation of Construction Noise Mitigation Plan to reduce noise levels to a less than significant level. As explained above, other projects listed in Table 4-1 and shown in Exhibit 4-1 would be required to implement similar mitigation and adhere to the County's or the City of Perris or City of Lake Elsinore's Municipal Code restrictions regarding construction noise. It is highly unlikely that a substantial number of the cumulative projects would be constructed simultaneously and close enough to one another for noise impacts to be compounded, since the projects listed in Table 4-1 and shown in Exhibit 4-1 are at widely varying stages of approval and development. Therefore, it is reasonable to conclude that construction noise from the proposed project would not combine with noise from other development projects to cause cumulatively significant noise impacts.

Construction activities associated with buildout of the proposed project would require the use of heavy construction equipment, which could expose sensitive receptors to vibration. Therefore, the proposed project would implement MM NOI-27b-1, which would require implementation of construction vibration reduction plan to reduce vibration to less than significant levels. Because vibration is a highly localized phenomenon, there is a low possibility for vibration associated with the proposed project to combine with vibration from other projects because of their distances from the proposed project's boundaries. Therefore, the proposed project would not contribute to a cumulatively significant vibration impact.

4.2.14 - Paleontological Resources

Paleontological resource impacts tend to be localized because the integrity of any given resource depends on what occurs only in the immediate vicinity around that resource, such as disruption of soils. For this reason, the geographic scope of the cumulative paleontological resource analysis is the areas within 500 feet of the proposed project's boundaries.

The planning area and areas within 500 feet of its boundaries are mostly built out and considered an urban environment. The planning area and areas with 500 feet predominantly contain areas of low paleontological sensitivity, as well as areas with undetermined paleontological sensitivity. All development within the County needs to adhere to General Plan Policy OS 19.8 which requires a paleontological resources report to be prepared if the project site has undetermined paleontological sensitivity as shown on General Plan Figure OS-8. In addition to such policy, there are a number of existing State and federal laws that regulate development impacts to paleontological resources, including those outlined under the California Public Resources Code Paleontological Resources Preservation Act. Because of the low paleontological sensitivity and unique geologic features within the cumulative study area and required conformance with existing regulations intended for the protection of sensitive paleontological resources, impacts to paleontological resources would be less than significant.

4.2.15 - Population and Housing

The geographic scope of the cumulative population and housing analysis is the County of Riverside. Population growth is typically measured in relation to the size of the applicable jurisdiction and, thus, the County is the appropriate geographical area. Consistent with State law, the County's General Plan identifies adequate housing to accommodate forecasted numbers of people within the jurisdiction, and displaced development, if any, would be replaced primarily within the County. Other cumulative projects in the County, such as those listed in Table 41 and shown in Exhibit 4-1, would be reviewed for impacts on population growth and would be required to address any potential impacts with mitigation. Because cumulative projects would comply with all applicable land use plans to provide adequate development within a jurisdiction, a significant cumulative impact related to population and housing would not occur.

Moreover, adoption of the proposed project would not result in any policies or physical improvements that would result in direct or indirect or cumulative impacts to regional growth or result in substantial displacement of people or the need to construct additional replacement housing and therefore would not contribute to a cumulative impact. The proposed project contemplates up to 4,000 multi-family residential dwelling units, which would add 12,800 residents to the planning area's population. This would represent a 3.3 percent increase in the existing resident population of unincorporated Riverside County and 0.12 percent increase in population of Riverside County overall. Growth-inducing impacts were found to be less than significant (see Section 3: Other CEQA). Therefore, the proposed project, in conjunction with other planned and approved projects, would not have a cumulatively significant impact related to population and housing.

4.2.16 - Public Services

The geographic scope of the cumulative public services and recreation analysis is the service area of each of the providers serving the planning area. No existing cumulatively significant impacts have been identified for any of these areas, as all service providers are able to achieve the requisite level of service, capacity, or response times. There must be both a cumulative impact and the proposed project must have a cumulatively considerable contribution to that cumulative impact for effects to rise to the level of significance. Although there is no identified cumulative impact related to public services, for purposes of disclosure, the remainder of this section considers whether incremental contribution of the impacts associated with implementation of the proposed project would be significant.

Fire Protection and Emergency Medical Services

The geographic scope of the cumulative fire protection and emergency medical services analysis is the Riverside County Fire Department (RCFD) service area, which consists of the City of Perris, City of Lake Elsinore, and the unincorporated areas of the County.

Buildout of the proposed project is estimated to increase the County's population by up to 4,000 residents, and thus, increase demand for fire protection and emergency medical services. Several fire stations would serve the planning area. In addition, the RCFD considers National Fire Protection Association (NFPA) Standard 1710 as a guideline for fire station location methodology, which calls for an engine company within 4 minutes of travel time to fire incidents and Emergency Medical Services

(EMS) calls. Based on the several fire stations serving the planning area, no new or expanded fire protection facilities would be required. All future development under the proposed project would be required to provide development fees to the RCFD for capital improvements to fire facilities. This would allow RCFD to develop additional facilities, as appropriate, as the proposed project builds out.

New development that occurs pursuant to the proposed project would be required to comply with all California Fire Code requirements for emergency access, fire detection, suppression systems, and minimum fire flow. Code compliance would serve to reduce the susceptibility of new development to fires and, in turn, minimize demand for fire protection.

Other cumulative projects in the RCFD service area would be reviewed for impacts on fire protection and EMS and would be required to provide development fees to finance capital improvements to the facilities to maintain acceptable service ratios and performance standards. According to the RCFD, existing facilities are sufficient to serve the proposed project in conjunction with existing and cumulative projects. Therefore, the proposed project, in conjunction with other planned and approved projects, would not have a cumulatively significant impact related to fire protection and EMS.

Police Protection

The geographic scope of the cumulative police protection analysis is the service area of the Riverside County's Sheriff's Department, which consists of the unincorporated areas of the County as well as the cities of Calimesa, Canyon Lake, Coachella, Eastvale, Indian Wells, Jurupa Valley, Lake Elsinore, La Quinta, Menifee, Moreno Valley, Morongo Indian Reserve, Norco, Palm Desert, Perris, Rancho Mirage, San Jacinto, Temecula, and Wildomar.

Buildout of the proposed project is estimated to increase the County's population by up to 4,000 residents, and thus, increase demand for police protection. All future development would be subject to development fees that would contribute toward the County Sheriff's Department for capital improvements to police facilities. This would allow the County Sheriff's Department to develop additional facilities, as appropriate, as the proposed project builds out.

Other cumulative projects within the County Sheriff's Department service area would be reviewed for impacts on police protection and would be required to provide development fees to finance capital improvements to the facilities to maintain acceptable service ratios and performance standards. According to the County Sheriff's Department, existing facilities are sufficient to serve the proposed project in conjunction with existing and cumulative projects. Therefore, the proposed project, in conjunction with other planned and approved projects, would not have a cumulatively significant impact related to police protection.

Schools

The geographic scope of the cumulative school analysis is within the three school districts that serve the planning area; Lake Elsinore Unified School District, Perris Union High School District, and Perris Elementary School District.

Buildout of the proposed project is projected to increase enrollment as up to 4,000 new residents may be generated as a result of the project buildout. The proposed project would be subject pay development fees to the School Districts to fund capital improvements to school facilities pursuant to Senate Bill (SB) 50. Other cumulative projects within the School Districts would be reviewed for impacts on schools and would be required to pay development fees to the School Districts to reduce impacts to existing school facilities. Therefore, the proposed project, in conjunction with other planned and approved projects, would not have a cumulatively significant impact related to schools.

Libraries

The geographic scope of the cumulative library analysis is within the planning area of the proposed project. Within the planning area, the County operates a library system of 36 libraries, two book mobiles, and a County museum

Buildout of the proposed project would increase demand for public services, including libraries and other public and governmental services. Thus, all future projects would be required to comply with General Plan policies, the Municipal Code, and other local, State, or federal regulations. Further, the allocation of other municipal services is determined annually by the County Board of Supervisors based upon local needs and resources.

Other cumulative projects within the planning area would be required to comply with federal, State, and local regulations regarding municipal services. Therefore, the proposed project, in conjunction with other planned and approved projects, would not have a cumulatively significant impact related to library facilities.

Health Services

The geographic scope of the cumulative health services analysis is the County of Riverside. There are approximately 18 hospitals in the County.

Buildout of the proposed project is estimated to increase the County's population by up to 4,000 residents. However, according to Section 3.15, Public Services, this increase is would occur incrementally and would not substantially increase demands on existing health services, because overall this population growth it is not substantial and would not place an undue burden on the 18 hospitals in the County.

Other cumulative projects within the County would be subject to review in order to determine whether development would significantly impact acceptable service ratios, response times, or other performance objectives for health services. Therefore, the proposed project, in conjunction with other planned and approved projects, would not have a cumulatively significant impact related to health services.

4.2.17 - Recreation

The geographic scope of the cumulative recreation analysis is the vicinity of the proposed project. As described in Section 3.16, Recreation, the planning area is within the Riverside County Regional Park and Open-Space District (RivCoParks). The County provides 9.2 acres of parks and open space per

1,000 residents. Local municipalities, including the City of Perris and the City of Lake Elsinore, are responsible for local parks and recreational facilities. Development activities associated with other cumulative projects in the region, including those projects listed in Table 4-1 and shown in Exhibit 4-1, would adhere to Ordinance No. 659 and be required to provide recreation facilities to reduce potential significant impacts related to recreation. For these reasons, cumulative impacts related to recreation are less than significant.

Based on the section analysis, the proposed project would not directly result in potential impacts to recreation as the proposed project would not authorize any immediate development that could affect the need for recreational facilities. Additionally, future development would be required to either provide recreational facilities and open space in accordance with the land use and density proposed or would be required to pay development impact fees pursuant to Ordinance No. 659. Therefore, implementation of the proposed project would not result in any impacts to recreation and would not contribute to a cumulatively considerable impact. As a result, the proposed project, in conjunction with other cumulative projects, would not have cumulatively considerable impacts on recreation.

4.2.18 - Transportation and Traffic

The geographic scope of the cumulative transportation analysis is the roadway network within the western Riverside County. As discussed in Section 3.17, Transportation, the Vehicle Miles Traveled (VMT) Analysis analyzed the Project's VMT Impact on the County, which projects the Existing Plus Project and Cumulative Plus Project VMT that could be expected if the proposed project was fully built out. It was concluded that the traffic generated by the proposed project would result in an increase in project-generated VMT from No Project baseline conditions, which is considered a significant VMT impact. Other cumulative projects would be required to provide appropriate public transit, bicycle facilities, and pedestrian facilities, as well as ensure that emergency access is maintained.

Additionally, projects that exceed VMT threshold(s) are required to mitigate transportation impacts to the extent feasible. VMT reduction strategies for large projects and community plans/specific plans may include altering a project's density, land use mix, site design, and availability of transit, bicycle, and pedestrian facilities. All cumulative projects would be required to comply with County and local ordinances and General Plan policies that address potential impacts related to transportation. Nonetheless, for these reasons, cumulative impacts with respect to transportation and traffic would be significant.

The proposed project would implement MM TRANS-37a-1 through -5 to reduce VMT impacts. Given the uncertainty in some components of the measure that influence VMT (such as the cost of fuel) combined with the County's inability to influence other measures that would have the largest effect on VMT (such as implementation of a VMT tax or an increase in the fuel tax), the effectiveness of these Transportation Demand Management (TDM) measures cannot be guaranteed to reduce impacts and the impact is considered significant and unavoidable. Implementation of mitigation measures would reduce this impact, but not to less than significant levels. As such, the proposed project, in conjunction with other projects, would have a significant and unavoidable impact with respect to VMT. And the proposed project's contribution would be cumulatively considerable.

For other transportation-related areas (roadway safety, emergency access, public transit, bicycle facilities, and pedestrian facilities), the proposed project would have less than significant impacts and therefore would not have the potential to cumulatively contribute to deficiencies. Therefore, the proposed project, in conjunction with other planned and approved projects, would not have a cumulatively significant impact related to roadway safety, emergency access, public transit, bicycle facilities, and pedestrian facilities.

4.2.19 - Tribal Cultural Resources

Tribal cultural resource impacts tend to be localized because the integrity of any given resource depends on what occurs only in the immediate vicinity around that resource, such as disruption of soils. For this reason, the geographic scope of the cumulative tribal cultural resource analysis is the areas within 500 feet of the proposed project's boundaries.

The planning area and areas within 500 feet of its boundaries are mostly built out and considered an urban environment. An NAHC Sacred Lands File search did not identify any TCRs within the planning area, however a records search conducted at the EIC identified listed prehistoric sites that meet the definition of a tribal cultural resource within the planning area. Additionally, consultation with tribal representatives pursuant to SB 18 and AB 52 noted the high potential for resources to be located within the planning area. The potential for additional undiscovered eligible TCRs to be present within the planning area exists, but varies by location.

Cumulative projects would be required to comply with applicable policies and programs and adhere to the rules and regulations in the Municipal Code that protect tribal cultural resources. Cumulative projects would also be required to comply federal, State, and local policies that protect cultural and tribal cultural resources, including the provisions of SB 18 and Assembly Bill (AB) 52. Accordingly, because cumulative development would be required to comply with long-term planning documents, and regulatory agency guidance establishing policies (including, but not limited to, evaluation requirements and inadvertent discovery procedures) that reduce impacts to potential tribal cultural resources, cumulative impacts would be less than significant.

While the proposed project does not directly propose any adverse changes to any recorded TCRs, future development allowed under the plan could affect known or previously unidentified resources. Potential cumulative impacts would be mitigated at an individual project level by adherence to applicable local State and federal laws and regulations, as well as City and County laws, regulations, and conditions of approval as discussed in Section 3.5. Therefore, the proposed project would not directly result in potential impacts to cultural resources and would not contribute to a cumulatively considerable impact to these resources.

Nonetheless, construction activities associated with the proposed project, as well as other cumulative projects in the vicinity, including those projects listed in Table 4-1 and shown in Exhibit 4-1, would result in ground-disturbing activities that may encounter previously undiscovered cultural resources. The implementation of the aforementioned conditions of approval would ensure undiscovered cultural resources are not adversely affected by cumulative project-related construction activities, which would prevent the destruction or degradation of potentially significant cultural resources within the geographic scope. Therefore, the proposed project, in conjunction with

other planned and approved projects, would not have a cumulatively significant impact related to tribal cultural resources.

4.2.20 - Utilities and Service Systems

Water

The geographic scope of the cumulative potable water analysis is the Eastern Municipal Water District (EMWD) and Elsinore Valley Municipal Water District (EVMWD) service areas, which include the three neighborhoods within the planning area. The EVMWD water service area is 96 square miles and EMWD is approximately 555 square miles. Water supply impacts are analyzed in Section 3.15, Utilities and Service Systems, which concluded that EMWD and EVMWD have adequate potable water supplies to serve the proposed project, as well as other existing and future users.

EVMWD has a water supply surplus of at least 4,361 AFY to meet future demands through 2045 and EMWD has the capacity to meet future demands but does not have a surplus of water. Future projects would be reviewed by the County for compliance with the policies and actions of the General Plan as well as the Municipal Code. Compliance with County and State-required water management and conservation regulations would assist in reducing the amount of water supplies required by future development. In addition, the County and water agencies would review each future development project, including proof of issuance of a “can and will serve” letter, and compliance with federal, State, and local water conservation standards to ensure adequate supply for the proposed project. During multi-year droughts, both EMWD and EVMWD would be able to serve development associated with the proposed project.

Other cumulative projects would also be required to demonstrate that they would be served with potable water service as a standard requirement of the development review process, and these projects may be required to implement water conservation measures to the extent they are required. Therefore, cumulative impacts would be less than significant. Additionally, the proposed project’s contribution to cumulative impacts would be less than significant. While development consistent with the proposed project would contribute to an increased cumulative demand for water supply within the EMWD and EVMWD service areas, the increased demand would not exceed the long-term supply under normal circumstances, as discussed under Impact USS-40b. EMWD and EVMWD anticipate that sufficient water supplies are also available to meet demands during a single dry year and multiple dry year. Additionally, compliance with General Plan Policy OS 2.2 and Ordinance No. 859 would ensure the efficient use of water. Accordingly, the proposed project, in conjunction with other planned and approved projects, would not have a cumulatively significant impact related to water supply.

Wastewater

The geographic scope of the cumulative wastewater analysis is the EMWD and EVMWD service areas. EVMWD has a total treatment capacity of 9.7 million gallons per day (mgd) with four Regional Water Reclamation Facilities (RWRF). The four RWRFs of the EMWD have a combined current capacity of 75 mgd.

As discussed in Section 3.18, Utilities and Service Systems, buildout of Neighborhood 1 of the proposed project would result in an estimated wastewater generation of 428,510.9 gpd, and buildout of Neighborhoods 2 and 3 of the proposed project would result in an estimated wastewater generation of 260,022.7 gpd. Although the proposed project would increase wastewater generation, the regional wastewater system for the planning area has sufficient capacity to accommodate project buildout. Nonetheless, the adequacy of wastewater facilities to serve specific development proposals would be determined through the County's development review process where necessary infrastructure improvements would be required as conditions of approval. In addition, future development would be subject to various standards for sewer use, construction, and industrial wastewater discharge. Other cumulative projects would be required to demonstrate that sewer service is available to ensure that adequate sanitation can be provided. For these reasons, cumulative impacts to wastewater would be less than significant. Additionally, the proposed project's contribution to cumulative impacts would be less than significant. While development consistent with the proposed project would result in an increased demand for wastewater collection and treatment, both EMWD and the EVMWD can accommodate wastewater collection and treatment generated at buildout (see Impact USS-41a). In addition, future projects within the would be required to comply with requirements that aim to reduce wastewater generation flows, including Ordinance No. 592. Therefore, the proposed project would not require the expansion of wastewater facilities and impacts would not be cumulatively considerable.

Therefore, the proposed project, in conjunction with other planned and approved projects, would not have a cumulatively significant impact related to wastewater.

Storm Drainage

The geographic scope of the cumulative storm drainage analysis is the San Jacinto River Watershed, which currently receives runoff from the planning area and would continue to do so in the future.

New utility infrastructure improvements may be required to provide services to projects that occur under the proposed project. Development within the planning area would be required to comply with the California State Water Resources Control Board (State Water Board), adhere to the County's Municipal Code and County's grading plan check process, and to comply with NPDES, SWPPP, and WQMP requirements. Other cumulative projects in the San Jacinto River Watershed would be required to provide drainage facilities that collect and detain runoff such that off-site releases are controlled and do not create flooding. Other cumulative projects would also be required to implement pollution prevention measures during construction and at operation. All cumulative projects would be required to comply with city/County ordinances and General Plan policies, as well as other regulations that minimize stormwater runoff, such as the CWA. Accordingly, cumulative impacts related to storm drainage would be less than significant.

Moreover, the proposed project's contribution to less than significant cumulative impacts would not be cumulatively considerable. All future development would be required to comply with the CWA and regulations enforced by the RWQCB, which reduce stormwater runoff. The proposed project would also implement pollution prevention measures during construction and at operation to ensure that downstream water quality impacts are minimized to the greatest extent possible. This would ensure that the proposed project would not contribute to downstream flooding conditions

during peak storm events and would avoid cumulatively significant stormwater impacts to downstream waterways at times when capacity is most constrained.

Additionally, the proposed project and other cumulative projects would be required to comply with the Santa Ana RWQCB. Therefore, the proposed project, in conjunction with other planned and approved projects, would not have a cumulatively significant impact related to storm drainage.

Solid Waste

The geographic scope of the cumulative solid waste analysis is the area served by El Sobrante Landfill in the City of Corona. The landfill has a capacity to process up to 70,000 tons of waste per week. Other future projects within the cumulative geographic context, would be required to comply with federal, State, and local laws and policies to address potential impacts related to solid waste. Other cumulative projects would generate construction and operational solid waste and, depending on the volumes and end uses, would implement recycling and waste reduction measures. For these reasons, cumulative impacts to solid waste would be less than significant. Additionally, the proposed project's contribution to cumulative impacts would be less than significant.

As described in Section 3.18, Utilities and Service Systems, the proposed project is estimated to generate a total of 30,414.4 tons of debris at buildout. While there is adequate permitted landfill capacity to accommodate future growth, the proposed project includes a policy to reduce impacts on solid waste services. Future development anticipated with the proposed project would also be subject to the Riverside County Department of Waste Resources (RCDWR) Design Guidelines for Refuse and Recyclables Collection and Loading Areas. Therefore, aluminum, glass, plastic, paper, cardboard, and organic waste are collected and diverted from the waste stream. As such, the estimated values likely overstate the solid waste generation that would be expected to occur from buildout of the proposed project. Nonetheless, the landfill that serves the planning area has a remaining estimated capacity of 3,834,470 cubic yards and, thus, can accommodate the solid waste generated during construction and at operation of the proposed project.

Accordingly, the proposed project, in conjunction with other future projects, would not have a cumulatively significant impact related to solid waste.

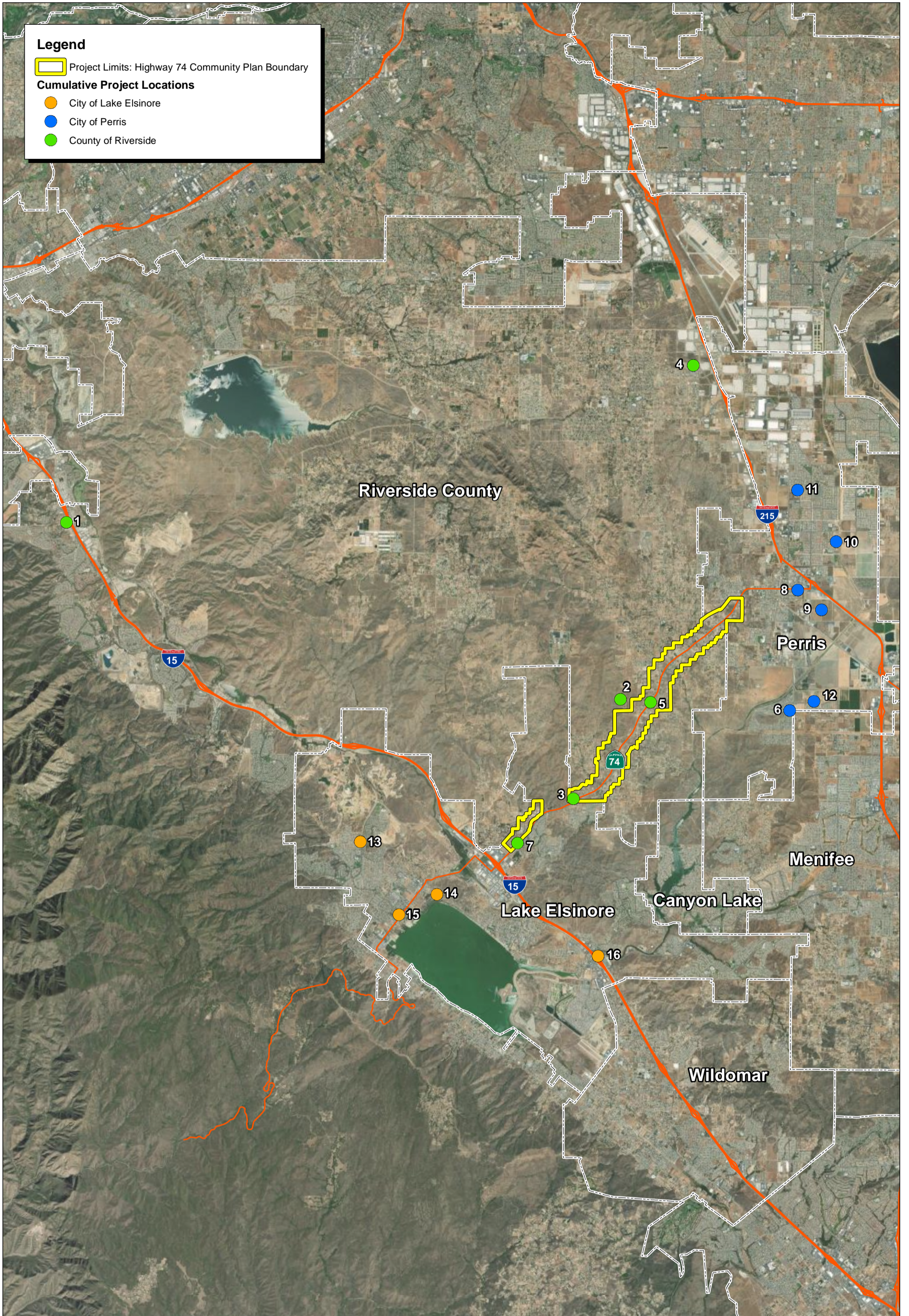
4.2.21 - Wildfire

The geographic scope of the cumulative wildfire analysis is the vicinity of the proposed project and generally areas within 0.5 mile of the proposed project's boundaries. Much of the County of Riverside is at risk from wildland fires, particularly around the County's hillside terrain. The planning area includes areas designated as Moderate, High, and Very High Fire Hazard Severity Zones. Cumulative projects, such as those listed in Table 41 and shown in Exhibit 4-1, would also be located within and adjacent to fire hazard severity zones. As such, all projects would be required to comply with State and local regulations and protocols, the California Fire Code, and the Uniform Building Code to reduce potential impacts in the event of a wildfire. In addition, all cumulative projects would be covered under existing emergency response plans established by the County, including the County's Local Hazard Mitigation Plan. For these reasons, cumulative impacts with respect to wildfire hazards would be less than significant.

Moreover, the proposed project's incremental contribution to cumulative wildfire hazard impacts would not be significant. As described in Section 3.19, Wildfire, the proposed project would allow future development adjacent to and within fire hazard zones.

According to the RCFD Strategic Plan, 11 fire stations are located within and near the planning area. While the proposed project would allow future development adjacent to and within fire hazard zones, future development would comply with the County's Building and Safety Department regulations and protocols, the County's Local Hazard Mitigation Plan, the California Fire Code, and the Uniform Building Code.

Therefore, the proposed project, in conjunction with other planned and approved projects, would not have a cumulatively significant impact related to wildfire.



Source: ESRI Aerial Imagery. Riverside County GIS Data.



Exhibit 4-1
Cumulative Projects Map

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CHAPTER 5: ALTERNATIVES TO THE PROPOSED PROJECT

5.1 - Introduction

In accordance with California Environmental Quality Act (CEQA) Guidelines Section 15126.6, this Draft Program Environmental Impact Report (Draft Program EIR) contains a comparative impact assessment of alternatives to the proposed project. The primary purpose of this chapter is to provide decision-makers and the general public with a reasonable number of feasible project alternatives that could attain most of the basic project objectives, while avoiding or reducing any of the project's significant adverse environmental effects. Important considerations for these alternatives analyses are noted below (as stated in State CEQA Guidelines § 15126.6).

- An EIR need not consider every conceivable alternative to a project;
- An EIR should identify alternatives that were considered by the lead agency, but rejected as infeasible during the scoping process;
- Reasons for rejecting an alternative include:
 - Failure to meet most of the basic project objectives;
 - Infeasibility; or
 - Inability to avoid significant environmental effects.

5.1.1 - Significant Unavoidable Impacts

The proposed project would result in the following significant unavoidable impacts:

- **Impact AIR-6(a):** The proposed project would conflict with implementation of the applicable Air Quality Plan (2022 AQMP for the South Coast Air Basin [SoCAB]). The proposed project would generate regional or localized construction or operational emissions that would exceed South Coast Air Quality Management District (SCAQMD) thresholds of significance. Additionally, the proposed project has the potential to significantly alter the demographic projections beyond what is accounted for in the current AQMP. Since the proposed project would include a General Plan Amendment, the proposed project would not be consistent with the growth assumptions within the current AQMP. Components of and improvements proposed under the proposed project would contribute to minimize criteria air pollutant emissions from transportation and energy use. However, given the potential increase in growth and associated increase in criteria air pollutant emissions, the project would continue to be potentially inconsistent with the assumptions in the AQMP. Implementation of Mitigation Measures (MM) AIR-6a-1 through MM AIR-6a-15 would be required to reduce regional and localized emissions to the extent feasible. However, the estimated construction emissions and long-term emissions generated under full buildout of the proposed project are estimated to continue to exceed the SCAQMD's regional significance thresholds after the implementation of mitigation, and would cumulatively contribute to the nonattainment designations in the SoCAB. In addition, implementation of the proposed project would contribute to exceedances of the current population and employment estimates for the planning area. Therefore, the proposed project would be considered inconsistent with the

AQMP, resulting in a significant impact in this regard. Therefore, Impact AIR-6a would remain significant and unavoidable.

- **Impact AIR-6(b):** The proposed project would result in a cumulatively considerable net increase of a criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard. Operation of the proposed project at buildout would generate air pollutant emissions that exceed SCAQMD regional significance thresholds for volatile organic compound (VOC), nitrogen oxide (NO_x), CO, PM₁₀, and PM_{2.5} at full buildout. Emissions of VOC and NO_x that exceed the SCAQMD regional threshold would cumulatively contribute to the O₃ nonattainment designation of the SoCAB. Emissions of NO_x that exceed SCAQMD's regional significance thresholds would cumulatively contribute to the O₃ and particulate matter nonattainment designations of the SoCAB. Emissions of direct PM₁₀ and PM_{2.5} would contribute to the PM_{2.5} nonattainment designations. Therefore, the project would result in a potentially significant impact because it would significantly contribute to the nonattainment designations of the SoCAB.

Combined with the Riverside County General Plan policies and the implementation of existing mitigation measures developed as part of the Final EIR for the General Plan, the implementation of MM AIR-6a-1 through MM AIR-6a-7 would reduce criteria air pollutant emissions from construction-related activities to the extent feasible. However, specific construction time frames and equipment for individual site-specific projects are not available and there is a potential for multiple developments to be constructed at any one time, resulting in potentially significant cumulative construction-related emissions.

Buildout in accordance with the proposed project would generate long-term emissions that would exceed SCAQMD's regional significance thresholds and cumulatively contribute to the nonattainment designations of the SoCAB. To reduce emissions from the operation of future projects envisioned in the proposed project, MM AIR-6a-8 through MM AIR-6a-15 are required to reduce emissions to the extent feasible, in combination with the existing General Plan policies and associated mitigation. However, due to the magnitude of emissions generated by residential, office, commercial, and light industrial land uses proposed as part of the project, no mitigation measures are available that would reduce cumulative impacts below SCAQMD's thresholds. Therefore, despite adherence to the applicable mitigation measures, Impact AIR-6b would remain significant and unavoidable.

- **Impact AIR-6(c):** The proposed project would expose sensitive receptors, which are located within 1 mile of the project site, to substantial pollutant concentrations. Known sensitive receptors located within 1 mile of the planning area include numerous residences, childcare centers, parks, and nine public schools. Construction equipment exhaust combined with fugitive particulate matter emissions have the potential to expose sensitive receptors to substantial concentrations of criteria air pollutant emissions and result in a significant impact. Furthermore, the proposed project would permit commercial and light industrial land uses, which could potentially generate substantial quantities of criteria air pollutants and toxic air contaminants (TACs) from land uses such as stationary sources and warehouses once the proposed project is operational. These emissions could potentially impact nearby sensitive receptors. To accurately analyze the potential impacts of potential future development projects, MM AIR-1 is required. Compliance with this mitigation measure will ensure that

specific project-level construction impacts are analyzed and further mitigation measures are considered, as appropriate. Even after complying with regulations, existing policies and mitigation measures, as well as new mitigation measures, the impacts cannot be guaranteed to be reduced to below applicable agency thresholds, resulting in a potentially significant impact from construction toxic air pollutants to sensitive receptors. Additionally, development of the commercial land uses that are allowed under the proposed project may result in stationary sources of TAC emissions. Mitigation measures included as part of EIR No. 521 would further serve to reduce the impacts of operational emissions on sensitive receptors within the General Plan area. Required General Plan mitigation includes EIR No. 441 MM 2.51A, MM 4.51B, and MM 4.5.1C, and EIR No. 521 MM 4.6.B-N1, MM 4.6.B-N2, MM 4.6.B-N3, MM 4.6.D-N1, and MM 4.6.D-N2. To accurately analyze the potential impacts of potential future development projects that include trucking emissions, MM AIR-6a-8 and MM AIR-6a-9 are required. Compliance with MM AIR-6a-8 and MM AIR-6a-9 will ensure that localized and regional project-level emissions are analyzed and further mitigation measures are considered, as appropriate. Additionally, the proposed project would locate new sensitive receptors (residents) that could be subject to existing sources of TACs within the project boundary. Therefore, MM AIR-6a-16 has been included to relay information to the residents in order for them to make their own informed decisions. Because the construction and operation of future developments envisioned under the proposed project could expose sensitive receptors to significant quantities of criteria and TACs even with the implementation of mitigation, the impacts of the proposed project remain significant and unavoidable.

- **Impact TRANS-37(a):** The proposed project would result in an increase in project-generated Vehicle Miles Traveled (VMT) from No Project baseline conditions, which is considered a significant impact. Projects that exceed VMT threshold(s) are required to mitigate transportation impacts to the extent feasible. VMT reduction strategies for large projects and community plans/specific plans may include altering a project's density, land use mix, site design, and availability of transit, bicycle, and pedestrian facilities. Mitigation Measure (MM) TRANS-37b-1 through MM TRANS-37b-5, would be required for future implementing projects to reduce impacts related to the increase in VMT. Given the uncertainty in some components of the measure that influence VMT (such as the cost of fuel) combined with the County's inability to influence other measures that would have the largest effect on VMT (such as implementation of a VMT tax or an increase in the fuel tax), the effectiveness of these Transportation Demand Management (TDM) measures cannot be guaranteed to reduce impacts and the impact is considered significant and unavoidable. Implementation of mitigation measures would reduce this impact, but not to less than significant levels.

5.1.2 - Alternative Eliminated From Further Consideration

An EIR must briefly describe the rationale for selection and rejection of alternatives. The lead agency may make an initial determination as to which alternatives are potentially feasible and, therefore, merit in-depth consideration, and which are clearly infeasible. Alternatives that are remote or speculative, or the effects of which cannot be reasonably predicted, need not be considered (State CEQA Guidelines § 15126.6(f)(3)).

This chapter identifies the alternative considered by the lead agency, but rejected as infeasible, and provides a brief explanation of the reasons for its exclusion. As noted above, alternatives may be eliminated from detailed consideration in the EIR if they fail to meet most of the project objectives, are infeasible, or do not avoid any significant environmental effects.

A maximum density reduction was considered in order to reduce air quality impacts to less than significant levels. As described in Section 3-.3, Air Quality, the overlap of potential construction and operations and the unknown nature of specific development projects present the possibility of a significant and unavoidable air quality impact. To result in less than significant air quality impacts, an alternative would require an extreme reduction in particulate matter less than 10 microns in diameter (PM₁₀) emissions during construction and operation from a maximum 753.7 pounds/day to a maximum of four pounds/day, or a reduction of 99.47 percent. Such an alternative would require a correspondingly extreme reduction in residential and nonresidential development densities. This alternative would not be financially feasible and would not accomplish any of the project objectives and is therefore rejected from further consideration.

5.1.3 - Alternatives to the Proposed Project

The three alternatives to the proposed project analyzed in this section are as follows:

- **Alternative 1: No Project Alternative:** Under this alternative, land use changes as per the proposed project would not occur. The Highway 74 Community Plan (proposed project) would not be implemented, and the existing land use activities within the planning area would continue for the foreseeable future until they are developed or redeveloped according to their General Plan land use designations. This alternative assumes the breakdown of land use acreages listed in the Existing General Plan Land Use Designation table (Table 2-1). No changes in buildout potential would occur.
- **Alternative 2: Reduced Density Alternative:** The purpose of this alternative is to reduce impacts from the proposed project related to the number of residential units and the intensity of commercial and industrial development. Under this alternative, the total number of residential dwelling units anticipated is assumed to be reduced from 3,587 to 2,691 representing a reduction of 896 units, or approximately 25 percent. The amount of commercial and industrial development would also be reduced by 25 percent, from 4,328,270 to 3,246,203 (a reduction of 1,082,067 square feet).
- **Alternative 3: Increased Industrial Use Alternative:** In addition to the land use changes proposed by the proposed project, this alternative would also change the existing residential, mixed-use, and community center designations within the Colinas del Oro Specific Plan area to Light Industrial (LI). This would represent an increase of 72.0 acres of LI use and reduction of residential, mixed-use, and community center uses compared to the proposed project. The proposed land use changes in the Colinas del Oro Specific Plan area as part of Alternative 3 is shown in Exhibit 5-1.

The three alternatives to the proposed project are analyzed below. These analyses compare the proposed project and each individual project alternative. In several cases, the description of the impact may be the same under each alternative when compared with the CEQA Thresholds of

Significance (i.e., both the project and the alternative would result in a less than significant impact). The actual degree of impact may be slightly different between the proposed project and each alternative, and this relative difference is the basis for a conclusion of greater or lesser impacts.

5.2 - Project Objectives

As stated in Section 2, Project Description, the planning area objectives were developed as a result of extensive community input and are designed to support the development of residential neighborhoods of varying densities, neighborhood servicing commercial uses, and local employment center areas clustered along the planning area. The underlying purpose of the proposed project is to stimulate economic development, provide housing opportunities, facilitate the development of infrastructure, and address environmental justice. The objectives are as follows:

1. Accommodate the development of a balance of land uses that maintain and enhance Riverside County's fiscal viability, economic diversity, and environmental integrity.
2. Update policies to be consistent with current legal requirements and legislation.
3. Encourage consolidation of parcels to promote better land use development and project design and maximize density of residential, commercial, and industrial uses.
4. Facilitate access from Highway 74 to residential, commercial, and industrial sites where feasible the development of frontage/service roads should be encouraged to increase.
5. Support economic vitality by maximizing the availability of a wide variety of employment opportunities within the planning area.
6. Provide live-work spaces within the MUAs where appropriate.
7. Promote livable and resilient neighborhoods that provide housing, goods and services, open space, and multi-model transportation options within proximity to each other and that reduce reliance on the automobile.
8. Promote healthy neighborhoods that incorporate best practices related to land use, mobility, air quality, housing, affordability, safety, environmental justice, community services, and design. Encourage complete streets, which include sidewalks, greenbelts, and trails to facilitate use by pedestrians and bicyclists where such facilities are well separated from parallel or cross through traffic to ensure pedestrian and cyclist safety.
9. Preserve outstanding scenic vistas and features and encourage underground placement of electric or communication distribution lines.
10. Encourage trees, signage, landscaping, street furniture, public art, and other aesthetic elements in development.
11. Incorporate policies that promote the health and welfare of the community by encouraging development to include convenient pedestrian and bicycle connections, bus, or shuttle connections, that increase connections to adjacent and nearby communities and cities, businesses, parks and open space areas, and new transit access opportunities into the planning process.

12. Maintain the rural and open space character of Riverside County by implementing policies that concentrate growth near or within existing urban and suburban areas to the greatest extent possible. Preserve and maintain the environment by developing policies to reduce illegal dumping, including hazardous waste, and increase access to affordable composting and recycling facilities; encourage the appropriate permitting of waste sites and reclamation of cleanup sites.
13. Encourage the connection of municipal water and wastewater services to community residents and facilities to reduce reliance on septic systems in order to limit groundwater contamination.

5.3 - Alternative 1—No Project Alternative

The purpose of this alternative is to evaluate the CEQA-required No Project Alternative in order to provide decision-makers and the public with what would be reasonably expected to occur if the proposed project does not advance. Under this alternative, land use changes as per the proposed project would not occur. The proposed project would not be implemented, and the existing and planned land use activities within the planning area would continue for the foreseeable future until they are developed or redeveloped according to their General Plan land use designations.

The existing General Plan land use designations and zoning classifications would remain unchanged. Existing land use designations would not be updated as part of the proposed project. Each parcel within planning area would be subject to the requirements of its corresponding General Plan land use designation. There would be no new guiding policies to support the modification of the planning area's structure.

5.3.1 - Impact Analysis

Aesthetics, Light, and Glare

The proposed project's impacts on scenic vistas, State Scenic Highways, visual character, and light and glare were found to be less than significant and did not require mitigation. The No Project Alternative would retain the existing land use designations and zoning classifications. The existing aesthetics, light, and glare conditions in the planning area would remain unchanged until parcels are developed or redeveloped according to their General Plan land use designations. Under both the No Project Alternative and the proposed project, future development would need to comply with applicable height, setback, lighting, and other zoning requirements to avoid impacts related to aesthetics, light, and glare. Impacts would be similar in this regard. However, this alternative would not meet project objectives such as preserving outstanding scenic vistas and features because it does not include policies that further encourage new development to underground placement of electric or communication distribution lines, or encouraging trees, signage, landscaping, street furniture, public art, and other aesthetic elements. The No Project Alternative is characterized by scattered commercial and industrial uses along Highway 74 and would not include a General Plan Amendment (GPA) to establish consistency with the existing development within the planning area and surroundings and, therefore, would not ensure the integrity of the visual character of the viewshed from the planning area to the same degree as the proposed project. In addition, the No Project Alternative includes less open space compared to the proposed project that would increase

the amount of open space by 4.28 acres and therefore could have a positive effect on aesthetics, light, and glare conditions. Therefore, the No Project Alternative would have increased impacts compared to that of the proposed project.

Agriculture and Forest Resources

The No Project Alternative would have the same level of impacts on agriculture and forest resources compared with the proposed project. Under the proposed project, there would be no impacts related to agriculture and forest resources because the planning area does not contain forestland or agricultural land, would not result in the loss or conversion of forestland or agricultural land, and would not result in other changes to the environmental related to agricultural or forest resources. Similarly, under the No Project Alternative, there would be no impacts related to agriculture and forest resources because this alternative would retain the existing land use designations and zoning classifications. However, under the No Project Alternative, the benefits of the proposed project's objectives that would maintain the rural and open space character of Riverside County by implementing policies that concentrate growth near or within existing urban and suburban areas and incorporate best practices related to land use would not be implemented. Therefore, although the project's benefits would not be implemented, the No Project Alternative would have similar impacts to the proposed project.

Air Quality

The proposed project would result in significant and unavoidable air quality impacts, as discussed in Section 3.3, Air Quality. Under the No Project Alternative, the parcels would remain unchanged until they are developed or redeveloped according to their General Plan land use designations. Because the proposed project would lead to a more intensive buildout (increase of almost 4,000 multi-family residential units, approximately 2,081,150 square feet of commercial retail uses, approximately 1,506,217 square feet of business park uses and approximately 740,903 square feet of light industrial uses) compared to General Plan buildout, the No Project Alternative would have less severe air quality impacts compared to the proposed project.

Biological Resources

Impacts from the proposed project to biological resources were found to be less than significant with mitigation. The existing biological resource conditions in the planning area would remain unchanged until parcels are developed or redeveloped according to their General Plan land use designations. Under both the proposed project and the No Project Alternative, future projects are required to comply with all federal, State, and local regulations and prepare a biological study to evaluate project impacts. As the proposed project would increase the overall development density and intensity of the planning area, the No Project Alternative could have less impacts on biological resources. However, the proposed project would increase the amount of open space by 4.28 acres and therefore could have a positive effect on biological resources. This alternative also would not meet the project objectives that would accommodate the development of a balance of land uses that maintain and enhance Riverside County's environmental integrity and preserve and maintain the environment by developing policies, and the positive benefits of implementation of the Highway 74 Community Plan would not be realized.

Cultural Resources

Under the No Project Alternative, impacts related to cultural resources would be similar to that of the proposed project. Impacts from the proposed project to cultural and tribal cultural resources were found to be less than significant with mitigation. Because parcels could still be developed according to their General Plan designations, potential disturbance to cultural resources would be similar.

Energy

Impacts from the proposed project related to energy were found to be less than significant. Under the No Project Alternative, the parcels would remain unchanged until they are developed or redeveloped according to their General Plan land use designations. Because the proposed project would lead to a substantial increase of residential, commercial, and industrial uses compared to General Plan buildout, the No Project Alternative would have less severe energy impacts compared to the proposed project.

Geology and Soils

Impacts from the proposed project to geology and soils were found to be less than significant with mitigation incorporated. The existing geology and soils conditions in the plan area would remain unchanged until parcels are developed or redeveloped according to their General Plan land use designations under the No Project Alternative. Under both the proposed project and the No Project Alternative, future projects are required to comply with all federal, State, and local regulations and prepare a geotechnical study to evaluate project impacts. Therefore, development based on the existing General Plan designations (the No Project Alternative) would have similar impacts than that of the proposed project. However, this alternative would not meet the project objectives, and the positive benefits of implementation of the proposed project would not be realized.

Greenhouse Gas Emissions

The proposed project would result in less than significant impacts with mitigation incorporated related to greenhouse gas (GHG) emissions. Under the No Project Alternative, the parcels would remain unchanged until they are developed or redeveloped according to their General Plan land use designations. Because the proposed project would lead to a more intensive buildout (increase of almost 4,000 multi-family residential units, approximately 2,081,150 square feet of commercial retail uses, approximately 1,506,217 square feet of business park uses, and approximately 740,903 square feet of light industrial uses) compared to General Plan buildout, the No Project Alternative would have less severe impact related to GHG emissions compared to the proposed project and would not require mitigation.

Hazards and Hazardous Materials

Impacts from the proposed project to hazards and hazardous materials were found to be less than significant. Under both the proposed project and the No Project Alternative, future projects are required to comply with all federal, State, and local regulations to avoid impacts related to hazards and hazardous materials. Therefore, the No Project Alternative would have similar impacts than that of the proposed project. However, there would be no objectives implemented related to hazards and

hazardous materials, including reducing illegal dumping, increasing access to affordable composting and recycling facilities, encouraging the appropriate permitting of waste sites and reclamation of cleanup sites, and reducing reliance on septic systems.

Hydrology and Water Quality

Impacts from the proposed project to hydrology and water quality were found to be less than significant. The existing hydrological and water quality conditions in the planning area would remain unchanged until parcels are developed or redeveloped according to their General Plan land use designations under the No Project Alternative. Under both the proposed project and the No Project Alternative, future projects are required to comply with all federal, State, and local regulations to avoid impacts related to hydrology and water quality. However, the proposed project would increase the amount of open space by 4.28 acres and therefore would have a positive effect on hydrology and water quality. Therefore, the No Project Alternative would have increased impacts than that of the proposed project.

Land Use and Planning

The No Project Alternative would retain the existing land use designations of the plan area. Therefore, under the No Project Alternative, there would be less than significant impacts related to land use and planning because there would be no alteration of land use designations. However, under the No Project Alternative, the objective related to related to land use and planning would not be implemented, such as accommodating the development of a balance of land uses, updating policies to be consistent with current legal requirements and legislation, incorporate best practices related to land use, or concentrating growth near or within existing urban and suburban areas, and encouraging consolidation of parcels to promote better land use development and maximize the density of residential, commercial, and industrial uses. Therefore, the No Project Alternative would have greater land use impacts than the proposed project because the policy benefits related to the proposed project would not be implemented.

Mineral Resources

Impacts from the proposed project to mineral resources were found to be either no impact or less than significant impact because there are no known mineral resources within the plan area, and the plan area is not designated as a resource recovery site. Under the No Project Alternative, the impacts would be similar to the proposed project.

Noise

Impacts from the proposed project related to noise were found to be less than significant with mitigation incorporated due to the potential for construction noise and groundborne vibration impacts from future development. Development based on the existing General Plan designations (the No Project Alternative) would have similar impacts than that of the proposed project.

Paleontological Resources

Impacts from the proposed project related to paleontological resources were found to be less than significant due to the low paleontological sensitivity and unique geologic features within the

planning area and required conformance with existing regulations intended for the protection of sensitive paleontological resources. Under this alternative, the existing paleontological conditions in the plan area would remain unchanged until parcels are developed or redeveloped according to their General Plan land use designations. Under both the proposed project and the No Project Alternative, future projects are required to comply with all federal, State, and local regulations and prepare a geotechnical study to evaluate project impacts. Therefore, development based on the existing General Plan designations (the No Project Alternative) would have similar impacts as compared to that of the proposed project. However, this alternative would not meet the project objectives, and the positive benefits of implementation of the proposed project would not be realized.

Population and Housing

Under the No Project Alternative, there would be no impacts related to population and housing because there would be no alteration of land use designations and therefore would not cause any potential displacement. The proposed project would have a less than significant impact related to displacement by re-designating residential land uses to other land uses. However, the proposed project would accommodate nearly 4,000 new multi-family residential units, providing increased housing opportunities in the planning area and reducing impacts to below a level of significance. Similarly, the No Project Alternative would have less than significant impacts, but would result in fewer housing units at buildout and would fail to meet the project's underlying purpose or advance project objectives such as promoting better land use development and project design and maximizing density of residential uses, promoting healthy neighborhoods and complete streets, and including pedestrian and bicycle connections, bus, and shuttle connections that increase connections to adjacent and nearby communities, and incorporating best practices related to housing and affordability.

Public Services

Impacts from the proposed project related to public services would be less than significant because it is anticipated that buildout of the proposed project could be accommodated by public services providers such as the police and fire departments. However, compared to the No Project Alternative, which means development according to the existing General Plan with mostly rural development, the proposed project would increase the overall development density and intensity of the planning area. As both alternatives would be required to pay any applicable development fees and incorporate any conservation measures required by applicable regulations or the service providers in order to be adequately served by existing service providers, the No Project Alternative would have a similar impact on public services as compared to the proposed project. However, this alternative would fail to meet the project objective of promoting healthy neighborhoods that incorporate best practices related to safety and community services.

Recreation

Compared to the No Project Alternative, which means development according to the existing General Plan with mostly rural development, the proposed project would increase the overall development density and intensity of the planning area. As this alternative would result in less population growth, demand for recreation would be less than under the proposed project. The

proposed project would result in a population increase of up to 12,800 residents if all approximately 4,000 dwelling units were constructed. This would represent a 3.3 percent increase in the existing resident population of unincorporated Riverside County and 0.12 percent increase in population of Riverside County overall, still resulting in 9.2 acres of parks and open space per 1,000 residents, far exceeding the County's adopted threshold of 3 acres for every 1,000 residents. As the No Project Alternative would result in less population growth, there would be sufficient parks and open space to meet the County's threshold. Both the No Project Alternative and the proposed project can be adequately served by existing parks and open spaces, and the resulting impacts would be similar.

Transportation and Traffic

As discussed in Section 3.11, Transportation, the proposed project would have a significant and unavoidable impact related to transportation because the proposed project would result in an increase in project-generated VMT from No Project baseline conditions, which is considered a significant impact for all VMT metrics presented. MM TRANS-37(b)-1 through MM TRANS-37(b)-5 would be required to reduce impacts. The effectiveness of TDM measures cannot be guaranteed to reduce impacts at a project-level; therefore, this impact is considered significant and unavoidable.

According to the project's VMT memorandum, a Cumulative No Project Condition using Riverside County Traffic Analysis (RivTAM) cumulative model (2040) was analyzed. The RivTAM model is developed to be consistent with the Southern California Association of Governments (SCAG) Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), which is based on each municipality's General Plan land uses. Therefore, the Cumulative No Project Condition using RivTAM cumulative model (2040) can be assumed to reasonably reflect the level of VMT impact under the No Project Alternative. Under the Cumulative No Project Condition, the residential VMT per capita for the planning area is 22.71 and the employment-based VMT per employee is 17.68. Under the proposed project, the residential VMT per capita for the planning area is 20.88 and the employment-based VMT per employee is 17.40. The No Project Alternative has an increased VMT impact compared to the proposed project.

In addition, the proposed project contains objectives designed to encourage better access to Highway 74; promote multi-modal transportation options within proximity to each other and that reduce reliance on the automobile; Encourage complete streets, which include sidewalks, greenbelts, and trails; encourage development to include convenient pedestrian and bicycle connections, bus, and shuttle connections that increase connections to adjacent and nearby communities and cities, businesses, parks and open space areas, and new transit access opportunities into the planning process; and concentrate growth near or within existing urban and suburban areas, which could promote VMT reduction through residential proximity to goods and services, open space, and public transit. Under the No Project Alternative, the benefits of the proposed project's policies would not be implemented.

Tribal Cultural Resources

Under the No Project Alternative, impacts related to Tribal Cultural Resources (TCRs) would be similar to that of the proposed project. Impacts from the proposed project to TCRs were found to be

less than significant with mitigation. Because parcels could still be developed according to their General Plan designations, potential disturbance to TCRs would be similar under this alternative.

Utilities and Service Systems

The No Project Alternative would have less impacts to utilities and service systems as compared to the proposed project. Impacts from the proposed project to utilities and service systems were found to be less than significant with mitigation incorporated due to an anticipated increase of multi-family residential dwelling units, commercial retail, business park, light industrial, and public facility uses under buildout of the proposed project, which would increase water demand and wastewater generation. However, this alternative would not meet the project objectives such as encouraging the connection of municipal water and wastewater services to community residents and facilities to reduce reliance on septic systems in order to limit groundwater contamination., and the positive benefits of implementation of the proposed project would not be realized. Under the No Project Alternative, the project objective to encourage consolidation of parcels to promote better land use development would not be fully realized.

Wildfire

The proposed project's impacts related to wildfire would be less than significant. Under both the proposed project and the No Project Alternative, future projects are required to comply with all federal, State, and local regulations to avoid impacts related to wildfire. Therefore, the No Project Alternative would have similar impacts than that of the proposed project.

5.3.2 - Conclusion

Under the proposed project, the implementation of mitigation measures would be required to reduce the potentially significant impacts associated with air quality; biological resources; cultural resources; geology, soils, and seismicity; GHG emissions; noise; transportation and traffic; tribal cultural resources, and utilities and service systems to less than significant levels. Transportation impacts related to VMT would be significant and unavoidable, and air quality impacts would be significant and unavoidable. Under the proposed project, no mitigation measures would be required for the less than significant impacts associated with aesthetics, agriculture and forest resources, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, paleontological resources, population and housing, public services, recreation, utilities and service systems, or wildfire. Overall, none of the mitigation measures required for the proposed project would be implemented under the No Project Alternative.

The No Project Alternative would not result in any significant changes to agriculture and forest resources; therefore it would have no impacts with respect to these resources. However, it would not offer any of the benefits of the proposed project and would not meet any of the project objectives.

Because the No Project Alternative would have a less intensive buildout than the proposed project, the No Project Alternative would have lower impacts than the proposed project's impacts related to air quality, biological resources, energy, GHG emissions, land use and planning, population and housing, and utilities and service systems.

The proposed project provides a framework for development that would enhance the Highway 74 corridor by promoting cohesive development that would not be realized under the No Project Alternative. Because the planning area would retain the existing land use designations and zoning classifications, the No Project Alternative would not meet any of the project objectives and development would continue to be scattered and disconnected. The No Project Alternative would not encourage consolidation of parcels to promote better land use development and project design; increase connections to adjacent and nearby communities and cities, businesses, parks and open space areas, increase and facilitate access from Highway 74 to residential, commercial, and industrial sites;; encourage development to include convenient pedestrian and bicycle connections, bus, and shuttle connections; promote the health and welfare of the community; or implement any of the other project objectives.

The No Project Alternative would not meet all of the project objectives because this alternative would not include new policies and programs that provide direction for issues related to land use, mobility, air quality, housing, affordability, safety, environmental justice, and community services, in addition to addressing new requirements of State law. As the new policies and programs in the proposed project reflect the current goals and vision expressed by residents, businesses, decision-makers, and other stakeholders, through an extensive public review process, neither the first nor second objective of the proposed project would be met under the No Project Alternative. As the General Plan Amendments and the new policies and programs in the proposed project address issues and concerns identified by involved residents, businesses, decision-makers, and other stakeholders, and provide a framework for cohesive development, the third objective of the proposed project would not be met under the No Project Alternative.

5.4 - Alternative 2—Reduced Density Alternative

The purpose of the Reduced Density Alternative is to evaluate a version of the proposed project that develops the same end uses on the same sites, but at a lower density. Under the Reduced Density Alternative, the buildout potential within the planning area would be reduced by 25 percent, which equates to an approximate reduction of 896 units and 1,978,910 square feet of nonresidential uses (commercial retail, business park, and light industrial). The planning area boundary would remain the same; however, less development would occur.

5.4.1 - Impact Analysis

Aesthetics, Light, and Glare

The proposed project's impacts on scenic vistas, State Scenic Highways, visual character, and light and glare were found to be less than significant and did not require mitigation. As this alternative would provide fewer dwelling units and less nonresidential uses, the height of the structures may be slightly reduced as compared to the proposed project. Thus, under this alternative, the visual character and light and glare condition would change, but to a lesser degree as compared to the proposed project. However, similar to the proposed project, the Reduced Density Alternative would allow for thoughtful and organized development including landscaping to enhance the appearance of the planning area. Therefore, the Reduced Density Alternative would have similar impacts related to aesthetics, light, and glare.

Agriculture and Forest Resources

The proposed project was found to have no impacts on agriculture and forest resources because the plan area does not contain forestland or agricultural land, would not result in the loss or conversion of forestland or agricultural land, and would not result in other changes to the environmental related to agricultural or forest resources. For these reasons, the Reduced Density Alternative would also result in no impacts regarding these resources. Therefore, the Reduced Density Alternative would have the same level of impacts on agriculture and forest resources as the proposed project.

Air Quality

The Reduced Density Alternative would result in less construction activity and fewer daily vehicle trips, which would have corresponding reductions in the severity of construction and operational air quality impacts. Additionally, because the proposed project has the potential to significantly alter the demographic projections beyond what is accounted for in the current AQMP, and this alternative would result in a reduction of 896 units as compared to the proposed project, this alternative would reduce conflicts with the AQMP. However, these impacts would still be considered significant and unavoidable because the proposed number of dwelling units under this alternative would not be consistent with the growth assumptions within the current AQMP. Additionally, this alternative would have similar impacts related to the nonattainment designations of the SoCAB, and exposure of sensitive receptors, and would require similar mitigation measures. Although this alternative would implement mitigation measures similar to the proposed project, the reduction in development potential and vehicle trips would reduce the severity of air quality impacts. Therefore, this alternative would have less impact on air quality than the proposed project.

Biological Resources

The Reduced Density Alternative would have the same potential to impact special-status species as the proposed project since the planning area is largely undeveloped and this alternative would result in similar ground disturbance and a similar footprint. This alternative would require mitigations similar to the proposed project, which would reduce potential impacts to a level of less than significant. Therefore, this alternative would have biological resources impacts similar to the proposed project.

Cultural Resources

Similar to the proposed project, the Reduced Density Alternative has the potential to result in adverse impacts to undiscovered cultural resources during subsurface earthwork activities undertaken by future development under buildout of the proposed project and, thus, would be required to implement mitigation similar to the proposed project to reduce impacts to a level of less than significant. Therefore, this alternative would have cultural resources impacts similar to the proposed project.

Energy

Impacts from the proposed project related to energy were found to be less than significant. Under the Reduced Density Alternative, impacts to energy would be reduced because of a lower buildout

potential. Therefore, the Reduced Density Alternative would have reduced impacts on energy as compared to the proposed project.

Geology and Soils

Similar to the proposed project, the Reduced Density Alternative would have the potential to expose people and structures to seismic hazards and, thus, would implement mitigation similar to the proposed project to reduce impacts to a level of less than significant. Therefore, this alternative would have geology, soils, and seismicity impacts similar to the proposed project.

Greenhouse Gas Emissions

Impacts from the proposed project to GHG emissions were found to be less than significant with mitigation incorporated. Under the Reduced Density Alternative, impacts to GHG emissions would be reduced because of a lower buildout potential. Therefore, the Reduced Density Alternative would have reduced impacts as compared to the proposed project.

Hazards and Hazardous Material

Similar to the proposed project, buildout of the Reduced Density Alternative would include grading and construction activities, which may involve the limited transport, storage, usage, or disposal of hazardous materials, such as the fueling/servicing of construction equipment, and future land uses would include the use of routine chemicals for typical residential and retail/commercial facilities. Overall, this alternative would have hazards and hazardous materials impacts similar to the proposed project.

Hydrology and Water Quality

Similar to the proposed project, the Reduced Planning Alternative would have the potential to introduce new sources of water pollution or increased runoff that could result in water quality impacts. This alternative would adhere to applicable federal, State, and local regulations similar to the proposed project to ensure that water pollution prevention and drainage measures are less than significant. Therefore, this alternative would result in hydrology and water quality impacts similar to the proposed project.

Land Use and Planning

This alternative would alter land use and zoning designations similar to the proposed project and would yield similar conclusions regarding General Plan and Zoning consistency. Therefore, this alternative would have land use impacts similar to the proposed project.

Mineral Resources

Impacts from the proposed project to mineral resources were found to be either no impact or less than significant impact because there are no known mineral resources within the plan area, and the plan area is not designated as a resource recovery site. Under the Reduced Density Alternative, the impacts would be similar to the proposed project.

Noise

The Reduced Density Alternative would result in less construction activity and fewer daily vehicle trips, which would have corresponding reductions in the severity of construction and operational noise impacts. Although this alternative would implement mitigation measures similar to the proposed project, the reduction in development potential and vehicle trips would reduce the severity of noise impacts. Therefore, this alternative would have slightly less impact on noise than the proposed project.

Paleontological Resources

Similar to the proposed project, the Reduced Density Alternative would be located in an area with low paleontological sensitivity and unique geologic features and required conformance with existing regulations intended for the protection of sensitive paleontological resources. Therefore, this alternative would have similar paleontological impacts as compared to the proposed project.

Population and Housing

Similar to the proposed project, the Reduced Density Alternative would have a less than significant impact related to displacement by re-designating residential land uses to other land uses. However, this alternative would provide 25 percent fewer multi-family residential units, and would provide fewer housing opportunities in the planning area and offset fewer displacement impacts. Therefore, the Reduced Density Alternative would have more impacts related to population and housing. Furthermore, because there would be fewer residential units and fewer housing opportunities, this alternative would not fully meet the project objective of maximizing the density of residential uses.

Public Services

The Reduced Density Alternative would result in a reduction in development potential and would therefore result in fewer new residents and employees. Thus, this alternative would have a corresponding reduction in demand for public services. Although the proposed project's public service impacts were determined to be less than significant and would not require mitigation, this alternative would have a slightly reduced impact on public services as compared to the proposed project.

Recreation

The Reduced Density Alternative would result in a reduction in development potential and would therefore result in fewer new residents and employees. Thus, this alternative would have a corresponding reduction in demand for recreational facilities. Although the proposed project's recreation impacts were determined to be less than significant and would not require mitigation, this alternative would have a slightly reduced recreation impacts as compared to the proposed project.

Transportation and Traffic

The Reduced Density Alternative would result in a reduction of the proposed project's buildout potential. This alternative would yield an overall reduction of vehicle trips. However, it would also provide fewer housing and employment opportunities within the planning area, necessitating

commutes that would have a VMT-inducing effect. For this reason, the Reduce Density Alternative is expected to have greater VMT impacts than the proposed project. Additionally, because of the reduction in buildout potential, this alternative would not fully meet the project objectives of increasing connections to adjacent and nearby communities and cities, businesses, parks and open space areas, and creating new transit access opportunities.

Tribal Cultural Resources

Similar to the proposed project, the Reduced Density Alternative has the potential to result in adverse impacts to TCRs under buildout of the proposed project and, thus, would be required to implement mitigation similar to the proposed project to reduce impacts to a level of less than significant. Therefore, this alternative would have cultural resources impacts similar to the proposed project.

Utilities and Service Systems

The Reduced Density Alternative would have less impacts to utilities and service systems as compared to the proposed project because of the reduction in development potential. Thus, this alternative would have a corresponding reduction in demand for utilities and service systems. As with the proposed project, this alternative would implement similar mitigation related to water conservation and recycling to reduce impacts to a level of less than significant. However, because of the reduced buildout potential, this alternative would not fully meet the project objective of reducing reliance on septic systems in order to limit groundwater contamination.

Wildfire

The proposed project's impacts related to wildfire would be less than significant. Under both the proposed project and the Reduced Density Alternative, future projects are required to comply with all federal, State, and local regulations to avoid impacts related to wildfire. Therefore, the No Project Alternative would have similar impacts as that of the proposed project.

5.4.2 - Conclusion

The Reduced Density Alternative would lessen the severity of the proposed project's impacts associated with air quality, energy, greenhouse gas emissions, noise, public services, recreation, and utilities and service systems. This alternative would increase the severity of the proposed project's impacts associated with population and housing and transportation. This alternative would have similar impacts to the proposed project associated with aesthetics, light, and glare; agriculture and forest resources; biological resources; cultural resources; geology, soils, and seismicity; hazards and hazardous materials; hydrology and water quality; land use; mineral resources; paleontological resources, tribal cultural resources, and wildfire.

The Reduced Density Alternative would advance most of the project objectives, but to a lesser degree than the proposed project because of the reduction in new dwelling units and nonresidential development. This includes objectives related to increasing connections and providing new transit opportunities, reducing reliance on septic systems, and maximizing the density of residential uses.

5.5 - Alternative 3—Increased Industrial Use Alternative

In addition to the land use changes that are proposed as part of the proposed project, this alternative would also change the existing residential, mixed-use, and community center designations within the Colinas del Oro Specific Plan area to LI. This would represent an increase of 72.0 acres of LI use and corresponding reduction of residential, mixed-use, and community center uses compared to the proposed project. The proposed land use changes in the Colinas del Oro Specific Plan area as part of Alternative 3 is shown in Exhibit 5-1.

The square footage has been estimated based on a floor area ratio (FAR) of 38 percent on 72 acres (i.e., 72-acres x 43,560 square feet per acre x 0.38 FAR = 1,191,802 square feet). For the purposes of this analysis, this alternative would be evaluated assuming an increase of 1,191,802 square feet of high-cube fulfillment center warehouse use.

5.5.1 - Impact Analysis

Aesthetics, Light, and Glare

The proposed project's impacts on scenic vistas, State Scenic Highways, visual character, and light and glare were found to be less than significant and did not require mitigation. Although the Increased Industrial Use Alternative would replace residential, mixed-use, and community center land use designations with LI uses, each future development would comply with applicable height, setback, lighting, and other zoning requirements to avoid impacts related to aesthetics, light, and glare. Therefore, the Increased Industrial Use Alternative would have impacts on aesthetics, light, and glare that are similar to the proposed project.

Agriculture and Forest Resources

The Increased Industrial Use Alternative would have the same potential to impact agriculture and forest resources as the proposed project, since its boundaries would be the same as the proposed project. The proposed project was determined to have no impact on agriculture and forest resources. As such, this alternative would have no impacts on agriculture and forest resources, similar to the proposed project.

Air Quality

Under the Increased Industrial Use Alternative, the reduction in total vehicle trips due to the shift from residential, mixed-use, and community center uses to industrial uses would result in fewer mobile source emissions; however, the fleet mix would change as a result of the shift in uses.

According to an Urban Crossroads Trip Generation Assessment prepared for the Increased Industrial Use Alternative, this alternative would result in an overall reduction of vehicle trips, which would reduce the air quality impacts. The residential, mixed-use, and community center designations are anticipated to generate a total of 13,016 two-way Passenger Car Equivalent (PCE) trips per day with 629 PCE AM peak-hour trips and 1,240 PCE PM peak-hour trips. This alternative is anticipated to generate a total of 3,248 two-way PCE trips per day with 181 AM peak-hour trips and 234 PM peak-hour trips (PCE). Therefore, the Increased Industrial Use Alternative would generate 9,768 fewer two-way PCE trips per day with 448 fewer PCE AM and 1,006 fewer PCE PM peak-hour trips as compared to the current land use assumptions.

However, the heavier use of diesel-fuel trucks would result in greater impacts with regard to certain types of emissions. This alternative would likely result in a reduction in mobile source VOCs and PM₁₀, as well as GHGs and carbon monoxide (CO), but could result in an increase in mobile source NO_x and particulate matter less than 2.5 microns in diameter (PM_{2.5}) due to a heavier use of diesel-fueled trucks versus gasoline-fueled passenger vehicles. Additionally, there would be similar impacts associated with inconsistencies with the growth assumptions within the current AQMP, the nonattainment designations of the SoCAB, and exposure of sensitive receptors, and this alternative would require similar mitigation measures as compared to the proposed project. Therefore, the Increased Industrial Use Alternative would likely result in a similar or lower level of impacts overall.

Biological Resources

Similar to the proposed project, the Increased Industrial Use Alternative would have the same potential to impact special-status species as the proposed project since the planning area is largely undeveloped and this alternative would result in similar ground disturbance and a similar footprint. This alternative would require mitigations similar to the proposed project, which would reduce potential impacts to a level of less than significant. Therefore, this alternative would have biological resources impacts similar to the proposed project.

Cultural Resources

Similar to the proposed project, the Increased Industrial Use Alternative would have the potential to result in adverse impacts to undiscovered cultural resources during subsurface earthwork activities and, thus, would be required to implement mitigation similar to the proposed project to reduce impacts to a level of less than significant. Overall, this alternative would have cultural resources impacts similar to the proposed project.

Energy

Impacts from the proposed project related to energy were found to be less than significant. Under the Increased Industrial Use Alternative, there would be more impacts related to energy because the operation of light industrial uses are expected to be more energy intensive than residential, mixed-use, and community center uses. However, the Increased Industrial Alternative would result in lower vehicular trips and therefore have fewer energy impacts related to fossil fuel. Overall, the Increased Industrial Use Alternative would have similar impacts on energy as compared to the proposed project.

Geology and Soils

Similar to the proposed project, the Increased Industrial Use Alternative would have the potential to expose people and structures to seismic hazards and, thus, would need to implement mitigation measures similar to the proposed project to reduce geology and seismic impacts to a level of less than significant. Therefore, this alternative would have geology, soils, and seismicity impacts similar to the proposed project.

Greenhouse Gas Emissions

Impacts from the proposed project to greenhouse gas emissions were found to be less than significant with mitigation incorporated. Under the Increased Industrial Use Alternative, there would be more impacts related to greenhouse gas emissions because the operation of light industrial uses

is expected to be more energy intensive than residential, mixed-use, and community center uses. However, the Increased Industrial Alternative would result in lower vehicular trips and therefore have fewer greenhouse gas emissions impacts related to fossil fuel. Overall, the Increased Industrial Use Alternative would have similar impacts on greenhouse gas emissions as compared to the proposed project.

Hazards and Hazardous Material

The Increased Industrial Use Alternative would have more industrial development and less residential, mixed-use, and community center development relative to the proposed project. The proposed goals and policies related to hazardous and hazardous materials would still be implemented under this alternative. By reducing residential, mixed-use, and community center land uses, this alternative would lessen the potential for exposing sensitive receptors to hazardous materials. Although the proposed project was determined to have less than significant impacts after mitigation, this alternative would also have a similar potential for impacts related to hazardous and hazardous materials. As such, this alternative would have similar impacts regarding hazards and hazardous materials as compared to the proposed project.

Hydrology and Water Quality

The Increased Industrial Use Alternative would have the same footprint as the proposed project. The plan area contains both developed and undeveloped land; thus, this alternative would have the potential to introduce new sources of water pollution or increased runoff that could result in water quality impacts. As such, this alternative would implement mitigation similar to the proposed project to ensure that water pollution prevention and drainage measures are in place to reduce impacts to a level of less than significant. Therefore, this alternative would have hydrology and water quality impacts similar to the proposed project.

Land Use and Planning

Similar to the proposed project, the Increased Industrial Use Alternative would involve the adoption of a community plan to guide future development in the plan area; however, this alternative would result in an increase of industrial uses and a reduction of residential, mixed-use, and community center land uses as compared to the proposed project. This alternative would require land use approvals similar to the proposed project and would yield similar conclusions regarding General Plan and Zoning consistency.

The project would meet some objectives related to related to land use and planning, such as encouraging consolidation of parcels to promote better land use development and project design, but would not fully meet the objectives related to maximizing residential and commercial uses or providing housing, goods, and services. Therefore, this alternative would have land use impacts similar to the proposed project.

Mineral Resources

Similar to the proposed project, the Increased Industrial Use Alternative would have either no impacts or less than significant impacts regarding mineral resources because there are no known mineral resources in the plan area, and the planning area is not designated as a resource recovery

site. Therefore, this alternative would have the same level of impacts on mineral resources as compared with the proposed project.

Noise

Similar to the proposed project, future development under this alternative would implement mitigation measures and prepare noise studies to reduce noise impacts to less than significant. Therefore, this alternative would have a similar impact on noise as the proposed project.

Paleontological Resources

Similar to the proposed project, the Industrial Use Alternative would be located in an area with low paleontological sensitivity and unique geologic features and required conformance with existing regulations intended for the protection of sensitive paleontological resources. Therefore, this alternative would have similar paleontological impacts as compared to the proposed project.

Population and Housing

The Increased Industrial Use Alternative would shift land uses within the from residential, mixed-use, and community center uses to light industrial uses within the Colinas del Oro Specific Plan area, which would consist of 72 acres. A reduction of housing would mean a corresponding reduction in opportunities to implement the proposed project's objectives to provide housing and maximize the density of residential and commercial uses. It would also lead to a lower population growth because of the reduction of housing. The Increased Industrial Use Alternative would also have a greater impact related to displacement because there would be fewer housing opportunities to offset the displacement. Overall, the Increased Industrial Use Alternative would have a slightly increased impact on population and housing.

Public Services

The Increased Industrial Use Alternative would reduce residential, mixed-use, and community center land uses and increase industrial uses relative to the proposed project. Therefore, this alternative would result in a lower population growth and the corresponding reduction in demand for public services. Because the proposed project's public services impacts were found to be less than significant and did not require mitigation, this alternative would have a similar impact on public services.

Recreation

The Increased Industrial Use Alternative would reduce residential, mixed-use, and community center land uses and increase industrial uses relative to the proposed project. (The open space areas of the Colinas del Oro Specific Plan would remain unchanged and would continue to be available to the public). Therefore, this alternative would result in a lower population growth and a corresponding reduction in demand for recreational facilities. Similar to the proposed project, development under this alternative would be required to either provide recreational facilities and open space in accordance with the land use and density proposed or would be required to pay development impact fees pursuant to Ordinance No. 659, thereby supporting the construction of facilities identified in the County's Public Facilities Needs List and/or the acquisition of open space and

habitat. Additionally, using a persons per household ratio of 3.20, if this alternative were fully developed, a population increase of up to 11,329 residents could be anticipated in the planning area. This would represent a 2.9 percent increase in the existing resident population of unincorporated Riverside County and 0.5 percent increase in population of Riverside County overall, still resulting in 9.2 acres of parks and open space per 1,000 residents (compared to 9.2 acres of parks and open space per 1,000 residents under the proposed project). Accordingly, similar to the proposed project's recreation impacts, this alternative would also have a less than significant impact on recreation. However, because this alternative would provide increased acres of parks and open space per 1,000 residents, impacts would be less compared to the proposed project.

Transportation and Traffic

Under the Increased Industrial Use Alternative, the reduction in total vehicle trips due to the shift from residential, mixed-use, and community center uses to industrial uses would result in fewer mobile source emissions; however, the fleet mix would change as a result of the shift in uses.

The residential, mixed-use, and community center designations are anticipated to generate a total of 13,016 two-way PCE trips per day with 629 PCE AM peak-hour trips and 1,240 PCE PM peak-hour trips. This alternative is anticipated to generate a total of 3,248 two-way PCE trips per day with 181 AM peak-hour trips and 234 PM peak-hour trips (PCE). Therefore, the Increased Industrial Use Alternative would generate 9,768 fewer two-way PCE trips per day with 448 fewer PCE AM and 1,006 fewer PCE PM peak-hour trips as compared to the current land use assumptions.

However, the heavier use of diesel-fuel trucks could potentially result in greater impacts with regard to certain types of emissions. This alternative would likely result in a reduction in mobile source VOCs and PM₁₀, as well as GHGs and CO, but could result in an increase in mobile source NO_x and PM_{2.5} due to a heavier use of diesel-fueled trucks versus gasoline-fueled passenger vehicles. Therefore, the Increased Industrial Use Alternative would likely result in a similar or lower level of impacts overall.

Tribal Cultural Resources

Similar to the proposed project, the Increased Industrial Use Alternative would have the potential to result in adverse impacts to TCRs and, thus, would be required to implement mitigation similar to the proposed project to reduce impacts to a level of less than significant. Overall, this alternative would have TCRs impacts similar to the proposed project.

Utilities and Service Systems

The Increased Industrial Use Alternative would reduce residential, mixed uses, and community center uses and increase industrial uses. Therefore, this alternative would result in a lower population growth and the corresponding reduction in demand for utilities and service systems. As with the proposed project, this alternative would implement similar mitigation for water and recycling to reduce impacts to a level of less than significant. This alternative would have fewer impacts on utilities and service systems as compared to the proposed project.

Wildfire

Similar to the proposed project, the Increased Industrial Use Alternative would have less than significant impacts regarding wildfire because the existing wildfire conditions would remain unchanged under this alternative. Furthermore, the proposed policies, such as protecting life and property from wildfire hazards through adherence to the Fire Hazards section of the General Plan Safety Element, would still be implemented under this alternative. Therefore, this alternative would have the same level of wildfire impacts as compared with the proposed project.

5.5.2 - Conclusion

The Increased Industrial Use Alternative would lessen the severity of, but would not avoid, the significant unavoidable air quality and transportation impacts associated with the proposed project. The Increased Industrial Use Alternative would lessen the impacts associated with recreation and utilities and service systems as compared with the proposed project. There would be similar impacts associated with aesthetics, light, and glare; agriculture and forest resources; air quality; biological resources; cultural resources; energy; geology, soils, and seismicity; greenhouse gas emissions; hazards and hazardous materials; hydrology and water quality; land use; mineral resources; noise; paleontological resources, public services; transportation; tribal cultural resources, and wildfire. This alternative would result in greater impacts associated with population and housing. However, the Increased Industrial Use Alternative would not fully advance the project objectives related to land use, residential and commercial density, and housing opportunities. It would fully advance the project objectives related to highway access, public transit and bicycle/pedestrian connections, aesthetic elements, parking, hazardous waste, and utilities.

5.6 - Environmentally Superior Alternative

The qualitative environmental effects of each alternative in relation to the proposed project are summarized in Table 5-1 below.

Table 5-1: Summary of Alternatives

Environmental Topic Area	No Project Alternative	Reduced Density Alternative	Increased Industrial Use Alternative
Aesthetics, Light, and Glare	More Impact	Similar Impact	Similar Impact
Agriculture and Forest Resources	Similar Impact	Similar Impact	Similar Impact
Air Quality	Less Impact	Less Impact	Similar Impact
Biological Resources	Less Impact	Similar Impact	Similar Impact
Cultural Resources	Similar Impact	Similar Impact	Similar Impact
Energy	Less Impact	Less Impact	Similar Impact
Geology, Soils, and Seismicity	Similar Impact	Similar Impact	Similar Impact
Greenhouse Gas Emissions	Less Impact	Less Impact	Similar Impact
Hazards and Hazardous Materials	Similar Impact	Similar Impact	Similar Impact
Hydrology and Water Quality	More Impact	Similar Impact	Similar Impact

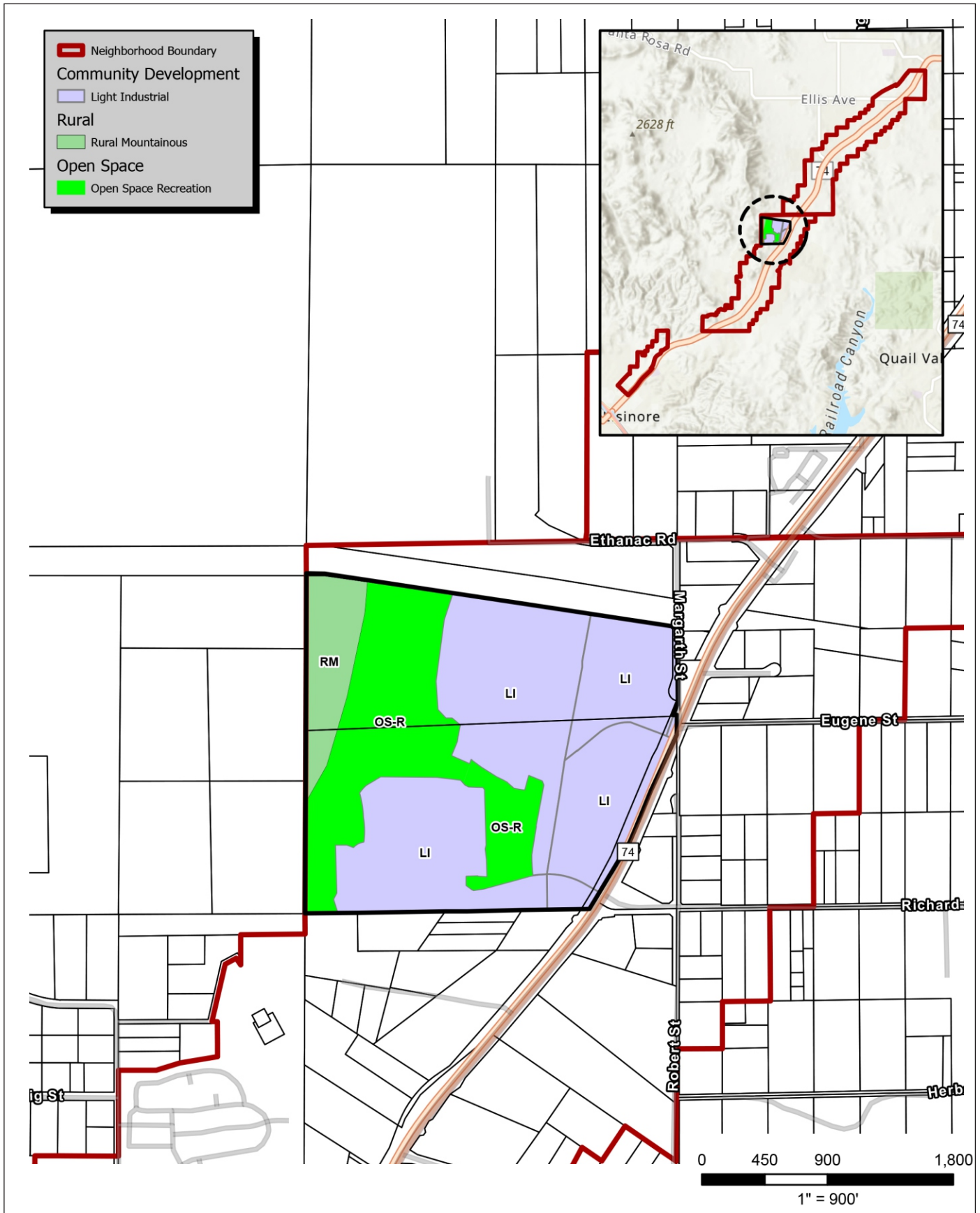
Environmental Topic Area	No Project Alternative	Reduced Density Alternative	Increased Industrial Use Alternative
Land Use	Less Impact	Similar Impact	Similar Impact
Mineral Resources	Similar Impact	Similar Impact	Similar Impact
Noise	More Impact	Less Impact	Similar Impact
Paleontological Resources	Similar Impact	Similar Impact	Similar Impact
Population and Housing	Similar Impact	More Impact	More Impact
Public Services	Similar Impact	Less Impact	Similar Impact
Recreation	Less Impact	Less Impact	Less Impact
Transportation	More Impact	More Impact	Similar Impact
Tribal Cultural Resources	Similar Impact	Similar Impact	Similar Impact
Utilities and Service Systems	Less Impact	Less Impact	Less Impact
Wildfire	Similar Impact	Similar Impact	Similar Impact

Source: FirstCarbon Solutions (FCS) 2023.

As shown in Table 5-1, the No Project Alternative is the environmentally superior alternative, as future development within the planning area under the current General Plan and Zoning would result in less impact.

State CEQA Guidelines Section 15126(e)(2) requires an EIR to identify an environmentally superior alternative. If the No Project Alternative is the environmentally superior alternative, the EIR must also identify an environmentally superior alternative from among the other alternatives.

Of the two remaining alternatives, the Reduced Density Alternative has the potential to yield the greatest reductions in the severity of the proposed significant and unavoidable impacts because it would result in less development overall than the Increased Industrial Use Alternative. The Increased Industrial Use Alternative would generate fewer daily vehicle trips compared with the proposed project, but the overall plan area footprint would not be reduced. Furthermore, the Increased Industrial Use Alternative would not completely avoid the significant and unavoidable impacts associated with the proposed project, and it would not fully advance the project objectives related to land use and housing opportunities. Therefore, the Reduced Density Alternative is the environmentally superior alternative.



Source: CASC Engineering and Consulting.

Exhibit 5-1
 Alternative 3 - Colinas del Oro
 Specific Plan Proposed Land Uses



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CHAPTER 6: OTHER CEQA CONSIDERATIONS

6.1 - Significant Unavoidable Impacts

California Environmental Quality Act (CEQA) Guidelines Section 15126.2(a)(b) requires an Environmental Impact Report (EIR) to identify and focus on the significant environmental effects of the proposed project, including effects that cannot be avoided if the proposed project were implemented.

This section describes significant impacts, including those that can be mitigated but not reduced to a level of less than significant. Where there are impacts that cannot be alleviated without imposing a project alternative, their implications, and the reason the project is being proposed, notwithstanding their effect, is described. With implementation of the proposed project, significant and unavoidable impacts related to an increase in project-generated Vehicle Miles Traveled (VMT), conflicts with the Congestion Management Program (CMP) and the applicable Air Quality Plan (2022 AQMP for the South Coast Air Basin [SoCAB]), cumulative air quality, and exposure of sensitive receptors to pollutant concentrations would occur. Each significant unavoidable impact is discussed below.

- The proposed project would conflict with implementation of the applicable Air Quality Plan (2022 AQMP for the SoCAB). The proposed project would generate regional or localized construction or operational emissions that would exceed the South Coast Air Quality Management District (SCAQMD) thresholds of significance. Additionally, the proposed project has the potential to significantly alter the demographic projections beyond what is accounted for in the current AQMP. Since the proposed project would include a General Plan Amendment, the proposed project would not be consistent with the growth assumptions within the current AQMP. Components of and improvements proposed under the proposed project would contribute to minimize criteria air pollutant emissions from transportation and energy use. However, given the potential increase in growth and associated increase in criteria air pollutant emissions, the project would continue to be potentially inconsistent with the assumptions in the AQMP. Implementation of Mitigation Measures (MM) AIR-6a-1 through MM AIR-6a-15 would be required to reduce regional and localized emissions to the extent feasible. However, the estimated construction emissions and long-term emissions generated under full buildout of the proposed project are estimated to continue to exceed the SCAQMD's regional significance thresholds after the implementation of mitigation, and would cumulatively contribute to the nonattainment designations in the SoCAB. In addition, implementation of the proposed project would contribute to exceedances of the current population and employment estimates for the planning area. Therefore, the proposed project would be considered inconsistent with the AQMP, resulting in a significant impact in this regard. Therefore, Impact AIR-6a would remain significant and unavoidable.
- The proposed project would result in a cumulatively considerable net increase of a criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard. Operation of the proposed project at buildout would generate air pollutant emissions that exceed SCAQMD's regional significance thresholds for volatile

organic compound (VOC), nitrogen oxide (NO_x), CO, PM₁₀, and PM_{2.5} at full buildout. Emissions of VOC and NO_x that exceed the SCAQMD regional threshold would cumulatively contribute to the O₃ nonattainment designation of the SoCAB. Emissions of NO_x that exceed SCAQMD's regional significance thresholds would cumulatively contribute to the O₃ and particulate matter nonattainment designations of the SoCAB. Emissions of direct PM₁₀ and PM_{2.5} would contribute to the PM_{2.5} nonattainment designations. Therefore, the project would result in a potentially significant impact because it would significantly contribute to the nonattainment designations of the SoCAB.

Combined with the Riverside County General Plan policies and the implementation of existing mitigation measures developed as part of the Final EIR for the General Plan, the implementation of MM AIR-6a-1 through MM AIR-6a-7 would reduce criteria air pollutant emissions from construction-related activities to the extent feasible. However, specific construction time frames and equipment for individual site-specific projects are not available and there is a potential for multiple developments to be constructed at any one time, resulting in potentially significant cumulative construction-related emissions.

Buildout in accordance with the proposed project would generate long-term emissions that would exceed SCAQMD's regional significance thresholds and cumulatively contribute to the nonattainment designations of the SoCAB. To reduce emissions from the operation of future projects envisioned in the proposed project, MM AIR-6a-8 through MM AIR-6a-15 are required to reduce emissions to the extent feasible, in combination with the existing General Plan policies and associated mitigation. However, due to the magnitude of emissions generated by residential, office, commercial, and light industrial land uses proposed as part of the project, no mitigation measures are available that would reduce cumulative impacts below SCAQMD's thresholds. Therefore, despite adherence to the applicable mitigation measures, Impact AIR-6b would remain significant and unavoidable.

- The proposed project would expose sensitive receptors, which are located within 1 mile of the project site, to substantial pollutant concentrations. Known sensitive receptors located within 1 mile of the planning area include numerous residences, childcare centers, parks, and nine public schools. Construction equipment exhaust combined with fugitive particulate matter emissions have the potential to expose sensitive receptors to substantial concentrations of criteria air pollutant emissions and result in a significant impact. Furthermore, the proposed project would permit commercial and light industrial land uses, which could potentially generate substantial quantities of criteria air pollutants and toxic air contaminants (TACs) from land uses such as stationary sources and warehouses once the proposed project is operational. These emissions could potentially impact nearby sensitive receptors. To accurately analyze the potential impacts of potential future development projects, MM AIR-1 is required. Compliance with this mitigation measure will ensure that specific project-level construction impacts are analyzed and further mitigation measures are considered, as appropriate. Even after complying with regulations, existing policies and mitigation measures, as well as new mitigation measures, the impacts cannot be guaranteed to be reduced to below applicable agency thresholds, resulting in a potentially significant impact from construction toxic air pollutants to sensitive receptors. Additionally, development of the commercial land uses that are allowed under the proposed project may result in stationary

sources of TAC emissions. Mitigation measures included as part of EIR No. 521 would further serve to reduce the impacts of operational emissions on sensitive receptors within the General Plan area. Required General Plan mitigation includes EIR No. 441 MM 2.51A, MM 4.51B, and MM 4.5.1C, and EIR No. 521 MM 4.6.B-N1, MM 4.6.B-N2, MM 4.6.B-N3, MM 4.6.D-N1, and MM 4.6.D-N2. To accurately analyze the potential impacts of potential future development projects that include trucking emissions, MM AIR-6a-8 and MM AIR-6a-9 are required. Compliance with MM AIR-6a-8 and MM AIR-6a-9 will ensure that localized and regional project-level emissions are analyzed and further mitigation measures are considered, as appropriate. Additionally, the proposed project would locate new sensitive receptors (residents) that could be subject to existing sources of TACs within the project boundary. Therefore, MM AIR-6a-16 has been included to relay information to the residents in order for them to make their own informed decisions. Because the construction and operation of future developments envisioned under the proposed project could expose sensitive receptors to significant quantities of criteria and toxic air contaminants even with the implementation of mitigation, the impacts of the proposed project remain significant and unavoidable.

- The proposed project would result in an increase in project-generated VMT from No Project baseline conditions, which is considered a significant impact. Projects that exceed VMT threshold(s) are required to mitigate transportation impacts to the extent feasible. VMT reduction strategies for large projects and community plans/specific plans may include altering a project's density, land use mix, site design, and availability of transit, bicycle, and pedestrian facilities. MM TRANS-37b-1 through MM TRANS-37b-5, would be required for future implementing projects to reduce impacts related to increase in VMT. Given the uncertainty in some components of the measure that influence VMT (such as the cost of fuel) combined with the County's inability to influence other measures that would have the largest effect on VMT (such as implementation of a VMT tax or an increase in the fuel tax), the effectiveness of these Transportation Demand Management (TDM) measures cannot be guaranteed to reduce impacts and the impact is considered significant and unavoidable. Implementation of mitigation measures would reduce this impact, but not to less than significant levels.

6.2 - Growth-Inducing Impacts

There are two types of growth-inducing impacts that a project may have: direct and indirect. To assess the potential for growth-inducing impacts, the project's characteristics that may encourage and facilitate activities that individually or cumulatively may affect the environment must be evaluated (CEQA Guidelines § 15126.2(d)).

Direct growth-inducing impacts occur when the development of a project imposes new burdens on a community by directly inducing population growth, or by leading to the construction of additional developments in the same area. Also included in this category are projects that remove physical obstacles to population growth (such as a new road into an undeveloped area or a wastewater treatment plant with excess capacity that could allow additional development in the service area). Construction of these types of infrastructure projects cannot be considered isolated from the

development they facilitate and serve. Projects that physically remove obstacles to growth, or projects that indirectly induce growth may provide a catalyst for future unrelated development in an area such as a new residential community that requires additional commercial uses to support residents.

Implementation of the proposed project would continue the plan for growth within Riverside County in a manner consistent with the County's General Plan criteria for appropriate built environments that promote economic development. In addition, project implementation would not result in substantially different or increased impacts than those identified in the General Plan EIR. The population of unincorporated Riverside County in 2019 was 382,077 based on Department of Finance (DOF) information. The DOF estimates that the population increased by 0.79 percent from 2019 to 2020. Southern California Association of Governments (SCAG) forecasts growth in population in unincorporated Riverside County to reach 525,600 by 2045, with a projected 180,900 households. Growth projections for Riverside County in 2045 are 3,252,000 persons and 1,086,000 households. Future development that would occur following project implementation would be based on market conditions and other future considerations. At such time as a development application is submitted for review by the County, the County would assess each proposed development and the site-specific environmental impacts associated with new housing through project-level CEQA analysis when their design and specific locations are known. Assuming all parcels designated for residential becomes developed, buildout of the proposed project would accommodate nearly 4,000 new multi-family residential units. Based on a person per household ratio of 3.20, if all approximately 4,000 dwelling units were constructed, a population increase of up to 12,800 residents could be anticipated in the planning area. As noted, based on a person per household ratio of 3.20, if all approximately 4,000 dwelling units were constructed, a population increase of up to 12,800 residents could be anticipated in the planning area. This would represent a 3.3 percent increase in the existing resident population of unincorporated Riverside County and 0.12 percent increase in population of Riverside County overall.

In addition to residential units, direct growth from the proposed project is projected to include new commercial and industrial land use designations, which would result in the potential for increased employment opportunities in the project area. The proposed project includes policies and programs that promote cohesive and compatible development and planned growth. It does not approve or entitle any specific development. Future development would also occur incrementally. As a result, project implementation would create minimal indirect growth, and project buildout would be consistent with the County's projections.

The proposed project would also not significantly or adversely affect the permanent job/housing balance. The proposed project would allow for creation on nonresidential development and jobs and would accommodate nearly 4,000 new multi-family residential units and up to 12,800 new residents. Because growth projections for the County are expected to increase significantly by 2045, housing included under the proposed project would help the County achieve a more even job/housing balance by provided much-needed housing and new land use designations.

Although the planning area is already developed, new infrastructure would likely be part of implementation of the proposed project to accommodate the new development. This, in turn, could

result in growth-inducing impacts that could increase demand for housing. However, the proposed project does not include infrastructure development and any potential infrastructure development to accommodate future projects would occur on a project-by-project basis to ensure that future development would be adequately served. As such, the proposed Master Plan would not result in indirect population growth through providing an extension of infrastructure or services, or through the removal of a barrier to growth. Impacts would be less than significant.

6.3 - Significant Irreversible Environmental Changes

As mandated by CEQA Guidelines Section 15126.2(d), the EIR must address significant irreversible environmental changes which would be caused by the proposed Master Plan should it be implemented. Specifically, such an irreversible environmental change would occur if:

- The proposed project would involve a large commitment of nonrenewable resources;
- Primary and secondary impacts would generally commit future generations to similar uses;
- The proposed project involves uses in which irreversible damage could result from any potential environmental accidents associated with the Master Plan; or
- The proposed consumption of resources is not justified (e.g., the proposed project results in wasteful use of energy).

Construction of the proposed project would include the consumption of resources that are not replenishable or which may renew so slowly to be considered nonrenewable. These resources would include the following: certain types of lumber and other forest products; aggregate materials used in concrete and asphalt such as sand, gravel, and stone; metals such as steel, copper, and lead; petrochemical construction materials such as plastics; and water. Fossil fuels such as gasoline and oil would also be consumed in the use of construction vehicles and equipment. Consumption of building materials and energy is common to most other development in the region, and commitments of resources are not unique or unusual to the proposed project. Development would not be expected to involve an unusual commitment of nonrenewable resources, nor be expected to consume any resources in a wasteful manner. Energy demands associated with construction of the proposed project are discussed in greater detail in Section 3.5, Energy, which concluded that construction-related impacts related to electricity and fuel consumption would be less than significant.

At operation, the proposed project would include the consumption of energy as part of building operations and transportation activities (vehicle trips associated with the proposed project). Fossil fuels would represent the primary energy source during operation of the project, and the existing, finite supplies of these nonrenewable resources would be incrementally reduced. As discussed in Section 3.5, Energy, the future development would be designed and constructed in accordance with the City's latest adopted energy efficiency standards, which are based on the State's Title 24 energy efficiency standards. There are also mitigation measures aim to reduce VMT and fuel consumption demand, including promoting and supporting carpools and rideshare. Thus, although the proposed project would result in an irretrievable commitment of nonrenewable resources at operation, the resources would not be consumed inefficiently, unnecessarily, or wastefully.

Implementation of the proposed project represents an essentially irreversible commitment of land uses that would change the existing uses on-site to higher density development. The restoration of the site to pre-developed conditions after development would not be feasible given the level of capital investment and degree of disturbance needed to develop the properties in the first place. Therefore, future generations would be committed to similar uses and the irreversible long-term environmental changes discussed below.

The irreversible long-term environmental changes associated with the proposed project would include a change in the visual character of the site. Additional irreversible environmental changes are associated with the increase in local and regional vehicular traffic, and the resultant increase in air pollutants, greenhouse gas emissions, and noise generated by this traffic. The proposed project would also irreversibly increase the commitment of energy resources, potable water supply, wastewater treatment, solid waste disposal, and public services, such as providing police and fire services, to support the proposed project through its lifetime. However, features have been incorporated into the project and mitigation measures are proposed in this EIR that would minimize or avoid the significant effects of the environmental changes associated with project to the maximum degree feasible.

The proposed project does not include any uses in which irreversible damage could result from potential environmental accidents associated with the proposed project. The proposed project would not introduce highly hazardous land uses or activities such that there would be a potential for irreversible damage from incidents such as a release of hazardous materials, explosion or other potentially catastrophic event. As discussed in Section 3.8, Hazards and Hazardous Materials, the proposed uses would not require the use of large quantities of hazardous materials. Small quantities of hazardous materials would be used on-site, including cleaning solvents (e.g., degreasers, paint thinners, and aerosol propellants), paints (both latex- and oil-based), acids and bases (such as many cleaners), disinfectants, and fertilizers. However, compliance with existing regulations regarding the storage, handling, usage, and disposal of the hazardous materials would reduce the potential for irreversible damage from environmental accidents to less than significant levels.

CHAPTER 7: LIST OF PREPARERS

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